# Research Report: Movement Among BC Public Post-Secondary Institutions

Tracking the Flow of 2001/02 Grade 12 Graduates in BC Public Post-Secondary Education Over a Five-Year Period

# **Background**

**About STP:** The Student Transitions Project (STP) is a collaborative effort of British Columbia's Ministries of Education and Advanced Education and Labour Market Development and B.C.'s public post-secondary institutions. STP research is helping school districts, post-secondary institutions and the Ministries of Education and Advanced Education and Labour Market Development to plan and manage programs and access to higher education in BC.

**Methodology:** All students entering the kindergarten to grade 12 (K-12) system in British Columbia are assigned a nine-digit personal education number (PEN) and this unique identifier follows students throughout their education in British Columbia. STP links the student PEN's between the two education systems to track student transitions in a manner that protects personal privacy.

**Executive Summary:** In this analysis, a cohort of 43,360 grade 12 graduates of 2001/02 was followed for a period of five years, from 2002/03 to 2006/07, as the students moved into and among BC's public post-secondary institutions. A summary of their retention and credential completion outcomes is also provided.

- Within five years of high school graduation in 2001/02, 72% of graduates registered for post-secondary education in BC, increasing to at least 78% when attendance at other non-BC public and BC private institutions are accounted for (via linkages to StudentAid BC and Passport to Education).
- Evidence suggests that BC's public postsecondary education system is allowing the transition of students between institutions and in multiple directions over time.
   Students flow between different institutions and different sectors (universities, university colleges, urban colleges, small colleges and institutions).
- Of the 2001/02 grade 12 graduation class who attended BC public post-secondary education, 40% attended more than one institution, attending an average of 1.6 institutions over a five-year period. Only 5% to 9% of students attended more than one institution in the same academic year.
- The post-secondary education system allows students to stop out for a period of time during their studies. Each year, the number of stop outs without a credential significantly outnumbers the stop outs with a completed

- credential. Some of these stop outs might never return (ultimately becoming dropouts), but we do not know for certain if and when they will return. Of those that did return within the five-year study period, the proportion of stop outs (without a credential) who returned declined from 27% in 2004/05 to 19% in 2005/06 and 13% in 2006/07.
- Stop out or dropout behavior is more common among students enrolled in small colleges and university colleges. It is hoped that a collaborative survey of BC's public post-secondary leavers, planned for 2009, might reveal some of the underlying reasons for this phenomenon.
- Of those who enrolled in BC's public postsecondary education system after high school graduation in 2001/02, 38% completed a credential. While this is the average completion rate, credential completion rates were much higher (49%) among those who graduated from high school with GPA's of at least 75% and among graduates from many of the college regions in the Lower Mainland.

**Web Site:** This report and a 2-page highlights newsletter is available on the Student Transitions Project web site. Please visit our web site at <a href="http://www.aved.gov.bc.ca/student transitions">http://www.aved.gov.bc.ca/student transitions</a> for more information, including STP Fast Facts for the general public and Excel pivot tables for authorized users.

# Tracking the Flow of 2001/02 BC Grade 12 Graduates Into and Among BC Public Post-Secondary Institutions Over a Five-Year Period, 2002/03 to 2006/07

The Student Transitions Project has reported remarkably consistent transition rates of British Columbia secondary school graduates into BC public post-secondary education over the last five years, with roughly half of each grade 12 graduation cohort enrolling in BC public post-secondary education within one year of high school graduation and 72% within five years (*STP Research Results, June 2008*). The STP is now discovering and revealing more about the mobility of these students within the BC public post-secondary education system. Some of these students register at multiple institutions over time, while others persist at the same institution; some register each year, while others stop out and return, or drop out without returning for the time being. Despite taking different pathways over varying lengths of time throughout the BC public post-secondary system, 38% of the 2001/02 grade 12 graduates who began their post-secondary studies in 2002/03 or later had completed a credential by 2006/07.

In this report, a cohort of 43,360 BC secondary school graduates of 2001/02 is followed for a five-year period (from 2002/03 to 2006/07). An analysis of their movement into and among BC public post-secondary institutions is provided, as well as a summary of their retention and credential completion outcomes. The primary research question of interest is: **What is the flow of Grade 12 graduates into and among BC public post-secondary institutions over a multi-year period?** A number of additional research questions follow from this topic and each question is addressed on the following pages of this newsletter.

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### Additional information is provided in the Appendices:

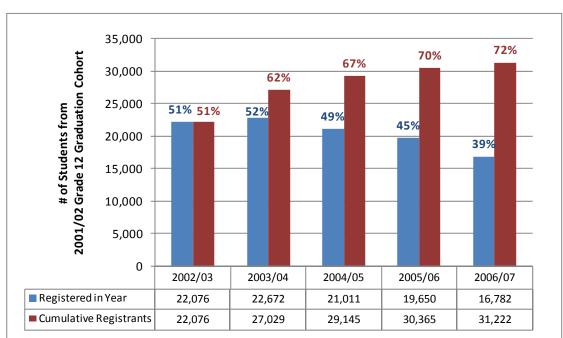
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# Q1. Post-Secondary Enrollment: After graduating from BC Grade 12, how many students registered in BC public post-secondary education over a five-year period?

As shown in *Figure 1*, 51% (or 22,076) of the 43,360 students from the 2001/02 high school graduation cohort made their first transition into BC public post-secondary education within one year of high school graduation. In each of the next four years, successively smaller proportions (11%, 5%, 3% and 2%) of the graduation cohort made their first transition to post-secondary education. The total number of students from the graduation cohort enrolled in post-secondary education reached its peak two years after high school graduation at 27,029 in 2003/04 and then declined in each of the three succeeding years as students stopped out and/or completed a credential.

Figure 1: BC Public Post-Secondary Registration Status of 2001/02 BC High School Graduation Class in each of Five Years Since Graduation

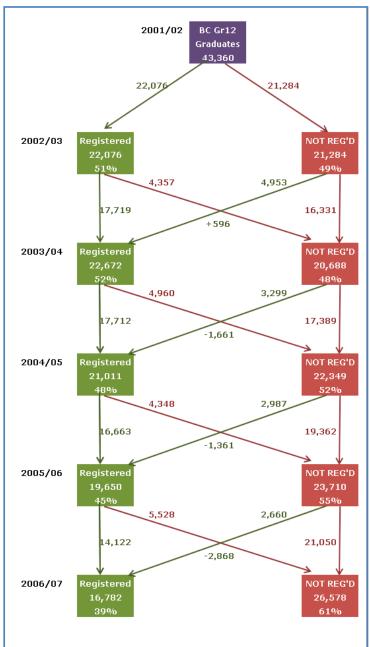


**Note:** The number and % of the 43,360 grade 12 graduates of 2001/02 who registered each year is shown. Declining annual registrant volume beginning in 2004/05 is due to credential completions and stop outs. Cumulative registrants is a unique count of graduates who registered at any time over the five-year period since graduation (72% within 5 years).

