

# **The Role of Transfer in the Attainment of Baccalaureate Degrees at Washington Public Bachelor's Degree Institutions Class of 2011**

**August 2013**

## **Background**

The *Role of Transfer* study is an update to two previous studies on the graduating classes of 2001 and 2006. The former was completed by the State Board for Community and Technical Colleges (SBCTC).<sup>1</sup> The latter study focused on similar questions for students who earned their first bachelor's degree as graduates of the Class of 2006, and was completed by the Washington State University Social and Economic Sciences Research Center (SESRC) under contract to the Higher Education Coordinating Board (HECB).<sup>2</sup>

As the case with the previous reports, a steering group for state level input and a technical workgroup of research specialists (see Appendix A) at Washington's public colleges and universities assisted in questions for the data during the study. The report focuses exclusively on Washington's public baccalaureate degree universities.

## **About the Data**

The source of data for the system is the SBCTC Data Warehouse for community and technical college (CTC) enrollments, and Public Centralized Higher Education Enrollment System (PCHEES) for the university records as stored in The Mutual Research Transcript Exchange (MRTE+) data system.<sup>3</sup> MRTE+ links student unit records from the CTCs and the public four year institutions in Washington. Overall data quality allowed for deep and rich analyses for student enrollments, transcripts, and completions.

The CTC data includes enrollment records from the 2004-05 through to the most current complete academic year. The university data begins in 2007-08.

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<sup>1</sup> The first study can be found at:

[http://www.sbctc.ctc.edu/docs/data/research\\_reports/transfer/2003june\\_role\\_of\\_transfer.doc](http://www.sbctc.ctc.edu/docs/data/research_reports/transfer/2003june_role_of_transfer.doc).

<sup>2</sup> The second study can be found at:

<http://www.wsac.wa.gov/sites/default/files/HECBTransferStudyFINAL.pdf>.

Note that the Washington 'Student Achievement Council' (WSAC) has replaced the HECB.

<sup>3</sup> The original Mutual Research Transcript Exchange was created in 2000 by Loretta Seppanen, (SBCTC) and Nina Oman (then of the University of Washington). MRTE+ was restarted with PCHEES data provided by the Education Research Data Center (ERDC).

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Previous data issues caveated in the last report are not present in the MRTE+ data. For example, the 2009 study did not have credits earned at the four year institutions. MRTE+ reports both previous credits transferred and credits earned for bachelor's degree completion. It identifies whether these credits were earned at the degree granting or another institution. This allows for more accurate analysis than the 2009 study for two significant issues: how to identify transfer students at entry point and how to determine total credits earned in completion of the bachelor's degree. However, because data sources are different from earlier versions of the study, precise trend analyses should be qualified. Going forward, iterations of this report will be based on a stable data source.

## **Study Definitions**

### ***Type of Student/Transfer Status***

All 2011 bachelor's degree graduates were classified as being "direct entry," "CTC transfer," or "other transfer" based on the credits and credentials they brought with them when they first entered a public bachelor's degree institution. The criteria used for classifying the graduates are described more completely in Appendix D.

### ***Majors***

Student majors were grouped to simplify the analysis into one of seven categories. In cases where students earned more than one degree, their degrees were grouped and reported in the analysis, which provided some duplication. See Appendix C for a complete listing of the CIP codes within each major grouping.

### ***Study Population***

This report is based on the records of 20,499 students who earned a bachelor's degree as graduates of the Class of 2011. The study population includes all students who earned a degree from one of the six public bachelor's degree institutions or seven applied bachelor's degree institutions for whom transcript, demographic, and degree attainment data were available.

The study excludes international students, students without enough identifiable data in their record to create a match to the CTC system, and students not found in MRTE+ who earned a degree.

## **The 2013 Study – Key Questions**

The study examines the graduating class of the public bachelor's degrees in 2010-11 (by gender, ethnicity, age, degree major, and institution type). Specifically, the study examines graduates in four parts:

1. By Four-Year Campus Type – What was the make-up of graduates at main campuses, branch campuses, university centers and community and technical college bachelor's degree programs?
2. By Transfer Status – How many bachelor's degree graduates entered four-year colleges directly? How many transferred from a Washington CTC? How many came through other paths?
3. By Pre-college Enrollments – What was the role of CTC pre-college English and math in preparing transfers and direct entry students to graduate with the bachelor's degree in 2011?

4. By Transfer Paths – What were the different transfer pathways delineated by the type of two-year degree CTC students received? How do these different pathways contribute to different bachelor's degree majors? How well do CTC transfer students perform compared to direct entry students on total credits earned to complete their bachelor's degree and senior year GPAs?

## **Selected Findings**

### **1. Transfer graduates are the majority of the baccalaureate graduating class of 2011. CTC transfers are the majority of those.**

- Over half (51 percent) of all bachelor's degree graduates in the class of 2011 were transfer students.
- This includes 40 percent who were CTC transfers. The definition of transfer is based upon previous credits transferred, previous credits earned at a CTC and/or a two-year degree earned.
- Among the 49 percent counted as direct entry, half had transferred in credits from other institutions (less than 40 college credits) at entry, describing even a broader role for CTCs in the 2011 baccalaureate graduating class.

### **2. CTC transfer is a substantial share of graduates in all majors, although the percent varies by campus type.**

- Overall, CTC transfers were 40 percent of the 2011 graduating class. The percent of CTC transfers varied by campus type – 29 percent of research universities graduating classes, 37 percent of comprehensive regional classes, and 72-84 percent of branch campus, university center and CTC bachelor's degree classes.
- CTC transfers graduated in all bachelor's degree majors in significant numbers. Of these graduates, CTC transfers comprised 51 percent of all education majors, 47 percent of business majors, 46 percent of health field majors, 40 percent of social sciences majors, 36 percent of liberal arts majors, and 35 percent of Science, Technology, Engineering and Mathematics (STEM) majors.

### **3. Pre-college courses had a significant role preparing students to graduate in the 2011 class.**

- Fifty-nine (59) percent of CTC transfer students completed remedial coursework at a CTC in English or math prior to progressing to a bachelor's degree (24 percent of all graduates).
- For pre-college math, the percentage of students enrolled increased by age.
- Forty-three (43) percent of CTC transfer STEM graduates and 53 percent of business graduates took pre-college math.
- Students identifying as Hispanic, African American, and Native American had the highest rates of pre-college enrollments. Students as a whole from these groups were equally likely to start as direct entry or CTC transfer. However, the high participation in pre-college among CTC transfer students indicates that the availability of pre-college courses provided significant access for a segment of

students identifying as Hispanic, African American, and Native American who were less prepared and less likely to earn bachelor's degrees without this additional support.

- Pre-college preparation was also important for older students (those over age 25); another segment that CTC transfers significantly contributed to access and bachelor's degree completion.

#### **4. Two-year degree paths proved efficient for CTC transfer graduates.**

- The Direct Transfer Agreement (DTA) and the Major Related Pathways (MRP) in Business were the transfer paths chosen by 69 percent of CTC transfer bachelor's degree graduates. Statewide agreement for transfer to engineering, chemistry, and physics – the Associate of Science-Technology (AS-T) – was completed by four percent of transfers. Six percent of CTC transfers completed a technical degree.
- Overall, 79 percent of CTC transfers completed an associate degree.
- Graduates who completed associate degrees aligned with specific majors were very likely to complete a bachelor's degree in a related field:
  - Over eight in ten (83 percent) CTC transfers completing the Business DTA/MRP earned a bachelor's degree in business.
  - More than nine in ten (92 percent) CTC transfers completing an Associate in Science Track 1 or 2 completed a bachelor's degree in a STEM or health related major.
- Students earning AS-T Track 1 and Track 2 degrees were much more likely to enroll at research universities (81 percent and 72 percent, respectively) than students earning other degrees.
- Median credits earned for degree completion were comparable across all majors for CTC transfer and direct entry bachelor's degree graduates.
- Graduates earning Business DTA/MRP or Associate in Science Track 1 or Track 2 degrees needed to take fewer credits than those who did not use these specialized tracks.
- Senior year GPAs across all major degree fields were equivalent for CTC transfer and direct entry students.

## Part One: Graduates by Campus Type

All institutions were grouped into five categories: research universities, branch campuses, regional comprehensive universities, university centers, and CTC bachelor's degrees.

**Figure 1**  
**Categorization of College Campuses**

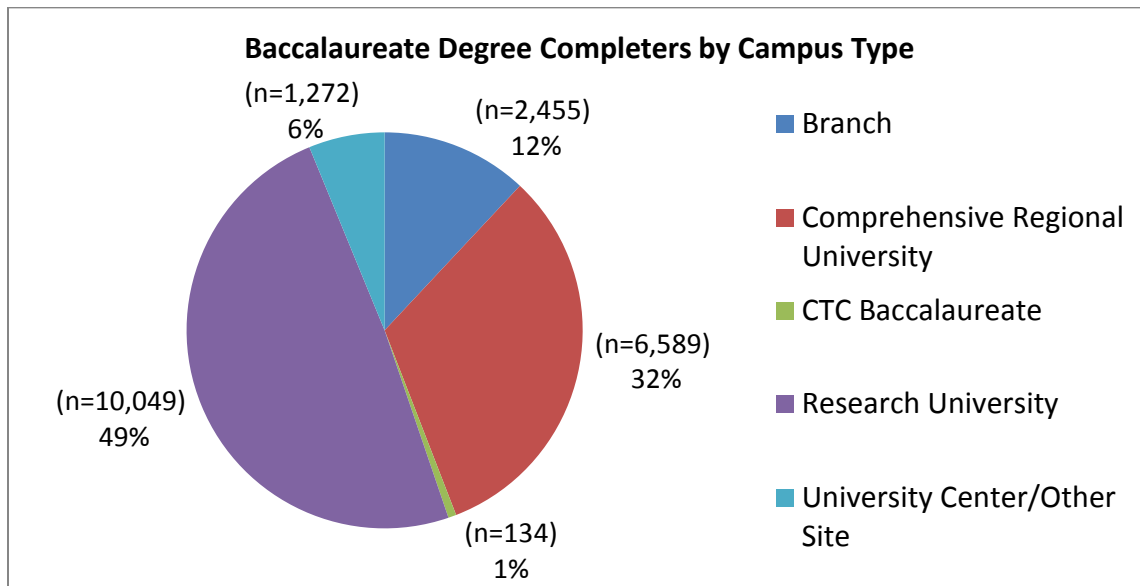
	<b>Research Universities</b>	<b>Comprehensive Regional Universities</b>	<b>Branch Campuses</b>	<b>University Centers<sup>4</sup></b>	<b>CTC Bachelor's degree</b>
<b>University of Washington</b>	Seattle		Tacoma, Bothell	Other sites	
<b>Washington State University</b>	Pullman		Spokane, Tri-Cities, Vancouver	Distance and other sites	
<b>Central Washington University</b>		Ellensburg		Other sites	
<b>Eastern Washington University</b>		Cheney		Other sites	
<b>The Evergreen State College</b>		Olympia		Other sites	
<b>Western Washington University</b>		Bellingham		Other sites	
<b>Community and Technical Colleges</b>					Bellevue, Columbia Basin, Lake Washington, Olympic, Peninsula, Seattle Central, South Seattle <sup>5</sup>

This report is based on the records of 20,499 students who earned a bachelor's degree as graduates of the Class of 2011. Almost half (49 percent) of these students graduated from the main campus of a research university and about one third (32 percent) were from a regional comprehensive university. Twelve (12) percent of the graduates were from the branch campuses; another six percent graduated from university centers. One percent graduated from a CTC bachelor's degree institution.

<sup>4</sup> Centers included programs offered by public baccalaureate institutions at various off-site locations and included WSU distance learning enrollments. See Appendix B for a list of all centers.

<sup>5</sup> These colleges had applied baccalaureates in 2011. An additional three colleges were approved to offer applied baccalaureates at the time this report was written.