When attendance at non-BC public and BC private institutions are accounted for, the proportion of students from the 2001/02 grade 12 graduation class who participated in post-secondary education within five years of high school graduation is at least 78%. This is a result of linking the Personal Education Number (PEN) from STP to StudentAid BC and Passport to Education data sets to obtain other post-secondary institution destinations outside of the BC public system. It should be noted, however, that these other data sources only reveal *some* of the additional student transitions outside of the BC public system because many students do not apply for Student Aid and/or redeem Passport stamps for their post-secondary education.

# Q2. Post-Secondary Pathways: What is the flow of BC Grade 12 graduates into out of BC public post-secondary education over a multi-year period?

Figure 2: BC Public Post-Secondary Registration Pathways of 2001/02 BC Grade 12 Graduates



**Figure 2** shows the volume and direction of student flows between registration and non-registration states for the cohort of 43,360 BC grade 12 graduates of 2001/02.

From one year to the next, roughly 17,000 to 18,000 students remained registered in BC public post-secondary education in the first four years after high school graduation. In addition, there was an annual inflow of 2,500 to 4,000 students who were not registered in the previous year, and an annual outflow of 4,000 to 5,000 students who moved from a registration to non-registration state. The annual supply of continuing registrants, along with annual inflows and outflows of new and former registrants, results in roughly 20,000 to 22,000 grade 12 graduates being registered in the BC public post-secondary system each year, at least until 2006/07 when the largest volume of students completed credentials (see Q4 and Q9).

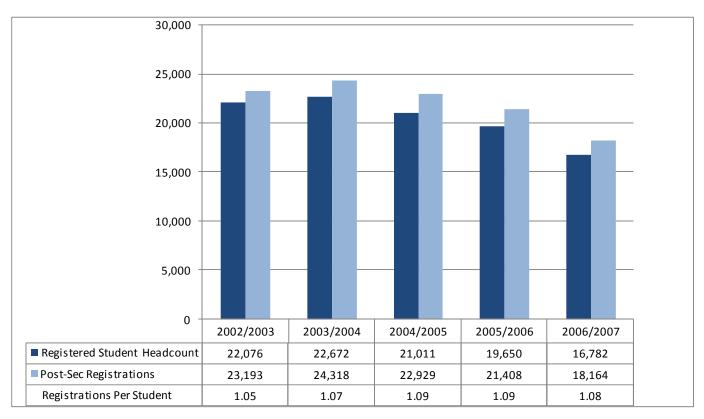
Net student flows are shown at the intersection of each inflow and outflow in the diagram. The net flow of +596 students in 2003/04 indicates that more students moved from a non-registered to registered state in this year than those who moved in the opposite direction. Over the succeeding three years, negative net flows imply that more grade 12 graduates of 2001/02 left the BC public post-secondary education system in those years than entered.

# Q3. Concurrent Enrollment: To what extent do students enroll concurrently at two or more institutions?

Students may attend more than one institution each year. Due to differences in registration and enrollment reporting periods across BC's post-secondary institutions, it is difficult to determine with certainty whether the multiple registrations occurred simultaneously or sequentially within the academic year. Nevertheless, by comparing the number of multiple registrations per year with a count of unique registrants per year, STP reveals that only 5% to 9% of students were enrolled in more than one BC public post-secondary institution annually (see *Figure 3*).

The proportion of students enrolled in more than one institution per year increases slightly over time, reaching a peak in the third year of registration (2004/05). The increasing rate of multiple enrollments may be due to students making sequential transfers within the same academic year to universities from colleges, university colleges, or institutes via BC's transfer system.

Figure 3: Registered Headcounts and Post-Secondary Registrations of 2001/02 High School Graduates in each of Five Years Since Graduation



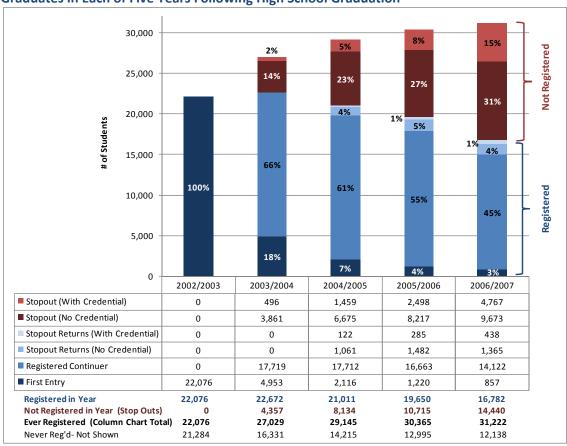
# Q4. Stop Outs: How many of the BC Grade 12 graduation cohort attended BC public post-secondary institutions, left for a period, and then returned?

As shown in *Figure 4*, the proportion of students from the 2001/02 grade 12 graduation cohort who stopped out or took at least one year off from their studies (despite not yet completing a credential) grew steadily over the five-year period, from 14% of registrants in 2003/04 (3,861 students), to 23% and 27% in the next two years, reaching 31% by 2006/07 (9,254 students). Some of these stop outs might ultimately become dropouts, but we do not know for certain if and when they will return.

**Do all stop outs leave without a credential?** Some stop outs from the BC grade 12 graduation cohort completed a public post-secondary credential before leaving, but each year, stop outs without such a credential significantly outnumber those stop outs with a post-secondary credential (see *Figure 4*).

Of the students who stopped out without a credential, what proportion returns? A total of 3,861 students stopped out in 2003/04 (having previously registered in 2002/03 without completing a credential), of which 1,061 (or 27%) returned to their studies in 2004/05. The proportion of stop outs who returned over the next two years, having stopped out in any of the previous two or three years, declined to 19% in 2005/06 and then 13% in 2006/07<sup>1</sup>.

Figure 4: Annual BC Public Post-Secondary Registration and Completion Status of 2001/02 BC High School Graduates in Each of Five Years Following High School Graduation



<sup>&</sup>lt;sup>1</sup> Stop outs are counted in each year in which they stopped out; multiple stop out periods are possible for each student. The proportion of stop outs who returned in 2005/06 and 2006/07 is calculated on the number of *unique* stop out students (1,482 and 1,365) over the preceding two or three years.

# Q5. Student Mobility Patterns: What are the patterns of student mobility among BC public post-secondary institutions?

Among the 2001/02 grade 12 graduates who registered in BC public post-secondary education within one year of high school graduation, the single largest destination was university (17%), followed by university college (15%), urban college (12%), small college (5%) and institute or agency (3%). After enrolling in the BC public post-secondary education system, STP is able to track the volume and direction of student flows (or net flows) between sectors over a five-year period<sup>2</sup>. Changes in sector designations during the time period of this study lead to some anomalies in the trends; however, some general student flow patterns are evident:

**Universities** primarily receive existing post-secondary students from university colleges and urban colleges, and a small number of students from small colleges. Many of these students entering university from other sectors are transfer students<sup>3</sup>. Universities send nearly triple the number of students to institutes and agencies than they receive from this sector.