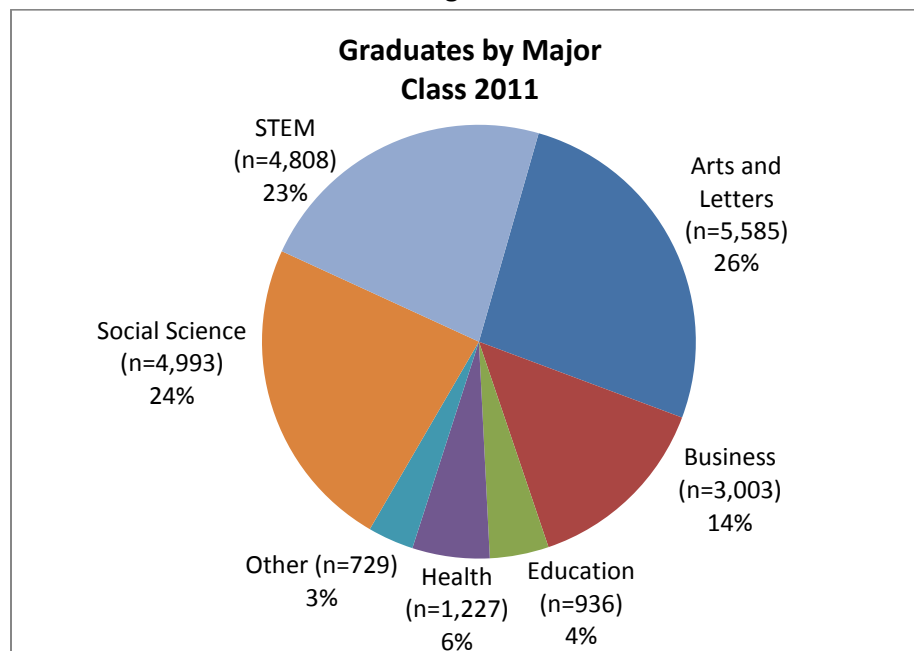
Figure 2



### Graduates by Major

Degrees were grouped into seven categories. All degrees awarded were counted. The total number of degrees awarded was 21,281. Seven hundred and eighty-two (782) students earned double major degrees. The largest category was arts and letters, followed by social science and STEM. The highest percentage of research university degrees was in STEM (29 percent) followed by social science (26 percent) and arts and letters (23 percent). Regionals awarded over one third (35 percent) of their degrees in arts and letters and 20 percent in social sciences. Branch campuses awarded 24 percent of their degrees in business and 20 percent in social sciences. University Centers awarded 29 percent of their degrees in education and 27 percent in business. CTC bachelor's degrees focused on arts and letters (38 percent), business (37 percent), and health fields (25 percent).

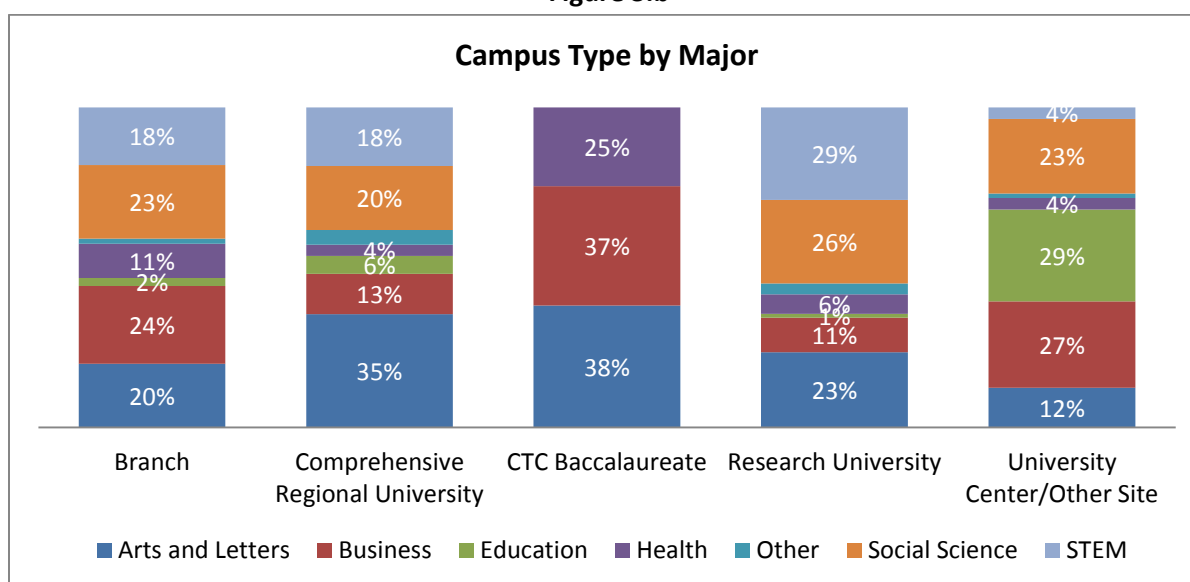
Figure 3



**Figure 3.a**  
**Degree Majors by Campus Type**

Major	Branch	Comprehensive Regional University	CTC Baccalaureate	Research University	University Center/ Other Site	Total
Arts and Letters (n=5,585)	9%	43%	1%	45%	3%	100%
Business (n=3,003)	20%	28%	2%	38%	12%	100%
Education (n=936)	6%	41%	0%	13%	40%	100%
Health (n=1,227)	22%	19%	3%	52%	4%	100%
Other (n=729)	5%	43%	0%	50%	2%	100%
Social Science (n=4,993)	11%	27%	0%	56%	6%	100%
STEM (n=4,808)	9%	26%	0%	64%	1%	100%
Total (n=21,281)	12%	32%	1%	50%	6%	100%

**Figure 3.b**



## Graduates by Race/Ethnicity, Gender, Age and Campus Type

This section describes the race/ethnicity, gender, and age of bachelor's degree graduates. Data are presented first in Figure 4 by campus type to show the percent of degrees earned by a group by campus type. Then in figure 4.a, the second view, the chart presents race/ethnicity by campus type. This chart shows the self-reported race/ethnicity of graduates disaggregated by the type of campus where they earned their degree. Each graduate is counted for each race and ethnic group reported and may be counted more than once.

### *Graduates' Self-Reported Race/Ethnicity*

Data are presented first in Figure 4 by campus type to show the percent of degrees earned by a group by campus type. Then in figure 4.a, the second view, the chart presents race/ethnicity by campus type. This chart shows the self-reported race/ethnicity of graduates disaggregated by the type of campus where they earned their degree. Each graduate is counted for each race and ethnic group reported and may be counted more than once.

Figure 4 shows that research universities have the highest percentage of students of color. This is largely due to the substantial share (19 percent) of students identifying as Asian at these campuses. University Centers have the highest proportion of students identifying as Hispanic.

**Figure 4**  
**Campus Type by Student Reported Race/Ethnicity**

Campus Type	Asian/Pacific Islander	African American	Native American	Hispanic	Multi-racial	White	Unknown
Branch (n=2,464)	14%	4%	1%	6%	2%	69%	5%
Comprehensive Regional University (n=6,561)	6%	2%	2%	5%	2%	77%	6%
CTC Baccalaureate (n=134)	11%	4%	1%	6%	1%	70%	6%
Research University (n=9,961)	19%	3%	1%	5%	1%	65%	6%
University Center/Other Site (n=1,311)	9%	6%	3%	8%	2%	67%	5%



The distribution of race/ethnicity by campus type (Figure 4.a) shows that 68 percent of graduates identifying as Asian received their degrees from a research university. Forty-six (46) to 47 percent of students identifying as white, Hispanic, and African American earned degrees from research universities and 31 to 37 percent earned degrees from regionals. Students identifying as Native American were the only group to have a higher percentage of graduates from regionals (45 percent) than from research universities (39 percent).

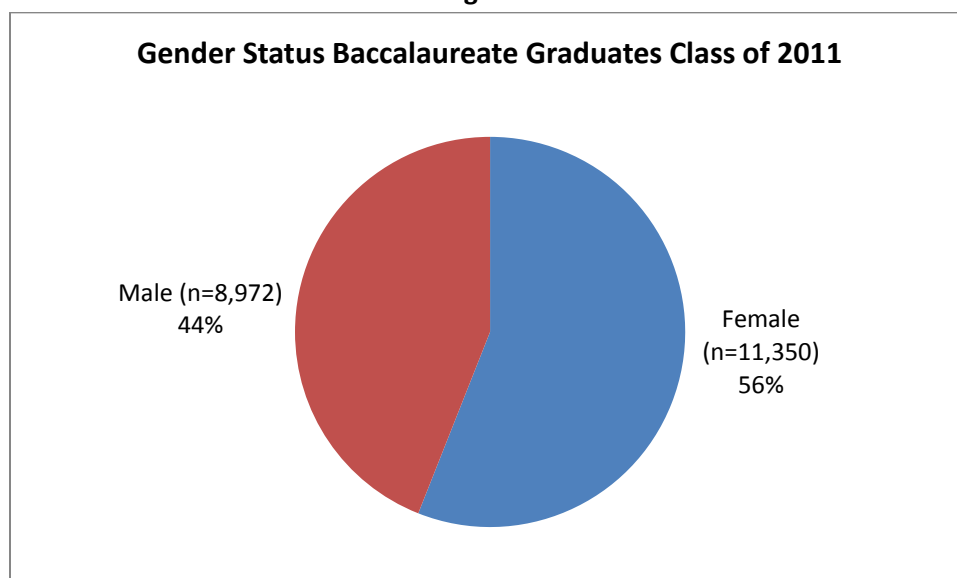
**Figure 4.a**  
**Student Reported Race/Ethnicity by Campus Type**

Campus Type	Branch	Comprehensive Regional University	CTC Baccalaureate	Research University	University Center/Other Site
Asian/Pacific Islander (n=2,717)	12%	15%	1%	68%	4%
African American (n=602)	15%	26%	1%	47%	12%
Native American (n=317)	9%	39%	1%	38%	12%
Hispanic (n=1,094)	12%	30%	1%	47%	10%
Other, Multiracial (n=336)	14%	33%	1%	43%	9%
White (n=14,163)	12%	36%	1%	46%	6%
Unknown (n=1,204)	11%	33%	1%	49%	6%

### *Graduates by Gender*

Females comprised over half (56 percent) of graduates at every campus type. The highest percentage of males by campus type was at research universities.