**University colleges** send more students to institutes, urban colleges and BC universities than they receive; it is only small colleges from which university colleges receive small annual net inflows of students.

**Urban colleges** primarily receive students from small colleges and university colleges. Students who leave urban colleges for another post-secondary institution typically transition to universities, while a smaller number transition to institutes.

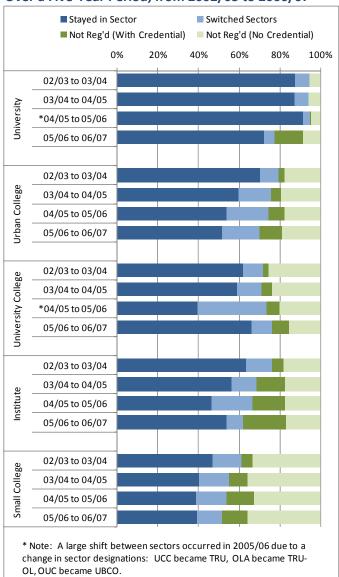
**Small colleges** have a net outflow of students to all other postsecondary sectors.

**Institutes** have a net inflow of students from all post-secondary sectors.

BC's post-secondary students are relatively mobile and the BC Transfer System is responsible for a significant volume of that movement. Students move between each of BC's public post-secondary institutions and between the different types of institutions over a multi-year period.

Figure 5 provides a visual summary of the extent to which students switch from one sector to another. The vast majority of students do not switch sectors from year to year, especially among those registered in the university sector. However, students enrolled in small colleges are much more likely to switch sectors (and the BC Transfer System encourages this type of student mobility). In the urban college sector, where no changes in sector designations occurred over the five-year time period, the proportion of the 2001/02 grade 12 graduation cohort switching sectors increases over time (primarily from college to university). See sector groupings and sector transition matrices in Appendix A and B.

Figure 5: Student Mobility by Public Post-Secondary Sector, Among 2001/02 BC Grade 12 Graduates of Over a Five-Year Period, from 2002/03 to 2006/07



STP is also able to track the mobility of students between individual institutions via a series of transition matrices, but these matrices are too detailed to present in this report. On average, over a period of four years, roughly 20% of continuing registrants switched institutions from one year to the next.

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<sup>&</sup>lt;sup>2</sup> Institutional designations in this study are those that were in place for the period of this study.

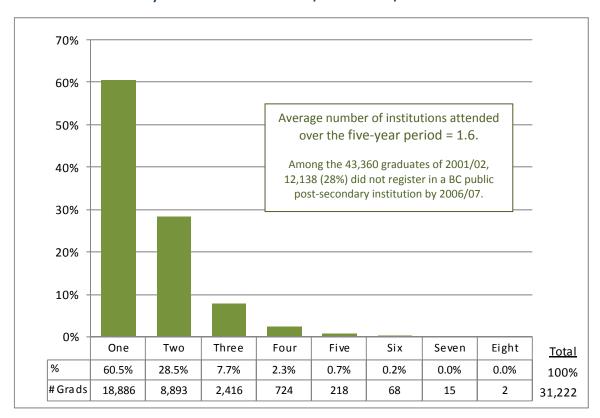
Transfer students are admitted to university on the basis of having completed a minimum number of credits in transferable courses in a college, university college, or institute.

# Q6. Student Mobility Volume: What is the number of BC public postsecondary institutions ever attended?

Student mobility can also be measured by the number of post-secondary institutions that registrants attended over a five year period. Students may attend more than one institution each year (either sequentially or simultaneously). A total of 31,222 students (or 72% of the 2001/02 grade 12 graduates) enrolled in BC public post-secondary institution(s) between 2002/03 and 2006/07. They attended an average of 1.6 institutions each over the period: 60.5% attended just one institution, 28.5% attended two and 11.0% attended three or more institutions (see *Figure 6*).

BC's public post-secondary students are relatively mobile, given that roughly 40% of registrants attended more than one institution over the five-year period. However, their mobility is primarily limited to a single transfer, most frequently from a college or university college to university.

Figure 6: Number of Institutions Attended Over Five Years by 2001/02 Grade 12 Graduates Who Registered in BC Public Post-Secondary Education Between 2002/03 and 2006/07



# Q7. Student Stability: Which BC Grade 12 students remained at the same BC public post-secondary institution through the entire reporting period?

A total of 22,076 BC grade 12 graduates of 2001/02 immediately enrolled in BC public post-secondary education in 2002/03, of which 18,382 (83%) enrolled continuously for a period of one to five years, depending upon their program duration, student persistence and full-time/part-time status. The largest proportion of continuous enrollees remained registered in the BC public post-secondary system for five years (51%). For others continuously enrolled, 13% stayed in the system for just one year, 11% for two years, 8% for three years and 17% for four years.

Despite continuous enrollment over different lengths of time, not all continuous registrants remained enrolled at the same post-secondary institution. Among the 18,382 continuous enrollees who first began their post-secondary education in 2002/03, a total of 11,730 (or 64%) remained registered at the same institution for the duration of their enrollment. As shown in *Table 1*, the longer students remained enrolled in the BC public post-secondary system, the less likely they were to stay at the same institution, declining from 85% for those who enrolled for two years to 49 % among those who remained continuously enrolled for five years.

Table 1: % of Immediate Entry Students of the 2001/02 Grade 12 Graduation Class Who Enrolled Continuously at the Same BC Public Post-Secondary Institution

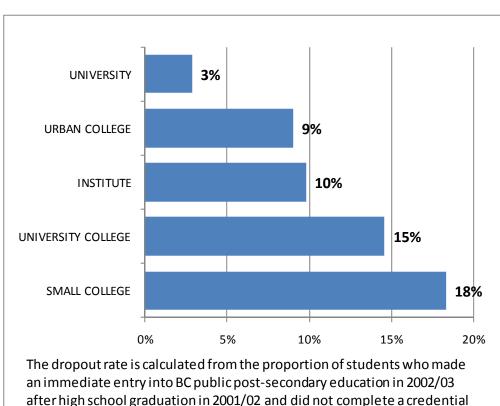
	(A)	(B)	(C=B/A)
	Number of	Number	% of Immediate-Entry
	Students	Enrolled	Students Enrolled
Continuous Enrollment Duration	Enrolled	Continuously	Continuously
of Immediate Entry Students	Continuously	at Same PSI	at Same PSI
One Year	2,403 (13%)	2,403 (20%)	100%
Two Years	1,996 (11%)	<b>1,706</b> (15%)	85%
Three Years	<b>1,523</b> (8%)	<b>1,054</b> (9%)	69%
Four Years	3,024 (17%)	1,941 (17%)	64%
Five Years	9,436 (51%)	<b>4,626</b> (39%)	49%
Subtotal: Enrolled Continuously	18,382 (100%)	<b>11,730</b> (100%)	64%
Not Continuous – Stopped Out	3,694		
Grand Total Immediate-Entry	22,076		

# Q8. Dropout Rates: What proportion of immediate-entry BC Grade 12 graduates, left a BC public post-secondary institution after their first year of registration and did not return over the next four years?

**Dropout Rates by Sector:** Among the 22,076 immediate-entry students from the 2001/02 grade 12 graduation class, a total of 2,110 (10%) left after their first year of registration and did not return within the next four years (2003/04 to 2006/07). Consistent with different levels of academic qualifications needed for post-secondary admission, the dropout rate tends to vary across sectors (see Figure 7).

Numerous reasons may exist for higher attrition rates in small colleges, such as lower GPA levels of high school graduates who enrolled in small colleges (see Figure 8), attractive employment opportunities in the local economy of the college region, and differences in parental education levels (which are often correlated with higher education participation).

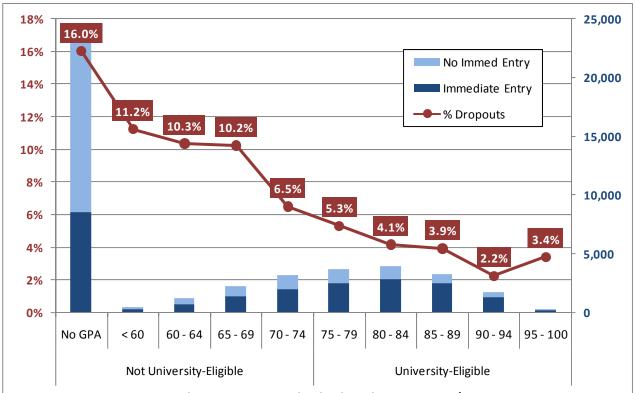
Figure 7: First Year, Immediate-Entry Dropout Rate from BC Public Post-Secondary Education, by Type of **Institution Last Attended** 



in 2002/03 and did not return to any BC public post-secondary institution at any time over the next four years (2003/04 to 2006/07).

**Dropout Rates by GPA:** As shown in **Figure 8**, the first year, immediate-entry dropout rate is higher among students admitted to BC public post-secondary education with no or low academic GPA's from high school, declining steadily from a 16% dropout rate (for students with no GPA) to a 2% dropout rate among students with GPA's in the 85 to 90 percent range. A small number of graduates with GPA's in the 95-100 range show a higher drop-out rate of 3.4%, possibly because these students transferred to other public or private institutions outside of BC, or to private post-secondary institutions within BC.

Figure 8: First Year, Immediate-Entry Dropout Rate from BC Public Post-Secondary Education, by Academic GPA in High School



Academic GPA Upon High School Graduation in 2001/02

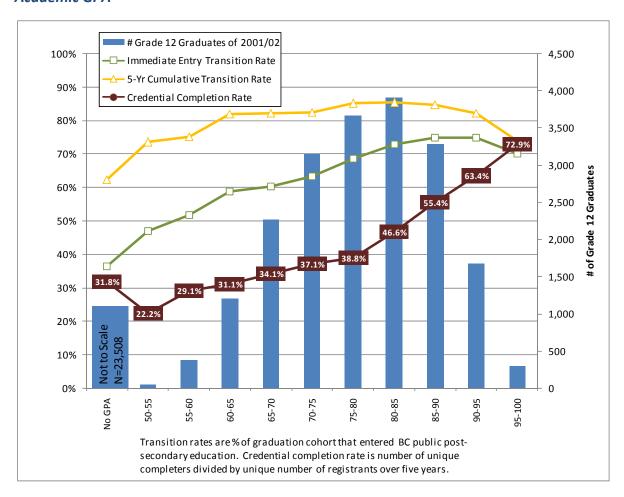
**Notes:** (a) The dropout rate is calculated from the proportion of students who made an immediate entry into BC public post-secondary education in 2002/03 after high school graduation in 2001/02 and did not complete a credential in 2002/03 and did not return to any BC public post-secondary institution at any time over the next four years (2003/04 to 2006/07). (b) The total height of each bar is the total number of high school graduates within the GPA range. (c) An academic GPA is not calculated for students with insufficient grades in academic grade 12 courses (English 12 plus the best three academic subjects).

# Q9. Credential Completion: What proportion of BC Grade 12 graduates completed a credential from a BC public post-secondary institution?

Within five years of BC grade 12 graduation in 2001/02, a total of 31,222 students (72%) had registered for at least one term in the BC public post-secondary education system. Five years later, by the end of the 2006/07 academic year, 11,977 students (or 38%<sup>4</sup> of registrants) completed 13,039 credentials. The two main types of credentials awarded were Bachelor's or first professional degrees (40% of the total credentials awarded), certificates (31%) and diplomas (21%)<sup>5</sup>.

Figure 9 shows that students with higher academic GPA's upon graduation from grade 12 are generally more likely to transition into BC public post-secondary education and even more likely to achieve higher credential completion rates. Students with academic GPA's of 75% or more upon graduation from high school achieved higher credential completion rates than the provincial average, with the highest completion rate reaching 72.9% among students who graduated with GPA's of 95% or higher.

Figure 9: Transition Rates and Credential Completion Rates of 2001/02 BC Grade 12 Graduates, by Academic GPA

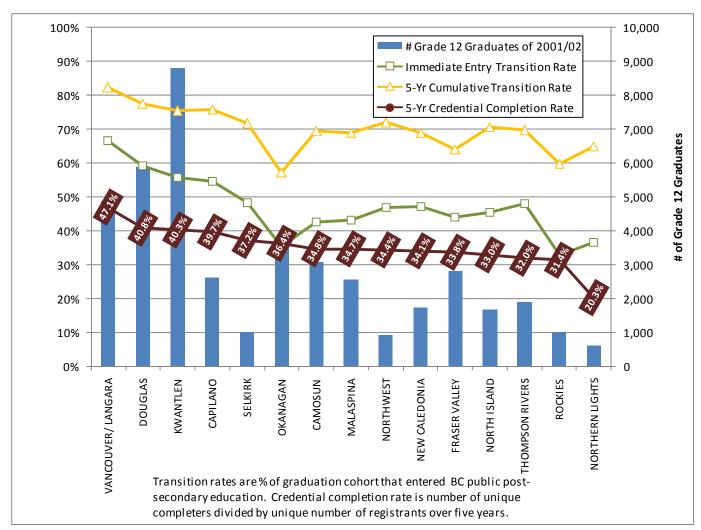


<sup>&</sup>lt;sup>4</sup> This credential completion rate is calculated for all completers who registered over the five-year period, including both direct and delayed entry students. The five-year credential completion rate calculated exclusively for 22,076 immediate-entry students is 44%, based on 11,096 credentials completed by 9,814 students.