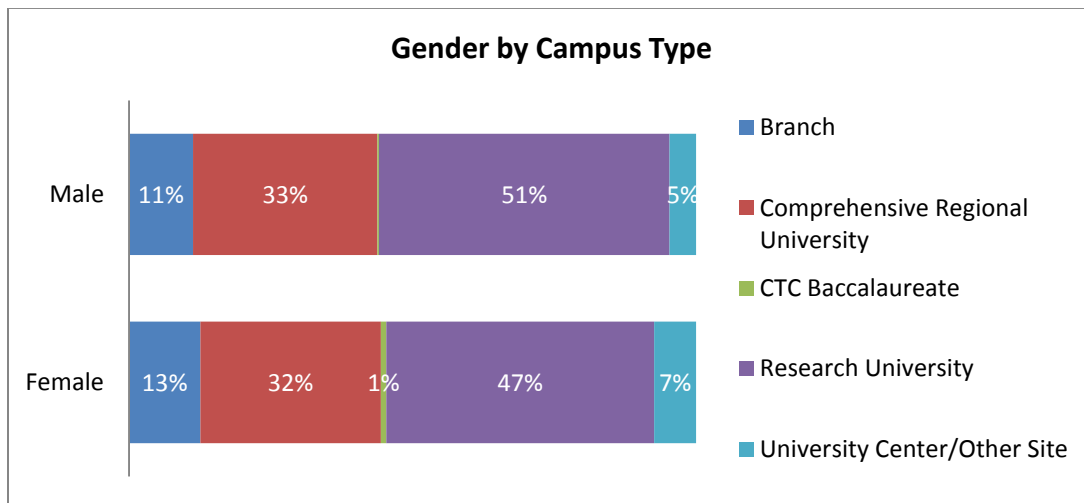
**Figure 5**



**Figure 5.a**  
**Campus Type by Gender**

Campus Type	Female	Male
Branch (n=2,436)	58%	42%
Comprehensive Regional University (n=6,532)	55%	45%
CTC Baccalaureate (n=134)	80%	20%
Research University (n=9,956)	54%	46%
University Center/Other Site (n=1,264)	67%	33%
Total (n=20,322)	56%	44%

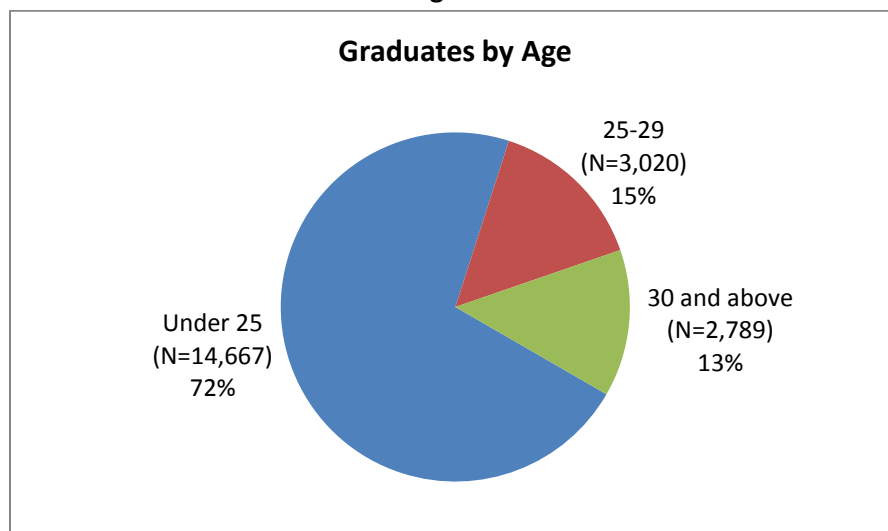
**Figure 5.b**



### ***Graduates by Age***

The majority (72 percent) of graduates were under 25 years. Younger students made up more than three-fourths of graduates at regional and research universities. Older graduates were more heavily concentrated at branches, university centers, and CTC bachelor's degrees.

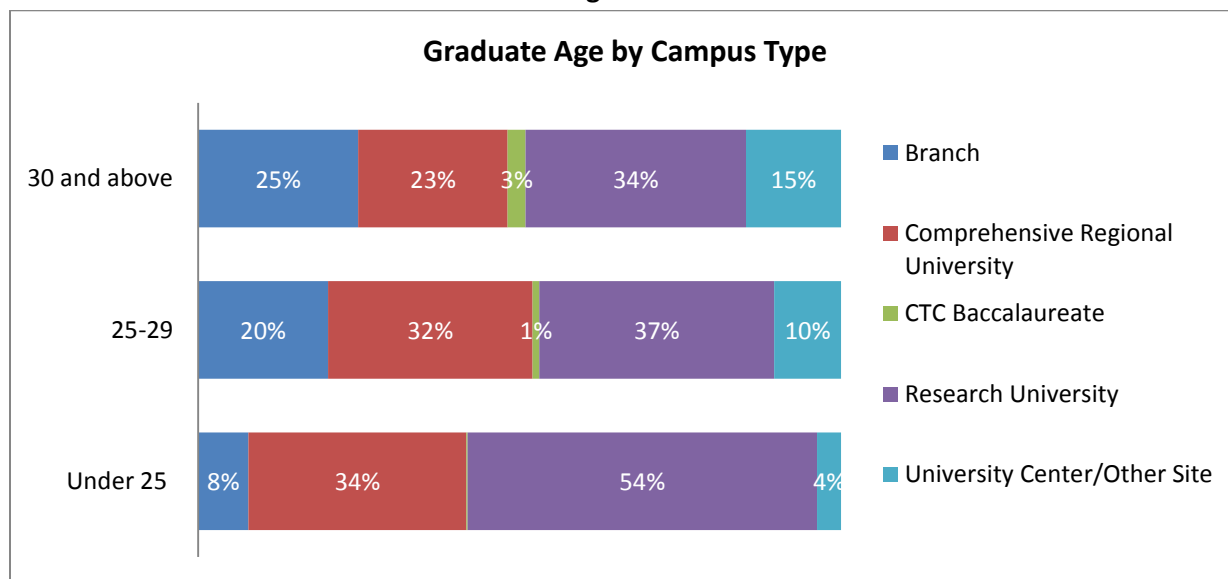
**Figure 6**



**Figure 6.a**  
**Campus Type by Age at Graduation**

Campus Type	Under 25	25-29	30 and above
Branch (n=2,454)	47%	25%	28%
Comprehensive Regional University (n=6,582)	76%	15%	10%
CTC Baccalaureate (n=134)	18%	24%	58%
Research University (n=10,034)	79%	11%	10%
University Center/Other Site (n=1,272)	43%	25%	32%
<b>Total (n=20,476)</b>	<b>72%</b>	<b>15%</b>	<b>14%</b>

**Figure 6.b**



## Part Two: Baccalaureate Graduates Entry Status

All graduates were classified as being a “direct entry,” “CTC transfer,” or “other transfer” based on the credits and credentials they brought with them when they first entered a public bachelor’s degree institution. The criteria used for classifying the graduates are described more completely in Appendix D.

Over half (51 percent) of graduates in the class of 2011 were classified as transfer students (Figure 7). Transfer students included CTC transfers (40 percent) and other transfers (11 percent). Forty-nine (49) percent of bachelor’s degrees were direct entry. About half of this group had previously transferred credits, however, less than the 40 credit threshold used to define a transfer student (Figure 8).

Figure 7

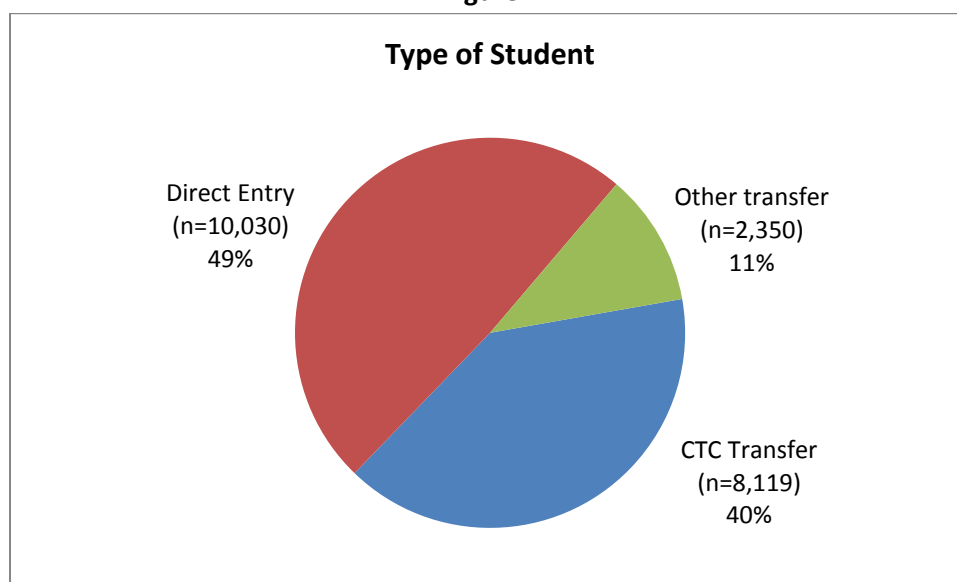
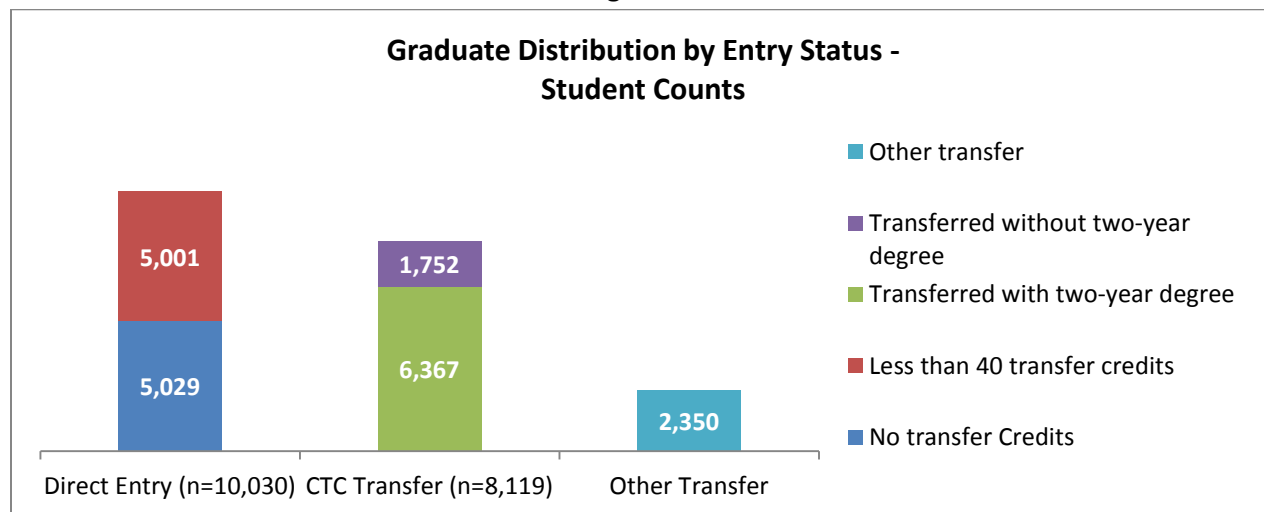


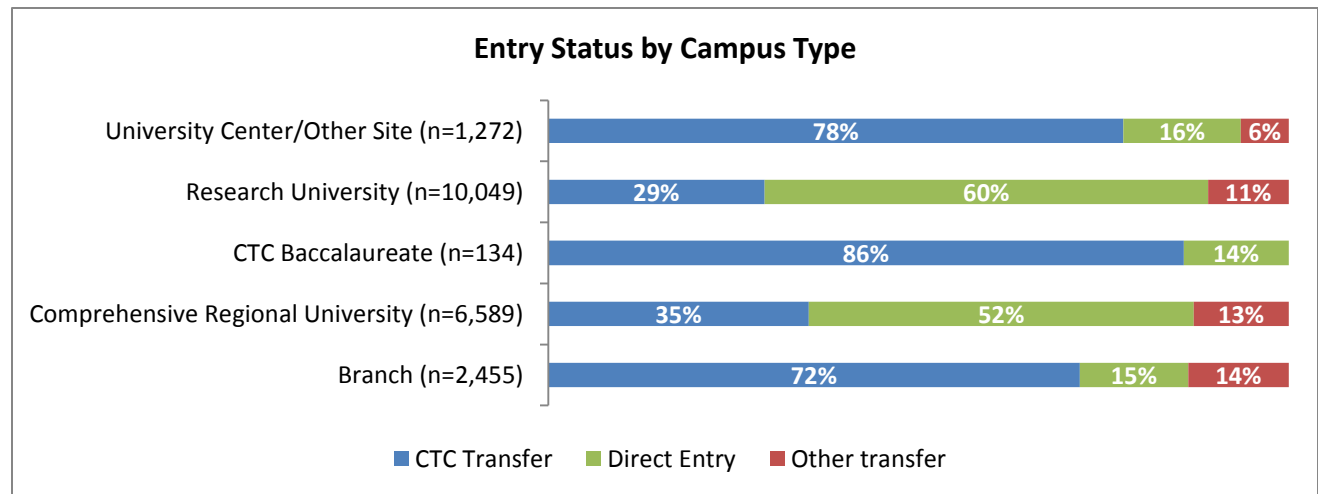
Figure 8



## Entry Status by Campus type

Figure 9 below describes entry status by campus type. CTC transfers as a percent of graduates ranges from 29 percent of graduates at the research universities to 86 percent of graduates at the CTC baccalaureate's degrees. The number of CTC transfer graduates from university centers and branch campuses was on par with the total CTC transfer graduates in the regionals and nearly on par with the research universities.

Figure 9



## Entry Status by Major

In Figure 10, CTC transfer students comprised at least one third of the graduates in each of the seven major categories (Figure 10). They comprised the largest share of graduates in education (51 percent), business (47 percent), and health (46 percent). They comprised 40 percent of social science graduates and 35 percent of STEM graduates.

Figure 10

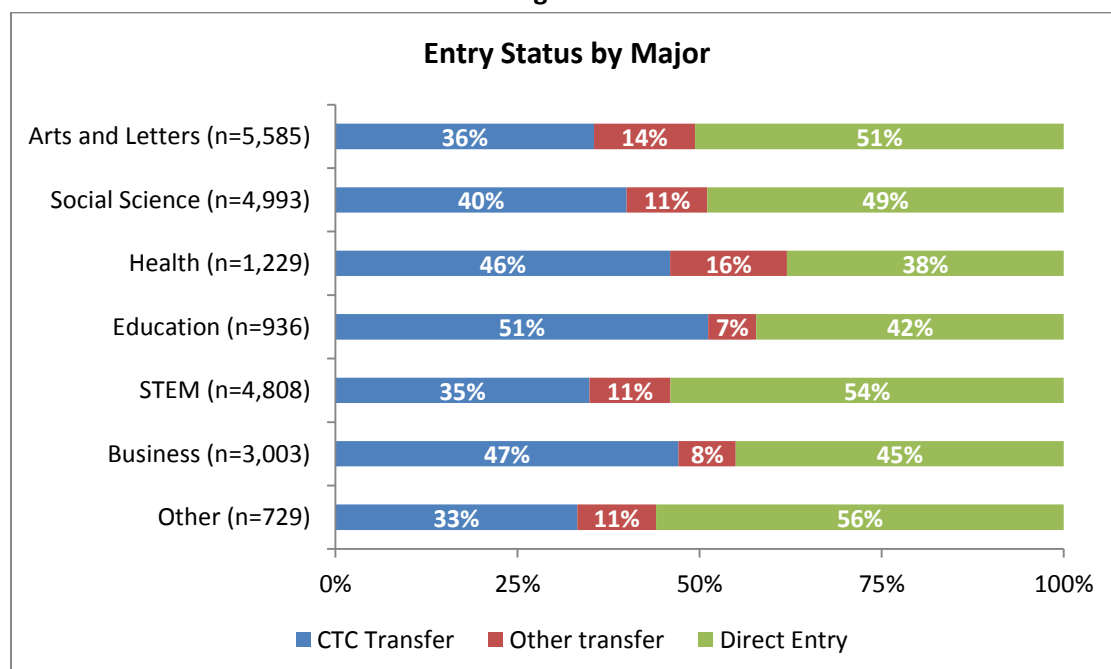
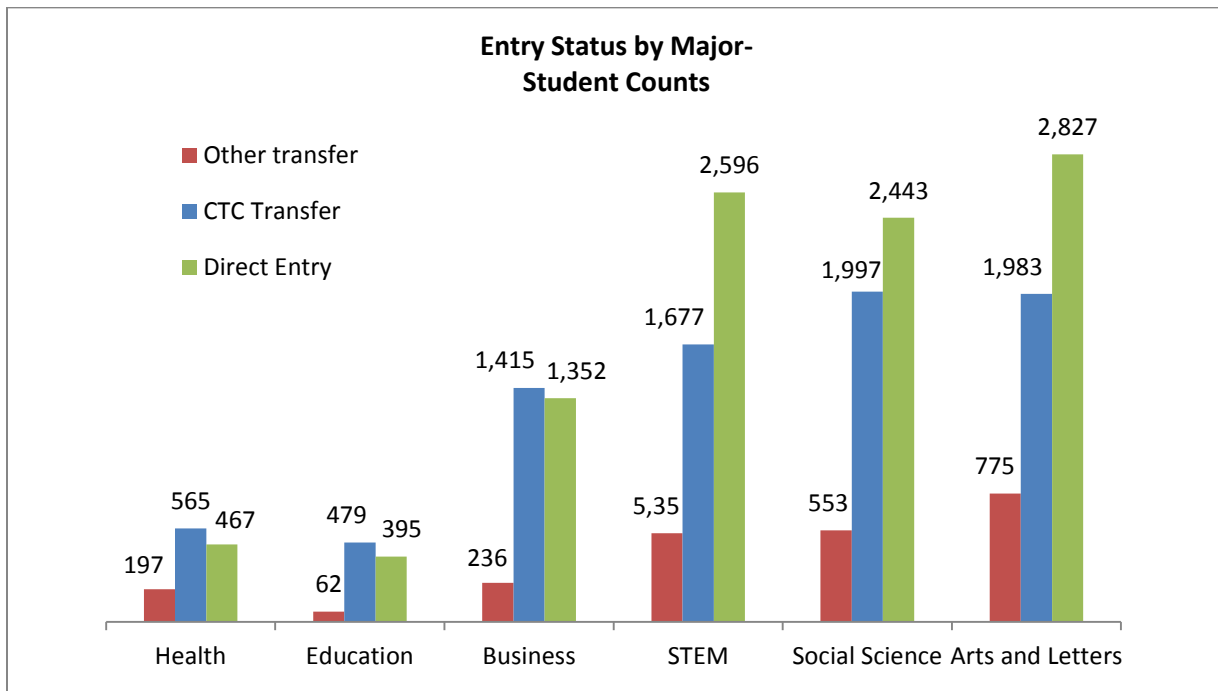


Figure 10.a

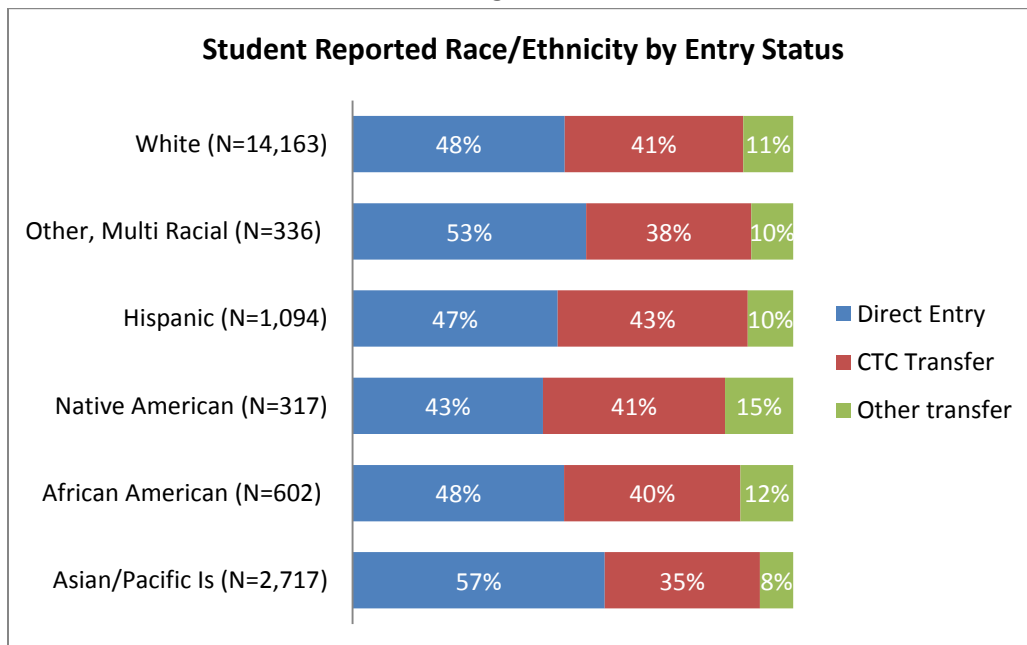


## Entry Status by Student Characteristics

### *Race/Ethnicity*

Over half of graduates reporting as Asian Pacific Islander and multi-race were direct entry students in their institutions. Graduates reporting as Native American had the smallest proportion of total graduates who were direct entry.

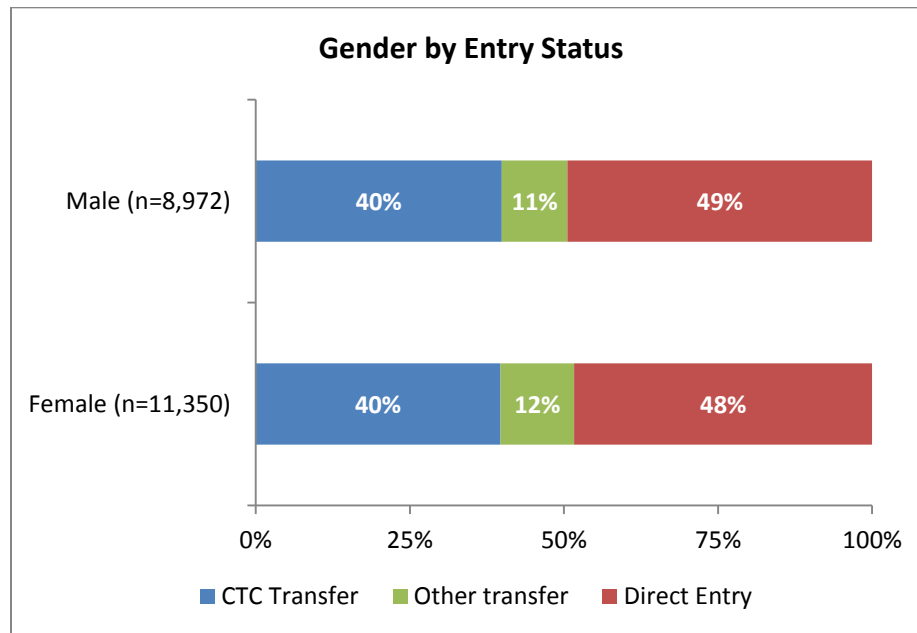
Figure 11



## Gender

There is little difference in entry status by gender between males and females.

Figure 12



## Entry Status by Age

CTC transfer students at entry are typically older than other graduates as shown in figure 13.