<sup>&</sup>lt;sup>5</sup> Apprenticeship credentials are not included in STP.

*Figure 10* compares transition rates to completion rates across the regions from which students graduated from high school<sup>6</sup>. This comparison reveals that some regions with relatively low transition rates (Okanagan) achieved relatively high credential completion rates. Similarly, other regions with relatively high transition rates (Northern Lights) achieved relatively low completion rates.

Figure 10: Transition Rates and Credential Completion Rates of 2001/02 Grade 12 Graduates, by College Region of Graduation High School



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<sup>&</sup>lt;sup>6</sup> Grade 12 graduates are classified into a college region, based on the geographic location of their high school of graduation.

**Conclusion:** BC's public post-secondary education system allows the transition of students between institutions and in multiple directions over the course of their studies. Evidence of the success of BC's post-secondary system is revealed after tracking a cohort of grade 12 graduates over a period of five years along their various post-secondary pathways.

- Just over half of the grade 12 graduates of 2001/02 entered BC public postsecondary education within one year of high school graduation, increasing to 72% within five years of graduation and reaching at least 78% when other non-BC public and BC private post-secondary destinations are accounted for<sup>7</sup>.
- The majority of students pursuing postsecondary education remain registered from year to year, while a smaller proportion flow into and out of the postsecondary system over time. Some take time off from their studies and do not return, while others resume their education in a subsequent year.
- Students flow between different institutions and in multiple directions between sectors (universities, university colleges, urban colleges, small colleges and institutes).
- A relatively large proportion of grade 12 graduates (40%) attended more than one BC public post-secondary institution over the five year period, with 28.5% attending two institutions and 11.0% attending three or more. Registrants attended an average of 1.6 institutions over the five-year period. Relatively few students attended more than one

- institution in the same academic year (5% to 9% per year).
- Of those who enrolled immediately in BC public post-secondary education after graduation, the largest proportion (51%) remained registered in the system for five years continuously; the balance registered for shorter periods without stopping. On average, among all those who enrolled continuously for up to five years, 64% remained at the same institution.
- There is evidence of high dropout rates among immediate entry students with low GPA's from high school and among those who enrolled in small colleges and university colleges. While it is possible that various external factors (independent of the institutions) lure students away from their education before completion, it is also possible that many of these students will return to their education in future, either within BC's public post-secondary education system, or elsewhere. A survey planned for 2009 might reveal some of the reasons for this phenomenon<sup>8</sup>.
- Within five years of grade 12 graduation, 72% of 2001/02 grade 12 graduates enrolled in BC public post-secondary education, of which 38% completed a credential. Credential completion rates are much higher (49%) among students who graduated from high school with university-eligible GPA's, with completion rates ranging from 39% for grade 12 graduates in the 75-80 GPA range to 73% among students in the 95-100 high school GPA range.

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<sup>&</sup>lt;sup>7</sup> By linking student information from STP to post-secondary education institution destinations in StudentAid BC and Passport to Education data sets via the Provincial Education Number (PEN), STP has identified additional student transitions to post-secondary institutions outside of BC and in BC private institutions. This is by no means a complete accounting of post-secondary transitions because students may still attend non-BC institutions or BC private institutions without applying for StudentAid or redeeming Passport stamps to do so.

<sup>&</sup>lt;sup>8</sup> The Short Stay and Early Leavers Survey is a collaborative project of the BC public post-secondary institutions and the Ministry of Advanced Education and Labour Market Development. This survey of students who last registered in BC public post-secondary education in 2005/06 and did not receive a credential and did not return to their education will be conducted in the Spring of 2009.

<sup>&</sup>lt;sup>9</sup> University-eligible graduates had an Academic GPA upon high school graduation of 75% or higher.

# Appendix A: BC Public Post-Secondary Institutions by Sector

PSI Type	PSI Code	PSI Name
Institute/Agency	BCIT	British Columbia Institute of Technology
	ECI	Emily Carr Institute of Art and Design
	IIG	Institute of Indigenous Government
	JIBC	Justice Institute of British Columbia
	NVIT	Nicola Valley Institute of Technology
	OLA	Open Learning Agency
Institute/Agency Total		
Small College	CNC	College of New Caledonia
	COTR	College of the Rockies
	NIC	North Island College
	NLC	Northern Lights College
	NWCC	Northwest Community College
	SEL	Selkirk College
Small College Total		
Urban College	CAM	Camosun College
	CAP	Capilano College
	DOUG	Douglas College
	LANG	Langara College
	OKAN	Okanagan College
	VCC	Vancouver Community College
Urban College Total		
University College	KWAN	Kwantlen University College
	MAL	Malaspina University-College
	OUC	Okanagan University College
	UCC	University College of the Cariboo
	UCFV	University College of the Fraser Valley
University College Total		
University	RRU	Royal Roads University
	SFU	Simon Fraser University
	TRU	Thompson Rivers University
	TRU-OL	Thomspon Rivers University - Open Learning
	UBC	Universtiy of British Columbia
	UBCO	University of British Columbia (Okanagan)
	UNBC	University of Norther British Columbia
	UVIC	University of Victoria
University Total		
<b>Grand Total</b>		

### Notes:

The above list provides the names of BC's public post-secondary institutions during the time period of this study (2002/03 to 2006/07), including changes that occurred during this period (UCC became TRU and TRU-OL, OUC split into OKAN and UBCO). All university collegs and Capilano College and Emily Carr Institute of Art and Design were converted to universities in 2008/09 (beyond the scope of this study).