Figure 13

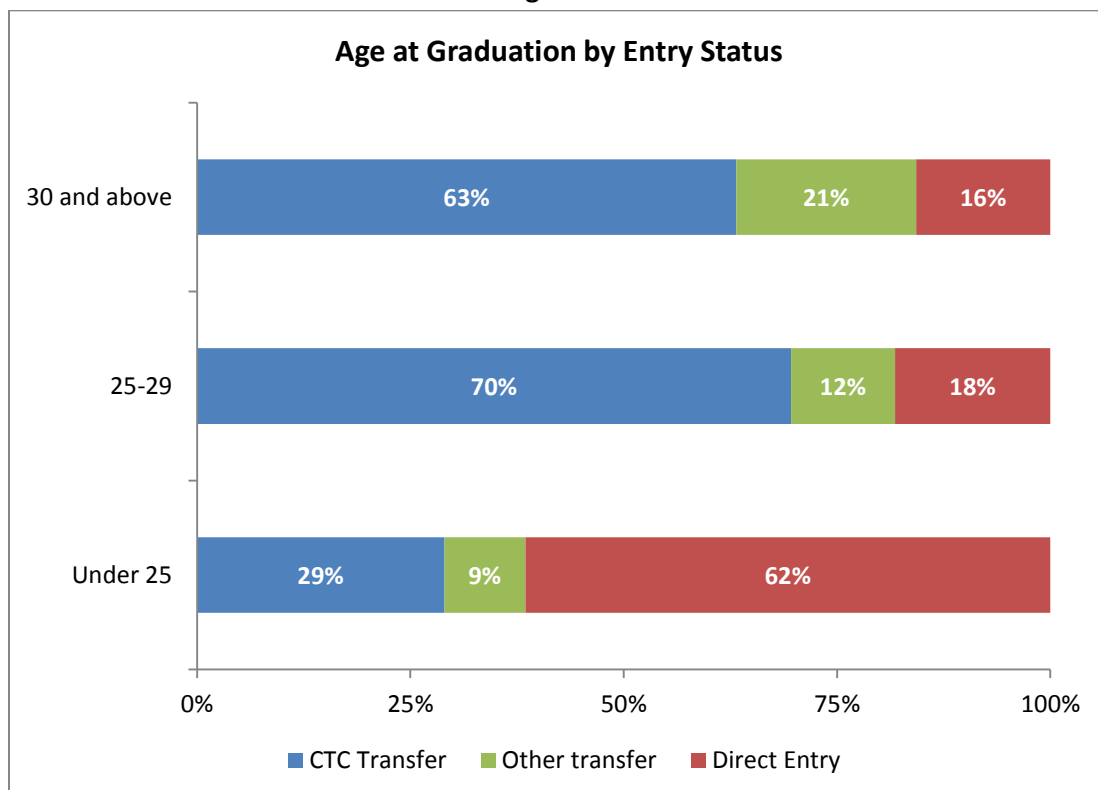
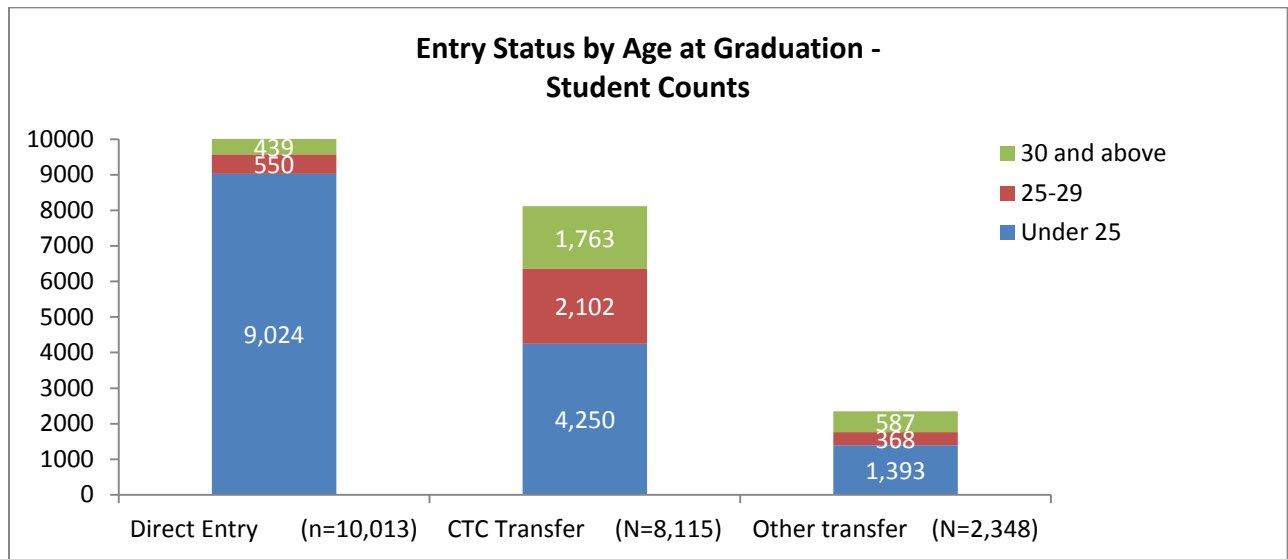


Figure 13.a



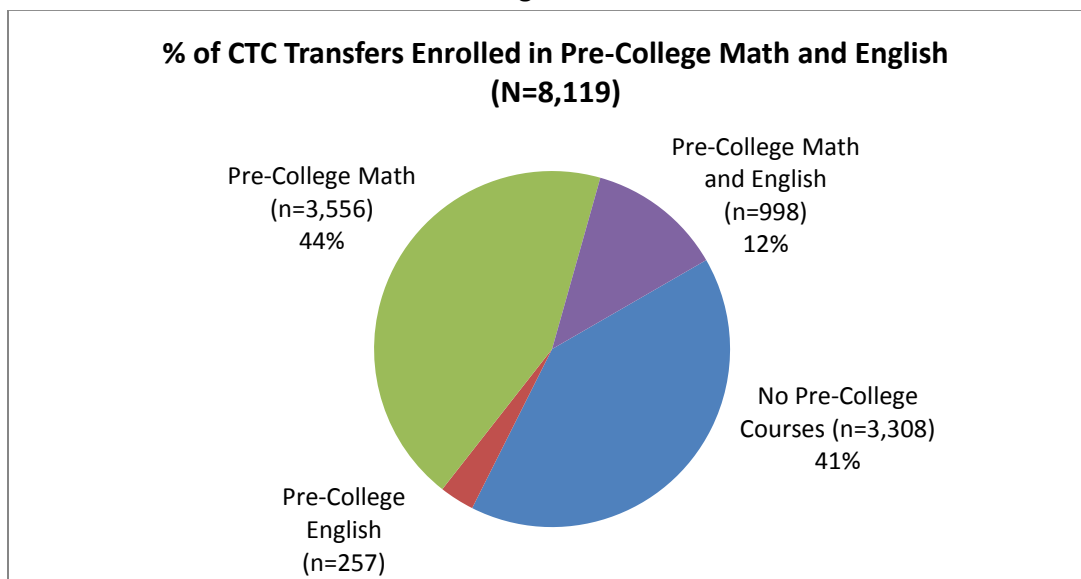


### Part Three: Contribution of Community and Technical College Pre-College Preparation to 2011 Baccalaureate Graduates

Four thousand eight hundred eleven (4,811) CTC baccalaureate completers (nearly six in ten) enrolled in pre-college coursework at their CTC as part of their preparation to transfer.

In addition to the CTC transfer students reported above, there were nearly 900 students classified as “direct entry” and “other transfer” who also took pre-college courses at the CTCs: Forty-one (41) students took English, 786 took math, and 55 took math and English. This demonstrates the strong role played by the CTCs in supporting bachelor’s degree students particularly with their math requirements.

**Figure 14**



## Pre-College Enrollments by Baccalaureate Graduation Major and Campus Type

Pre-college course taking prior to transfer contributed substantially to graduates in all major fields (figure 15) and all campus types (figure 16).

Figure 15

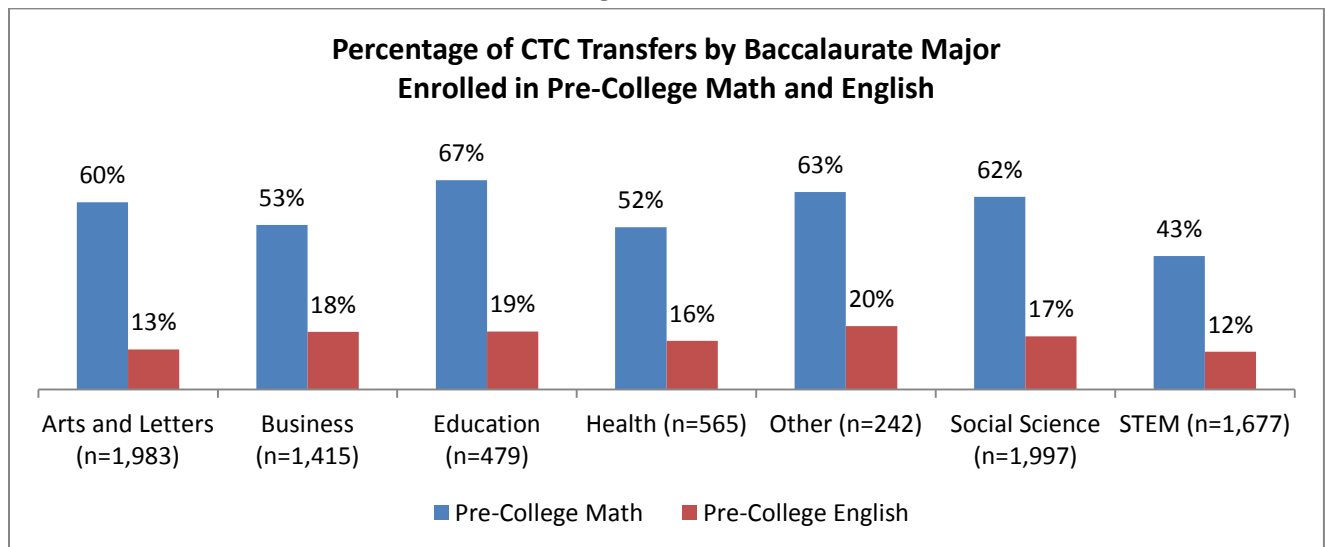
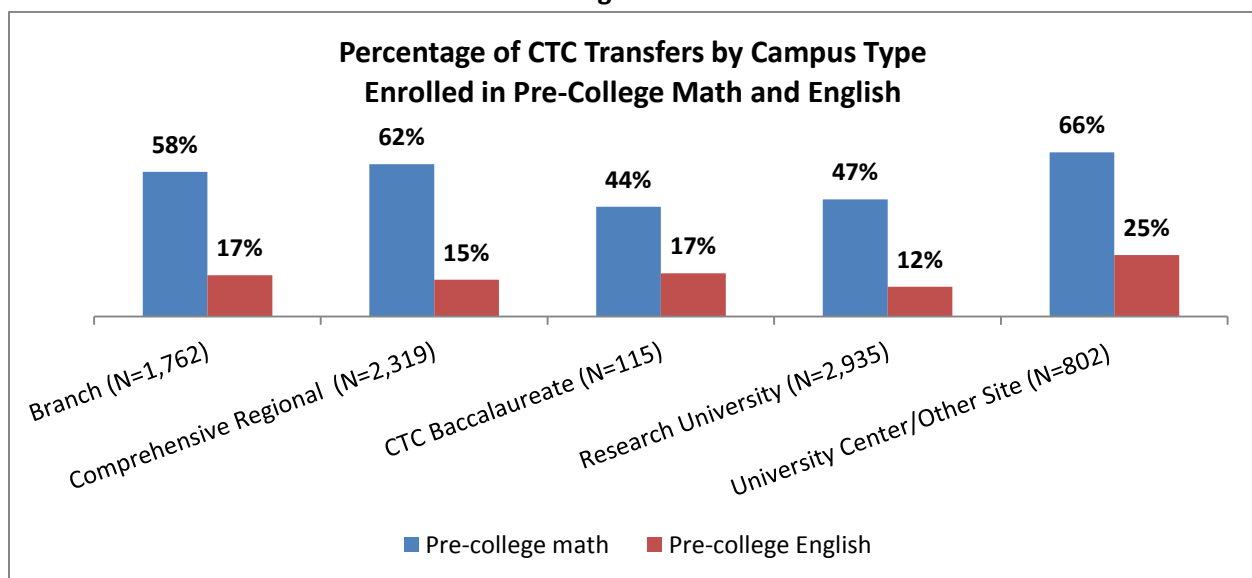


Figure 16



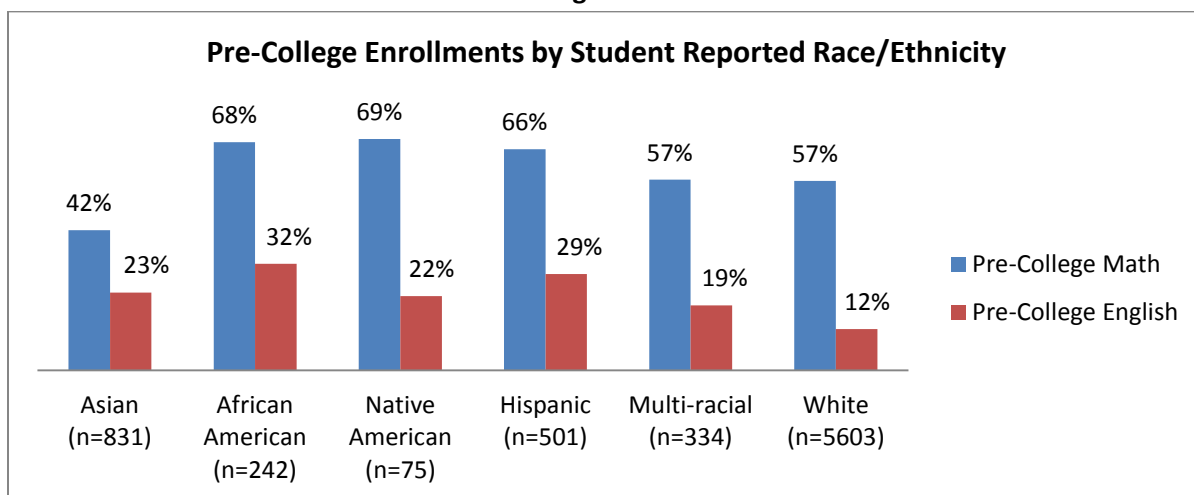
## Characteristics of Pre-College CTC Transfer Students

### *Race/Ethnicity*

Participation in pre-college courses was critical to preparing students in all race/ethnic groups.

Students identifying as Hispanic, African American and Native American had the highest rates of pre-college enrollments. Students from these groups were equally likely to start as direct entry or CTC transfer (Figure 11). However, the high participation in pre-college among CTC transfer students indicates that the availability of pre-college courses provided significant access for a segment of students who identified as Hispanic, African American, and Native American who were less prepared and less likely to earn bachelor's degrees without this additional support.

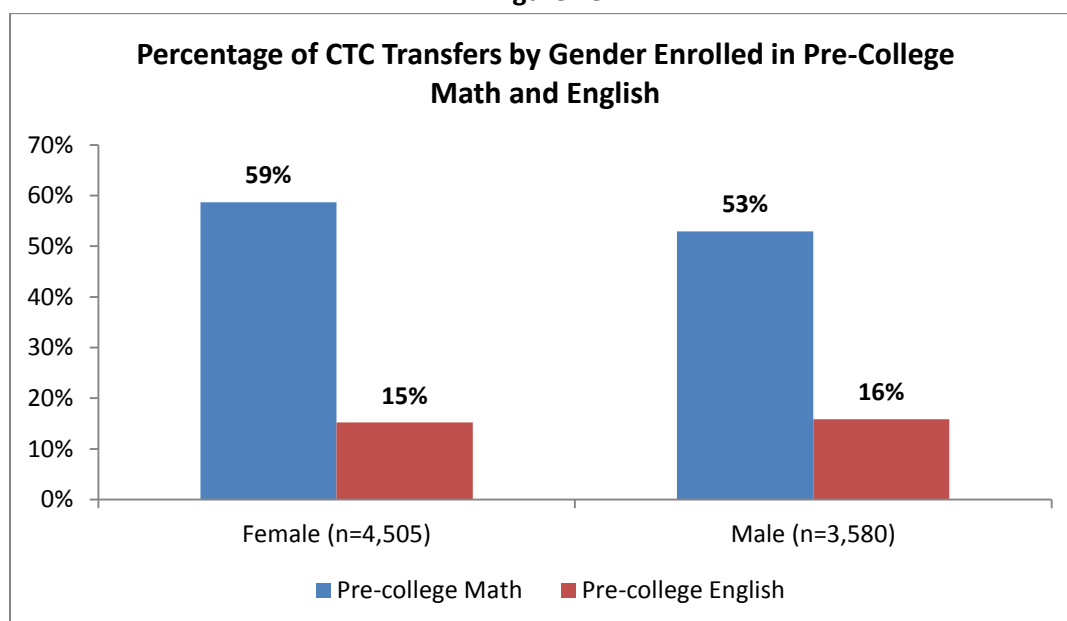
**Figure 17**



### *Gender*

While over half of females and males enrolled in pre-college math, participation was higher for females. Males and females participated in pre-college English in about the same proportion.

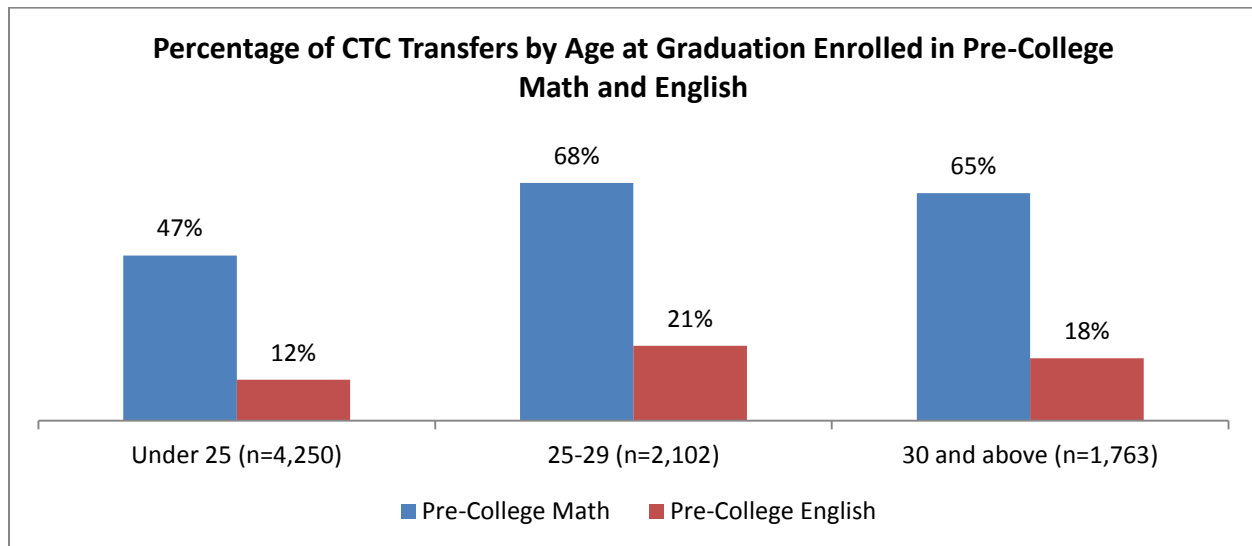
**Figure 18**



### *Age*

Older graduates were more likely to have needed pre-college preparation prior to transfer than students under 25. However, there was substantial need in all age groupings.

**Figure 19**

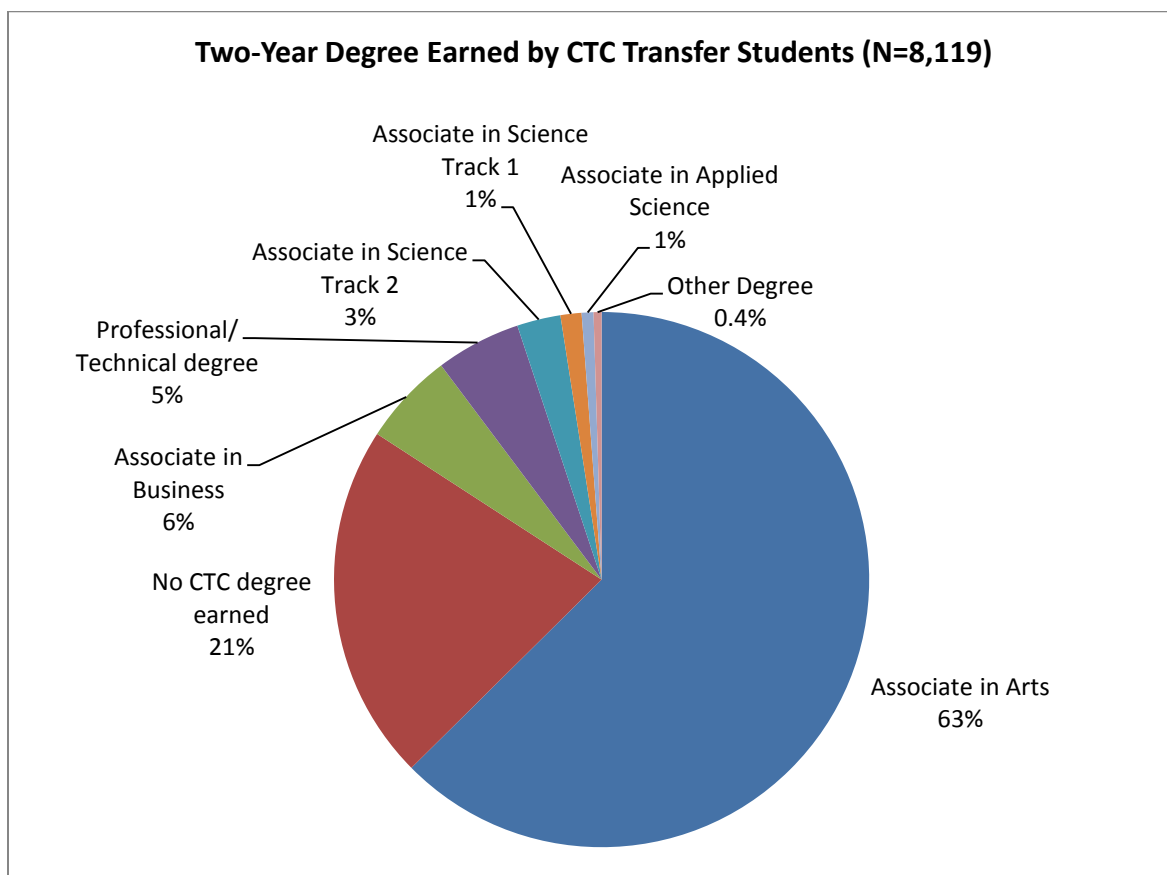


## Part Four: CTC Transfer Pathways and How Transfer Graduates Perform Compared to Direct Entry Graduates

### CTC Transfers by Two-Year Degree Type

Nearly eight in ten (79 percent) of CTC transfers earned their two year degree prior to transfer. The Direct Transfer Agreement (DTA) Associate degree (sometimes called the Associate in Arts, Associate in Arts and Sciences), was by far the most common degree transferred (63 percent). Another 10 percent earned specialized Associate in Arts and Science degrees. These degrees focus on specific transfer pathways for business, engineering, and sciences. Five (5) percent transferred with a professional technical degree. One (1) percent transferred with Associate in Applied Science degrees, professional technical degrees that include general education transfer required coursework. Finally, a very small portion (less than 1 percent) had transfer degrees in major ready pathways for education and pre-nursing.