# **Appendix B: Sector Mobility Matrices**

# Movement Among BC Public Post-Secondary Sectors by BC Secondary School Graduates of 2001/02

Table A: Post-Secondary Sector Transitions of 2001/02 High School Graduates From Yr1 to Yr2 (2002/03 to 2003/04)

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	Post-	Secondary Sect	tor Where Regis						
						Reg Both	Reg Yr1;	Total Reg'd	Compl in
Post-Secondary Sector	Institute	Small college	Urban College	College	University	Yr1 & Yr2	NoReg Yr2	Yr1	Yr1
Institute	868	11	75	50	36	1,040	326	1,366	131
	63.5%	0.8%	5.5%	3.7%	2.6%	76%	24%	100%	10%
Small college	35	940	45	108	101	1,229	779	2,008	182
	1.7%	46.8%	2.2%	5.4%	5.0%	61%	39%	100%	9%
Urban College	215	7	3,564	97	153	4,036	1,034	5,070	224
	4.2%	0.1%	70.3%	1.9%	3.0%	80%	20%	100%	4%
University College	208	40	243	4,002	154	4,647	1,819	6,466	257
	3.2%	0.6%	3.8%	61.9%	2.4%	72%	28%	100%	4%
University	105	40	241	109	6,272	6,767	399	7,166	0
	1.5%	0.6%	3.4%	1.5%	87.5%	94%	6%	100%	0%
Reg Both Yr1 & Yr2	1,431	1,038	4,168	4,366	6,716	17,719 (a)	4,357 (b)	22,076 (c)	
	67%	64%	74%	72%	93%				
No Reg Yr1; Reg Yr2	698	591	1,489	1,708	467	4,953 (d)	16,331 (e)	21,284 (f)	
	33%	36%	26%	28%	7%				
Total Reg Yr2	2,129	1,629	5,657	6,074	7,183	22,672 (g)	20,688 (h)	43,360 (i)	794 (j)
	100%	100%	100%	100%	100%				4%
Compl in Yr2	476	240	533	508	6			1,763 (k)	88%
	22%	15%	9%	8%	0%			8%	0070
	Institute  Small college  Urban College  University College  University  Reg Both Yr1 & Yr2  No Reg Yr1; Reg Yr2  Total Reg Yr2	Post-Secondary Sector Institute Institute  868 63.5%  Small college 35 1.7%  Urban College 215 4.2%  University College 208 3.2%  University 105 1.5%  Reg Both Yr1 & Yr2 1,431 67%  No Reg Yr1; Reg Yr2 698 33%  Total Reg Yr2 2,129 100%  Compl in Yr2 476	Post-Secondary Sector Institute Small college Institute	Post-Secondary Sector Institute Small college Urban College Institute	Post-Secondary Sector	Institute         868         11         75         50         36           63.5%         0.8%         5.5%         3.7%         2.6%           Small college         35         940         45         108         101           1.7%         46.8%         2.2%         5.4%         5.0%           Urban College         215         7         3,564         97         153           4.2%         0.1%         70.3%         1.9%         3.0%           University College         208         40         243         4,002         154           3.2%         0.6%         3.8%         61.9%         2.4%           University         105         40         241         109         6,272           1.5%         0.6%         3.4%         1.5%         87.5%           Reg Both Yr1 & Yr2         1,431         1,038         4,168         4,366         6,716           67%         64%         74%         72%         93%           No Reg Yr1; Reg Yr2         698         591         1,489         1,708         467           33%         36%         26%         28%         7%           Total Reg Yr2	Post-Secondary Sector	Post-Secondary Sector   Institute   Small college   Urban College   University   College   University   Yr1 & Yr2   NoReg Yr2	Post-Secondary Sector   Institute   Small college   Urban College   College   University   College   University   Vr1 & Vr2   NoReg Yr2   Vr1

<sup>\* %</sup> who reg'd both years and stayed in same sector.

Table B: Post-Secondary Sector Transitions of 2001/02 High School Graduates From Yr2 to Yr3 (2003/04 to 2004/05)

		Post-	Post-Secondary Sector Where Registered Yr3 (2004/05)							
					University		Reg Both	Reg Yr2;	Total Reg'd	Compl in
	Post-Secondary Sector	Institute	Small college	Urban College	College	University	Yr2 & Yr3	NoReg Yr3	Yr2	Yr2
	Institute	1,195	19	107	76	64	1,461	668	2,129	476
a 4		56.1%	0.9%	5.0%	3.6%	3.0%	69%	49%	100%	22%
r Where (2003/04)	Small college	51	662	40	63	84	900	729	1,629	240
Z 00		3.1%	40.6%	2.5%	3.9%	5.2%	55%	36%	100%	15%
5 %	Urban College	250	13	3,371	148	495	4,277	1,380	5,657	533
S Se		4.4%	0.2%	59.6%	2.6%	8.8%	76%	27%	100%	9%
Post-Sec Sec Registered Yr	University College	218	37	213	3,575	277	4,320	1,754	6,074	508
Post-9		3.6%	0.6%	3.5%	58.9%	4.6%	71%	27%	100%	8%
A S	University	160	24	201	104	6,265	6,754	429	7,183	6
		2.2%	0.3%	2.8%	1.4%	87.2%	94%	6%	100%	0%
	Reg Both Yr2 & Yr3	1,874	755	3,932	3,966	7,185	17,712 (a)	4,960 (b)	22,672 (c)	
		77%	60%	82%	79%	97%				
	No Reg Yr2; Reg Yr3		511	891	1,084	246	3,299 (d)	17,389 (e)	20,688 (f)	
		23%	40%	18%	21%	3%				
	Total Reg Y3	2,441	1,266	4,823	5,050	7,431	21,011 (g)	22,349 (h)	43,360 (i)	1,763 (j)
		100%	100%	100%	100%	100%				8%
	Compl in Yr3		216		610	34			2,148 (k)	ጸን‰
		21%	17%	16%	12%	0%			10%	55/0

<sup>\* %</sup> who reg'd both years and stayed in same sector.

### Description of Totals (using Table B as an example):

- (a) Total registered in both years (2003/04 and 2004/05) = 17,712.
- (b) Total registered in Yr2 (2003/04), but not Yr3 (2004/05) = 4,960.
- (c) Total registered in Yr2 (2003/04) = 22,672.
- (d) Total registered in Yr3 (2004/05), but not Yr2 (2003/04) = 3,299.
- (e) Total NOT registered in either Yr2 or Yr3 (2003/04 or 2004/05) = 17,389.
- (f) Total NOT registered in Yr2 (2003/04) = 20,688.
- (g) Total registered in Yr3 (2004/05) = 21,011.
- (h) Total NOT registered in Yr3 (2004/05) = 22,349.
- (i) Total high school graduates of 2001/02 = 43,360.
- (j) Total credential completers in Yr2 (2003/04) = 1,788 (or 8% of 22,672 registrants in 2003/04).
- (k) Total credential completers in Yr3 (2004/05) = 2,170 (or 10% of 21,011 registrants in 2004/05).