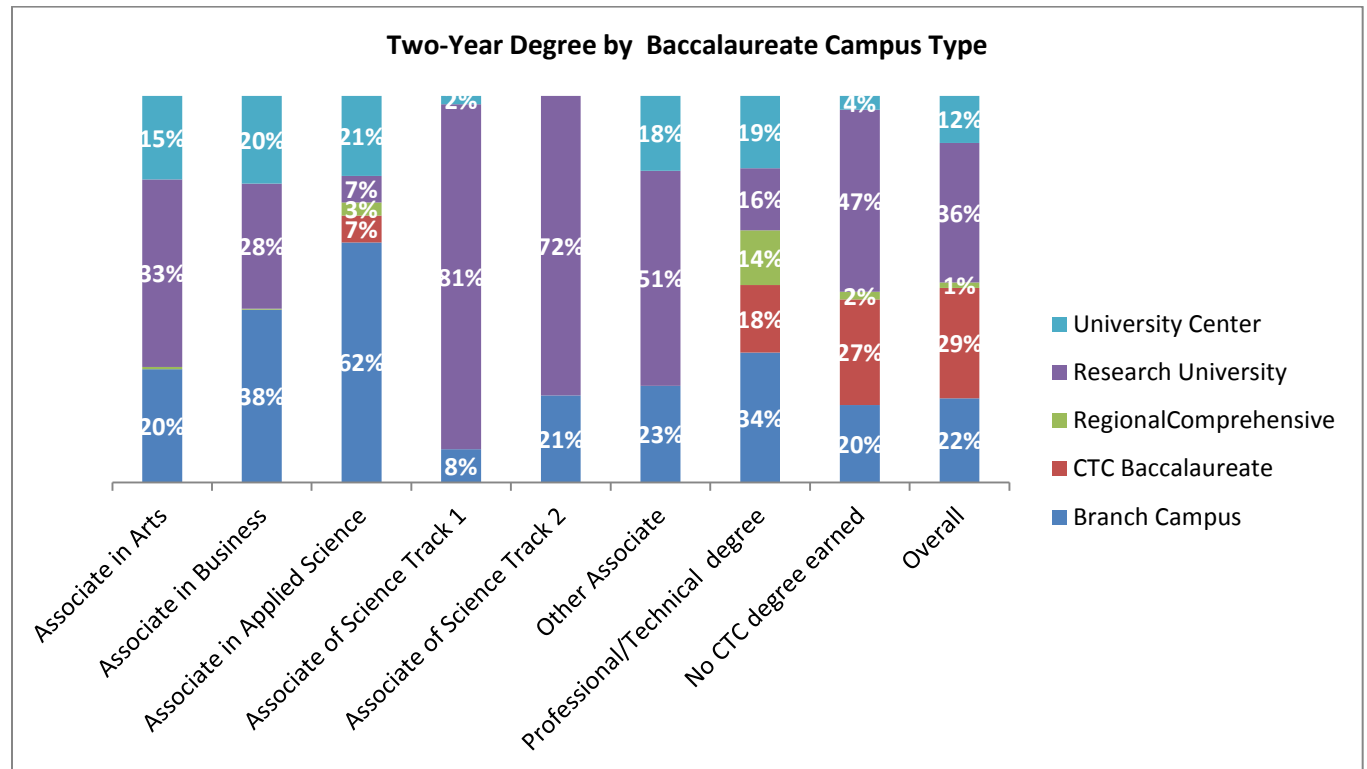
Figure 20



## Two-Year Degree by Four-Year Campus Type

The DTA was successfully used by transfer students to all campus types. Associate in Science degrees were particularly significant for transfer to research universities. The largest portion of Associate in Applied Science degrees were used to transfer to branch campuses.

Figure 21



## Two-Year Degree by Baccalaureate Major

The Associate in Arts - DTA degree was distributed across bachelor's degree majors. Specialized degrees were well targeted towards the articulated bachelor's degree major associated with it. Professional technical and transfer professional technical degrees were both focused on business and health. The former was also applied to the “upside down” degree, which rounds out the two year degree with general education coursework.

Figure 22

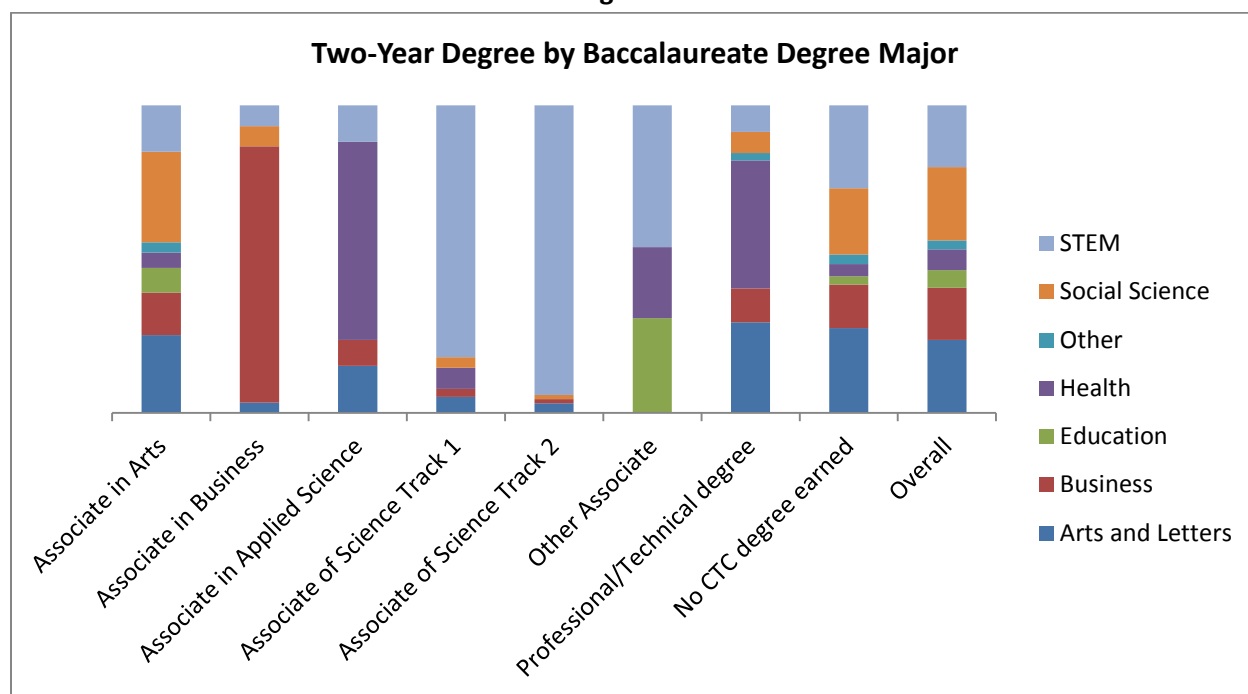


Figure 22.a

Two-Year Degree by Bachelor's Degree Major- Detailed Table

CTC Degree	Arts and Letters	Business	Education	Health	Other	Social Science	STEM
Associate in Arts (n=5,206)	25%	14%	8%	5%	3%	30%	15%
Associate in Business (n=461)	3%	83%				7%	7%
Associate in Applied Science (n=59)	15%	8%		64%			12%
Associate of Science Track 1 (n=116)	5%	3%		7%		3%	82%
Associate of Science Track 2 (n=225)	3%	1%				1%	94%
Other Associate (n=39)			31%	23%			46%
Professional/Technical degree (n=419)	29%	11%		42%	2%	7%	9%
No CTC degree earned (n=1,833)	28%	14%	3%	4%	3%	21%	27%
Overall (n=8,358)	24%	17%	6%	7%	3%	24%	20%

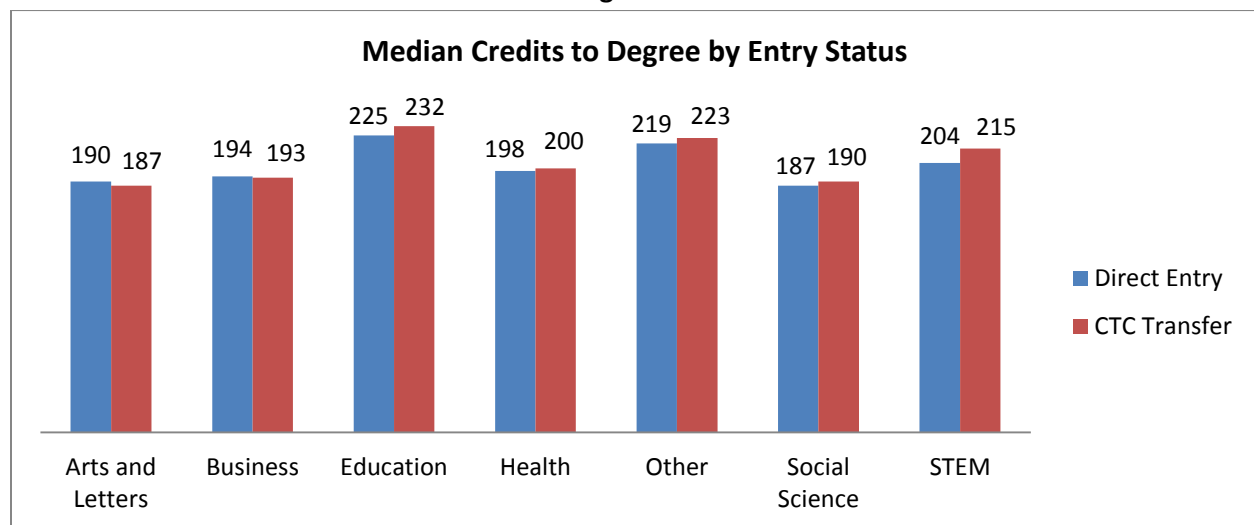
## CTC Transfer Performance: Credits Earned For Bachelor's Degree Completion and Senior Year GP

This section describes CTC transfer and direct entry graduate performance along two dimensions: credits earned for the bachelor's degree and senior year GPA. Credits earned include "institutional credits earned" and "non-institutional credits earned" from PCHEES to create a "total credits to degree" field. An adjustment was made to the credits earned for all Washington State University campuses to normalize the semester credits to quarter credits. Graduates with more than one degree awarded were excluded from the analysis due to inconsistent application of credits to each completion record. Graduates from a CTC bachelor's degree institution were not included in the analysis of major pathways, nor were graduates who showed no total credits. Average senior GPA was compiled by averaging the term GPA of all terms where "bachelor's degree class standing" = senior.

### *All Graduates Median Credits Earned*

Median credits earned for graduation was approximately the same for CTC transfer and direct entry graduates. The CTC transfer pathway judged by this dimension is equally efficient to direct entry for degree completion across degree majors.

Figure 23

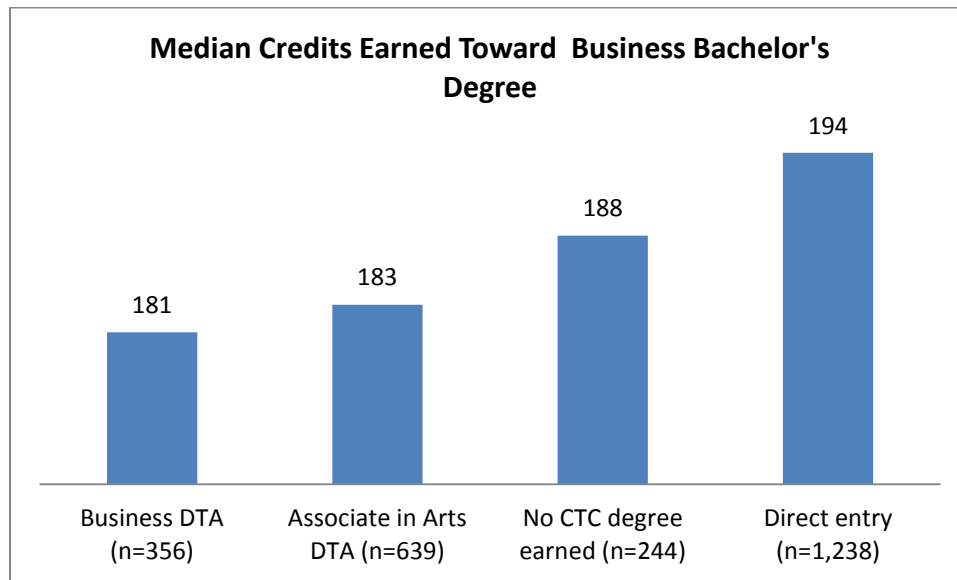




### ***Baccalaureate Business Degree Median Credits Earned***

For business majors, the specialized Business DTA degree was slightly more efficient than other CTC degrees, transferring without a degree, or even direct entry in terms of credits earned for degree completion.

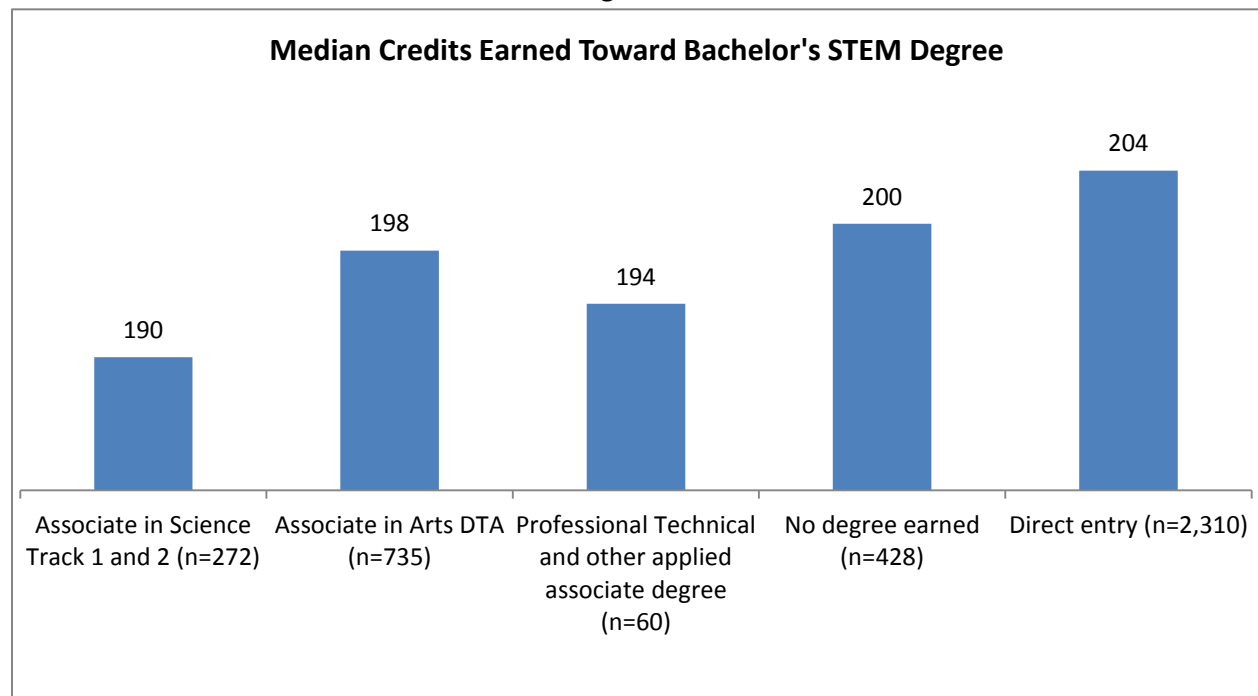
**Figure 24**



### ***Baccalaureate STEM Graduates - Median Credits Earned***

Associate in Science degrees were the most efficient pathway to Bachelor's degree completion based upon credits earned.

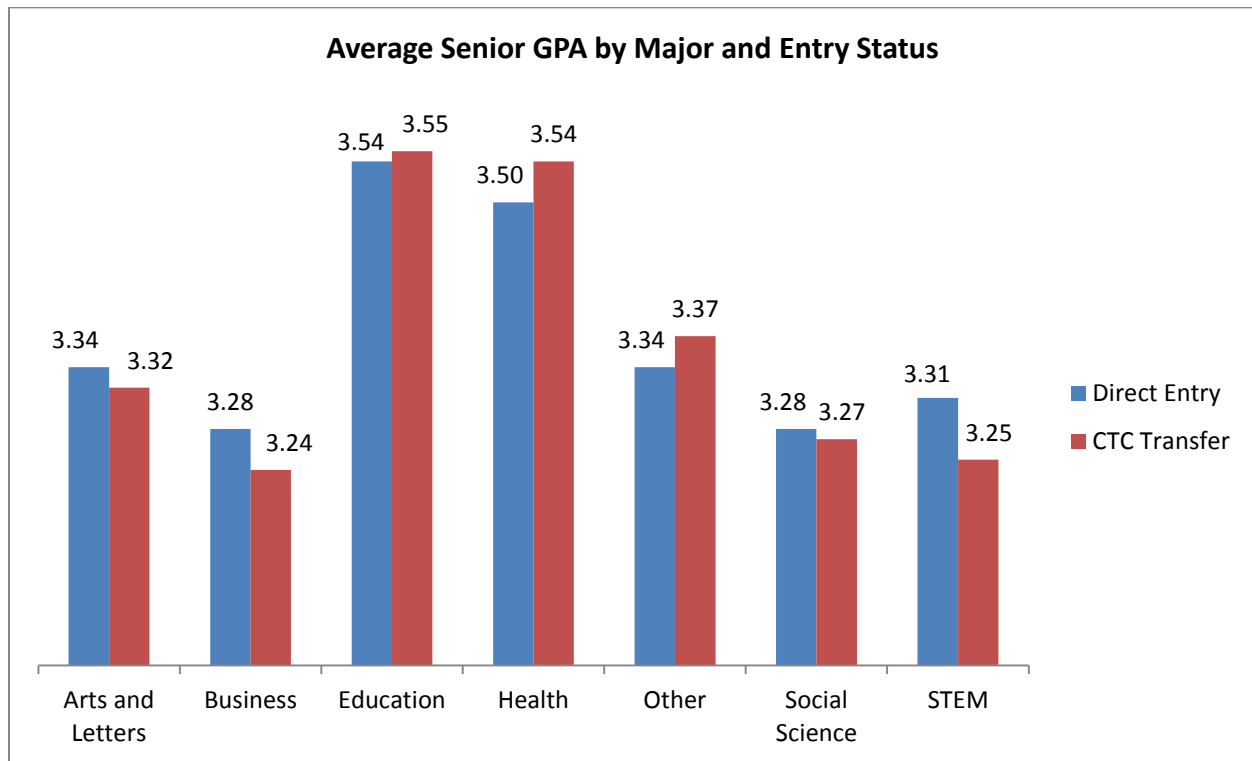
**Figure 25**



### *Senior Year GPA by Major*

Senior year GPAs were similar for CTC transfer and direct entry students across majors.

**Figure 26**



## **Appendix A: Steering and Technical Workgroup Membership**

### Steering Group

Michelle Andreas, State Board for Community and Technical Colleges (SBCTC) Director of Student Services & Transfer Education

Darby Kaikkonen, SBCTC Policy Research Associate

David Prince, SBCTC Policy Research Director

Jan Yoshiwara, SBCTC Deputy Executive Director for Education Services

Wilma Dulin, CTC Research and Planning Commission President

Tomas Ybarra, CTC Instruction Commission President

Jane Sherman, Council of Presidents (COP) Associate Director for Academic Policy

Paul Francis, Council of Presidents (COP) Executive Director

Melissa Beard, Education Research and Data Center

Chadd Bennett, Independent Colleges of Washington Director Research and Publications

Randy Spaulding, Washington Student Achievement Council (WSAC) Director of Academic Affairs and Policy

Jim West, WSAC Associate Director Policy Planning and Research

Christy England-Siegerdt, WSAC Director Research and Planning

### College and University Institutional Researchers

Patty James, Bellevue College

Colleen Gelatt, Central Washington University

Keith Klauss, Eastern Washington University

Hal Royaltey, Peninsula College

Kelley Cadman, Tacoma Community College

Laura Coghlan, The Evergreen State College

Nevena Lalic, University of Washington

Fran Hermanson, Washington State University

Corinna Lo, Washington State University

Chris Stark, Western Washington University

## Appendix B: List of All Centers and the Related University Sites

Central Washington University	Big Bend Community College
	Edmonds Community College
	Edmonds Community College Partnership
	Everett Community College
	Green River Community College
	Highline Community College
	Pierce College Partnership
	Pierce Community College -- Fort Steilacoom
	Skagit Valley College
	U Center of N Puget Sound Partnership
	Wenatchee Valley College
	Yakima Valley College
Eastern Washington University	Bellevue College
	Clark College
	Clark College Partnership
	North Seattle Community College
	Pierce Community College -- Fort Steilacoom
	South Seattle Community College
	Spokane Community Colleges
	Spokane Falls Community College
The Evergreen State College	Grays Harbor College
	Muckleshoot Reservation
	Nisqually Reservation
	Northwest Indian College-Tulalip
	Port Gamble S'klallam Reservation
	The Evergreen State College-Tacoma
	U Center of N Puget Sound Partnership
	U Center of N Puget Sound Partnership
University of Washington – Seattle and Bothell	
Washington State University - Tri-Cities Campus	Walla Walla Community College
Washington State University - Vancouver Campus	Grays Harbor College
Western Washington University	Everett Community College
	North Seattle Community College
	Olympic College
	Peninsula College
	U Center of N Puget Sound Partnership

## Appendix C: Majors Defined and Grouped

Each degree was associated with a Classification of Instructional Program (CIP) six digit code, which was used to identify a graduate's major. With the exception of some CIP codes for the STEM areas, most two-digit CIP's could be classified into a single major category. These categories were further grouped into clusters for the purposes of this report.

All bachelor's degree degrees earned were reported in the sections that counted total number of majors, even if a student earned two or sometimes three degrees. The first criteria for grouping majors came from the 2009 Role of Transfer study, Appendix 2. The criteria was applied first to all CIP codes, then the criteria for STEM degrees established in the dashboard reports from the Education Research and Data Center was applied. See below for all CIP codes earned by 2011 graduates and the major grouping assigned:

<b>2 or 6-digit CIP code</b>	<b>Major Grouping for Report</b>	<b>CIP Title</b>
<b>01.</b>	Other	Ag. & Natural Conservation
01.090.1	STEM	
01.10.01	STEM	
01.11.02	STEM	
01.11.03	STEM	
01.12.01	STEM	
<b>03.</b>	STEM	Ag. & Natural Conservation
<b>04.</b>	STEM	Engineering, CIS, & Architecture
<b>05.</b>	Arts and Letters	Humanities
<b>09.</b>	Arts and Letters	Communications
<b>10.</b>	Arts and Letters	Communications
<b>11.</b>	STEM	Engineering, CIS, & Architecture
<b>13.</b>	Education	Education & Teaching
<b>14.</b>	STEM	Engineering, CIS, & Architecture
<b>15.</b>	STEM	Engineering, CIS, & Architecture
<b>16.</b>	Arts and Letters	Arts & Letters
<b>19.</b>	Other	Ag. & Natural Conservation
19.05.01	STEM	
19.05.05	STEM	
<b>22.</b>	Other	Law
<b>23.</b>	Arts and Letters	Arts & Letters
<b>24.</b>	Arts and Letters	Humanities
<b>26.</b>	STEM	Science & Math
<b>27.</b>	STEM	Science & Math
30.01.01	STEM	Science & Math
<b>30.08.01</b>	STEM	Science & Math
<b>30.11.01</b>	Other	
<b>30.15.01</b>	STEM	
30.19.01	STEM	
30.20.01	Arts and Letters	Humanities
<b>2 or 6-digit CIP code</b>	<b>Major Grouping for Report</b>	<b>CIP Title</b>
30.24.01	STEM	Science & Math
30.99.99	Arts and Letters	Humanities
<b>31.</b>	Other	Ag. & Natural Conservation

38.	Arts and Letters	Humanities
40.	STEM	Science & Math
42.	Social Science	Psychology
43.	Social Science	Social Sciences- Applied
44.	Social Science	Social Sciences- Applied
45.	Social Science	Social Sciences- General
49.	Other	Trades
50.	Arts and Letters	Arts & Letters
51.	Health	Health
52.	Business	Business
54.	Social Science	Social Sciences- General
99.	Other	Unknown

## Appendix D: Entry Status Definition

Students were given an entry status using the following criteria:

Code	Criteria
Direct Entry- no Transfer Credits	Previous Credits=0, no degree
Direct Entry< less than 40 Credits Transferred	Previous Credits <40, no degree
CTC Transfer with Two Year Degree	Has CTC Degree
CTC Transfer, no Degree	Previous Credits>=40, CTC credits>=20 , no degree
Other Transfer	Previous Credits>=40, CTC Credits <20, no degree

Based on the above, graduates were grouped into three categories of direct entry, CTC transfer, or other transfer for the comparisons within the report.