Table C: Post-Secondary Sector Transitions of 2001/02 High School Graduates From Yr3 to Yr4 (2004/05 to 2005/06)

	Post-Secondary Sector Where Registered Yr4 (2005/06)									
					University		Reg Both	Reg Yr3;	Total Reg'd	Compl in
	Post-Secondary Sector	Institute	Small college	Urban College	College	University	Yr3 & Yr4	NoReg Yr4	Yr3	Yr3
	Institute	1,139	23	122	64	274	1,622	819	2,441	517
ا ا		46.7%	0.9%	5.0%	2.6%	11.2%	66%	34%	100%	21%
or Where (2004/05)	Small college	19	492	31	34	107	683	583	1,266	216
200 200		1.5%	38.9%	2.4%	2.7%	8.5%	54%	46%	100%	17%
3 3	Urban College	135	15	2,592	94	757	3,593	1,230	4,823	771
s Se d Y		2.8%	0.3%	53.7%	1.9%	15.7%	74%	26%	100%	16%
Post-Sec Sec egistered Yr	University College	112	32	375	2,010	1,179	3,708	1,342	5,050	610
ost		2.2%	0.6%	7.4%	39.8%	23.3%	73%	27%	100%	12%
Re	University	53	21	136	53	6,794	7,057	374	7,431	34
		0.7%	0.3%	1.8%	0.7%	91.4%	95%	5%	100%	0%
	Reg Both Yr3 & Yr4	1,458	583	3,256	2,255	9,111	16,663 (a)	4,348 (b)	21,011 (c)	
		73%	56%	76%	80%	96%				
	No Reg Yr3; Reg Yr4	529	458	1,043	551	406	2,987 (d)	19,362 (e)	22,349 (f)	
		27%	44%	24%	20%	4%				
Total Reg Y4		1,987	1,041	4,299	2,806	9,517	19,650 (g)	23,710 (h)	43,360 (i)	2,148 (j)
		100%	100%	100%	100%	100%				10%
	Compl in Yr4	498	136	712	443	1,583			3,372 (k)	78%
		25%	13%	17%	16%	17%			17%	7 6 7 6

<sup>\* %</sup> who reg'd both years and stayed in same sector.

Table D: Post-Secondary Sector Transitions of 2001/02 High School Graduates From Yr4 to Yr5 (2005/06 to 2006/07)

		Post-	Secondary Sec	tor Where Regis	tered Yr5 (2006	5/07)				
					University		Reg Both	Reg Yr4;	Total Reg'd	Compl in
	Post-Secondary Sector	Institute	Small college	Urban College	College	University	Yr4 & Yr5	NoReg Yr5	Yr4	Yr4
	Institute	1,071	7	66	31	57	1,232	755	1,987	498
e (9		53.9%	0.4%	3.3%	1.6%	2.9%	62%	38%	100%	25%
r Where (2005/06)	Small college	21	409	19	15	75	539	502	1,041	136
2 V €		2.0%	39.3%	1.8%	1.4%	7.2%	52%	48%	100%	13%
원 <b>4</b>	Urban College	123	18	2,225	78	567	3,011	1,288	4,299	712
ec Sec ed Yr		2.9%	0.4%	51.8%	1.8%	13.2%	70%	30%	100%	17%
Post-Sec	University College	60	11	80	1,650	184	1,985	821	2,806	443
Post-Se Register		2.1%	0.4%	2.9%	58.8%	6.6%	71%	29%	100%	16%
R S	University	167	37	177	79	6,895	7,355	2,162	9,517	1,583
		1.8%	0.4%	1.9%	0.8%	72.4%	77%	23%	100%	17%
	Reg Both Yr4 & Yr5	1,442	482	2,567	1,853	7,778	14,122 (a)	5,528 (b)	19,650 (c)	
		72%	57%	75%	82%	95%				
	No Reg Yr4; Reg Yr5	573	369	872	411	435	2,660 (d)	21,050 (e)	23,710 (f)	
		28%	43%	25%	18%	5%				
Total Reg Y5		2,015	851	3,439	2,264	8,213	16,782 (g)	26,578 (h)	43,360 (i)	3,372 (j)
		100%	100%	100%	100%	100%				17%
	Compl in Yr5	378	111	629	439	3,405			4,962 (k)	87%
		19%	13%	18%	19%	41%			30%	6770

<sup>\* %</sup> who reg'd both years and stayed in same sector.

### Notes:

- 1) Each of these tables show the flow of students from one post-secondary year to the next (for the 2001/02 high school graduation cohort). The matrices show the flow of students from one post-secondary sector to another from year to year. The counts in the main diagonal indicate the number and % of students who did not switch sectors; the counts above and below the main diagonal indicate the number and % of students who switched from one post-secondary sector to another.
- 2) Student flows between sectors are confounded by changes in sector designations. For example, due to the change in designation of the University College of the Cariboo to Thompson Rivers University, Table C shows a large increase (relative to Table B) in the proportion of students flowing from the UC to Univ sector. This merely reflects the change in sector designation.
- 3) The number of credential completers is shown in the perimeter of each table, including the % of registrants in the year who completed.
- 4) See Appendix A for a list of BC public post-secondary institutions, by sector.

# **Sector Mobility Matrices – Interpretation Notes**

Four matrices are provided to show how students transition from one sector to another in four transition periods, beginning with 2002/03 to 2004/05 and ending with 2005/06 to 2006/07. Each matrix shows students transitioning from one year to the next and from one sector to another. The left side of the table indicates the sector in one year and the top of the table shows the sector in the subsequent year. Using the institute sector as an example, these interpretation notes trace the transitions of students into and out of the institute sector in each of the four matrices. Note that **Appendix A** of this document provides a list of the institutions grouped into each sector.

<u>Table A</u> shows, by reading across the institute row, that 1,366 students from the 2001/02 grade 12 graduation cohort were registered in an institute in 2002/03. Among these 2002/03 registrants, 1,040 remained registered in the BC public post-secondary system in the following year, of which 868 remained in the institute sector, 11 switched to the small college sector, 75 to an urban college, 50 to a university college and 36 to a university. A total of 326 registrants from 2002/03 did not register in 2003/04.

By reading down the institute column, we see that 2,129 students from the 2001/02 grade 12 graduation cohort were registered in an institute in 2003/04, an increase over the previous year's institute enrollment of 1,366. Among the 2,129 registrants of 2003/04, 1,431 were also registered in the BC public post-secondary system in 2002/03, but only 868 of these students were in an institute in 2002/03. Other students transferred into the institute sector in 2003/04, including 35 from a small college, 215 from an urban college, 208 from a university college and 105 from a university. Of the 2,129 students registered in an institute in 2003/04, 698 had not registered in the BC public post-secondary system in 2002/03 - these are the delayed-entry students into the institute sector.

The lower right corner of the matrix shows the following total registrants in the BC public post-secondary system, across all sectors:

- a) 17,719 students were registered in 2002/03 and 2003/04.
- b) 4,357 students were registered in 2002/03, but not 2003/04.
- c) 22,076 students were registered in 2002/03.
- d) 4,953 students registered in 2003/04, but not 2002/03.
- e) 16,331 students were NOT registered in 2002/03 or 2003/04.
- f) 21,284 students were NOT registered in 2002/03.
- g) 22,672 students registered in 2003/04.
- h) 20,688 students were NOT registered in 2003/04.
- i) 43,360 students graduated from grade 12 in 2001/02.
- j) 794 students completed a credential in 2002/03 (or 4% of registrants in 2002/03).
- k) 1,763 students completed a credential in 2003/04 (or 8% of registrants in 2003/04).

The outer boundaries of the table show the number of credential completers in each sector. From the cohort of 2001/02 grade 12 graduates, a total of 131 students completed a credential in 2002/03 (or 10% of registrants) and 476 students completed a credential in 2003/04 (or 22% of registrants).

**Figure 1** shows how the total registrants in the institute sector are followed from one year to the next and from one table to the next (Table A to B to C to D). For example, the total registrants in 2003/04 (2,129) in Table A is found by reading down the institute column of Table A. This same number of registrants in Table B for 2003/04 is found by reading across the institute row of Table B. A similar pattern is followed for Tables C and D in subsequent years.

Figure 1: Tracking Total Registrants in the Institute Sector, from Table A to B to C to D

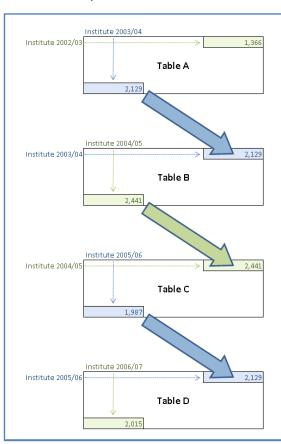


Table B provides similar information as previously described for Table A, but this matrix shows the transition of students from one sector to another from 2003/04 to 2004/05. In 2003/04, 2,129 students were registered in the institute sector, of which 1,195 (or 56% of students who registered in both years) remained registered in the institute sector in the following year (2004/05). Of those registered in the institute sector in 2003/04 (2,129), 19 left for a small college in the following year (2004/05), 107 to an urban college, 76 to a university college and 64 to a BC university.

Of those registered in the institute sector in 2004/05 (2,441), 567 had not registered in the previous year, 51 transitioned to the institute sector from a small college, 250 from an urban college, 218 from a university college and 160 from a university.

The net flows into and out of the institute sector can also be examined in this table:

- (a) Inflows: 250 students entered the institute sector in 2004/05 from the urban college sector;
- (b) Outflows: 107 students, previously registered in the institute sector in 2003/04, had left this sector for the urban college sector in 2004/05.
- (c) Net inflow: The institute sector had a net inflow of 143 students from the urban college sector in 2004/05, derived from 205 107.

<u>Table C</u> provides similar information, but for the transition of students from 2004/05 to 2005/06. It should be noted that due to sector designation changes much of the transitions between sectors can be explained by changes in sector designation alone. For example, the University College of the Cariboo was converted to Thompson Rivers University, thus affecting the proportion of students flowing from the university college to university sector.

<u>Table D</u> is the final table in this series of sector-to-sector transitions. This table shows the transition of 2001/02 grade 12 graduates between sectors in the BC public post-secondary system from 2005/06 to 2006/07. In this year, the proportion of students who remained in the institute sector from 2005/06 to 2006/07 is roughly 54%. Of those who were enrolled in the institute sector in 2006/07 (2,015), 378 students completed a credential (or 19% of the 2,015 registrants in that year). Note that the cumulative credential completion rate, by institution, is available in the T7 series of tables.

# **Appendix C: STP Information and Definitions**

**STP Steering Committee:** STP is managed by a steering committee with representation from the two ministries, public institutions and BC Council on Admissions and Transfer (BCCAT). Three subcommittees are established to address key areas of research: mobility of transfer students, data management and applicant research. The ministries and institutions are equal partners in this undertaking.

Devron Gaber, STP Chair, Associate Director, BC Council on Admissions and Transfer.

Bob Cowin, Director, Institutional Research, Douglas College.

Gerald Morton, Director, Information Department, Ministry of Education.

Jacqui Stewart, Director, Planning and Data Management Branch, Ministry of Advanced Education and Labour Market Development.

Walter Sudmant, Director, Planning and Institutional Research, University of British Columbia.

**Special Thanks:** The Student Transitions Project would like to thank the Ministry of Education, the Ministry of Advanced Education and Labour Market Development and the BC public post-secondary institutions<sup>10</sup> for collaborating in this research effort. Without their co-operation and data contributions, this research could not have been accomplished.

Rural Colleges: College of New Caledonia, College of the Rockies, North Island College, Northern Lights College, Northwest Community College, Selkirk College.

*Urban Colleges:* Camosun College, Douglas College, Langara College, Okanagan College, Vancouver Community College.

*Institutes:* British Columbia Institute of Technology, Justice Institute of BC, Nicola Valley Institute of Technology and Open Learning Agency.

Research Universities: Simon Fraser University, University of British Columbia, University of Northern British Columbia and University of Victoria.

Special Purpose Universities: Capilano University<sup>a</sup>, Emily Carr University of Art and Design<sup>b</sup>, Kwantlen Polytechnic University<sup>c</sup>, Thompson Rivers University<sup>d</sup>, Royals Roads University, University of the Fraser Valley<sup>e</sup>, Vancouver Island University<sup>f</sup>.

### **Definitions:**

Secondary school (or high school) graduate — a BC secondary school student who completes his or her regular or adult dogwood credential in the secondary school graduation year (October 1 to September 30). Students who return to the K-12 system, to re-take a course for example, are deemed graduates in the year they earned their dogwood.

Post-secondary registrant — a student who registers in at least one course in a public BC post-secondary institution in the post-secondary entry year (September 1 to August 31) and is still registered on the stable enrollment date.

Immediate entry — students who first transition to a BC post-secondary institution within one year of secondary school graduation. These are sometimes referred to as "direct entry" students and are represented in the main diagonal of the transition matrix (see Figure 1).

Delayed entry — students who first transition to a BC post-secondary institution after one year (13 to 24 months) or two years (25 to 36 months) or three or more years (37 or more months) after secondary school graduation. These transitions are represented above the main diagonal of the transition matrix (see Figure 1).

Academic GPA — the average of four academic grade 12 course grades: blended grades in English 12 and the student's best three other academic subjects. Blended grades are a 40%-60% blend of provincial exam scores and school-assigned grades in each of the selected courses. The academic GPA is not calculated for students with insufficient courses or lacking passing grades in academic subjects. Students are deemed minimally university eligible if their academic GPA is 75% or higher.

A number of institutions have changed names and/or sectors during or following the time period of this study. The current institution names are provided above. Former names were: <sup>a</sup>Capilano College, <sup>b</sup>Emily Carr Institute of Art and Design, <sup>c</sup>Kwantlen University College, <sup>d</sup>Cariboo College, <sup>e</sup>University College of the Fraser Valley <sup>e</sup>, and Malaspina University-College<sup>f</sup>.