

Student Transitions Project

Research Report: Movement Among B.C. Public Post-Secondary Institutions

Tracking the Flow of 2001/02 Grade 12 Graduates in B.C.
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 B.C.

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 B.C.'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 per cent of graduates registered for post-secondary education in B.C., increasing to at least 78 per cent when attendance at other non-B.C. public and B.C. private institutions are accounted for (via linkages to StudentAid BC and Passport to Education).
- Evidence suggests that B.C.'s public post-secondary education system is allowing the transition of students between institutions and in multiple directions over time. Students flow between institutions and sectors (universities, university colleges, urban colleges, small colleges and institutions).
- Of the 2001/02 grade 12 graduation class who attended B.C. public post-secondary education, 40 per cent attended more than one institution, attending an average of 1.6 institutions over a five-year period. Only five to nine per cent 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 outnumbered 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 per cent in 2004/05 to 19 per cent in 2005/06 and 13 per cent 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 B.C.'s public post-secondary leavers, planned for 2009, might reveal some of the underlying reasons for this phenomenon.
- Of those who enrolled in B.C.'s public post-secondary education system after high school graduation in 2001/02, 38 per cent completed a credential. While this is the average completion rate, credential completion rates were much higher (49 per cent) among those who graduated from high school with GPAs of at least 75 per cent and among graduates from many of the college regions in the Lower Mainland.

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

Tracking the Flow of 2001/02 B.C. Grade 12 Graduates into and Among B.C. 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 B.C. public post-secondary education over the last five years, with roughly half of each grade 12 graduation cohort enrolling in B.C. public post-secondary education within one year of high school graduation and 72 per cent within five years (*STP Research Results, June 2008*). The STP is now discovering and revealing more about the mobility of these students within the B.C. 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 B.C. public post-secondary system, 38 per cent 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 B.C. 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 B.C. 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 B.C. 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.

Research Questions:	Page
Q1. Post-Secondary Enrollment: After graduating from B.C. Grade 12s, how many students registered in B.C. public post-secondary education over a five-year period?	4
Q2. Post-Secondary Pathways: What is the flow of B.C. Grade 12 graduates into out of B.C. public post-secondary education over a multi-year period?	5
Q3. Concurrent Enrollment: To what extent do students enroll concurrently at two or more institutions?	6
Q4. Stop Outs: How many of the B.C. Grade 12 graduation cohort attended B.C. public post-secondary institutions, left for a period, and then returned?	7
Q5. Student Mobility Patterns: What are the patterns of student mobility among B.C. public post-secondary institutions?	8
Q6. Student Mobility Volume: What is the number of B.C. public post-secondary institutions ever attended?	9
Q7. Student Stability: Which B.C. Grade 12 students remained at the same B.C. public post-secondary institution through the entire reporting period?	10
Q8. Dropout Rates: What proportion of immediate-entry B.C. Grade 12 graduates, left a B.C. public post-secondary institution after their first year of registration and did not return over the next four years? By Sector? By GPA?	11-12
Q9. Credential Completion: What proportion of B.C. Grade 12 graduates completed a credential from a B.C. public post-secondary institution?	13-14

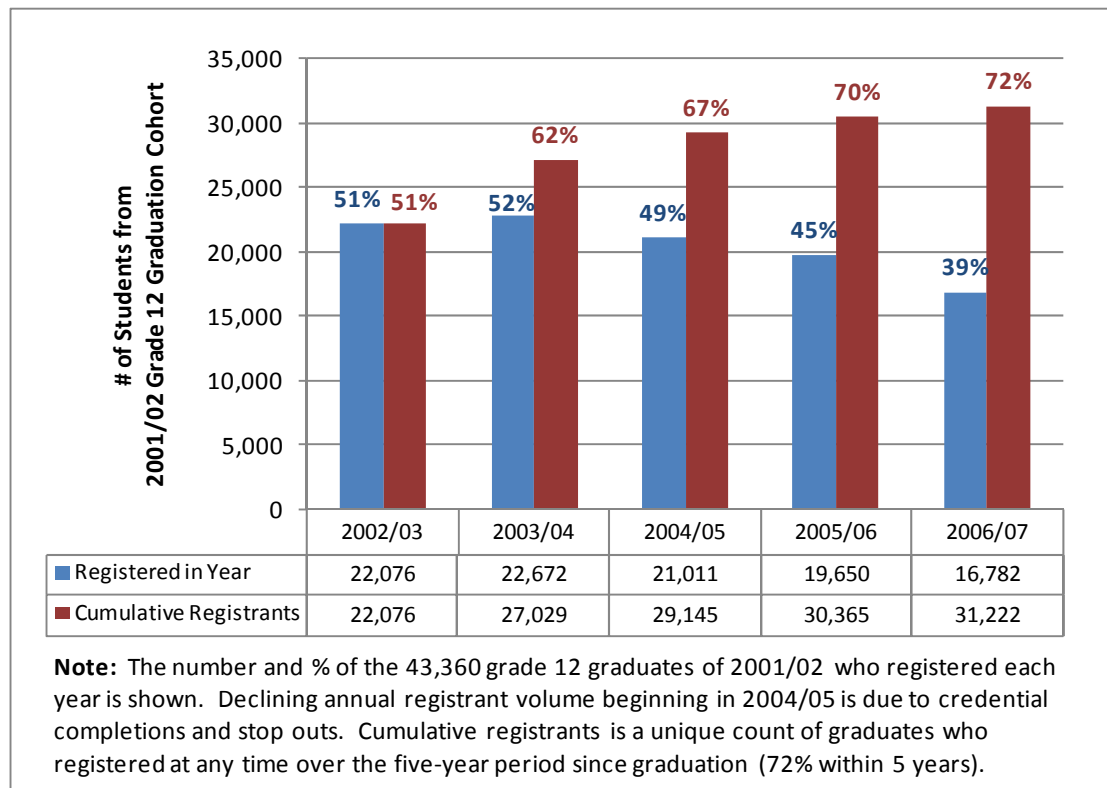
Additional information is provided in the Appendices:

- Appendix A: B.C. Public Post-Secondary Institutions by Sector (Page 16)
- Appendix B: Sector Mobility Matrices (Page 17-20)
- Appendix C: STP Information and Definitions (Page 21)

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

As shown in **Figure 1**, 51 per cent (or 22,076) of the 43,360 students from the 2001/02 high school graduation cohort made their first transition into B.C. public post-secondary education within one year of high school graduation. In each of the next four years, successively smaller proportions (11, five, three, and two per cent, respectively) 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: B.C. Public Post-Secondary Registration Status of 2001/02 B.C. High School Graduation Class in each of Five Years since Graduation



When attendance at non-B.C. public and B.C. 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 per cent. 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 B.C. public system. It should be noted, however, that these other data sources only reveal *some* of the additional student transitions outside of the B.C. 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 B.C. Grade 12 graduates into out of B.C. public post-secondary education over a multi-year period?

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

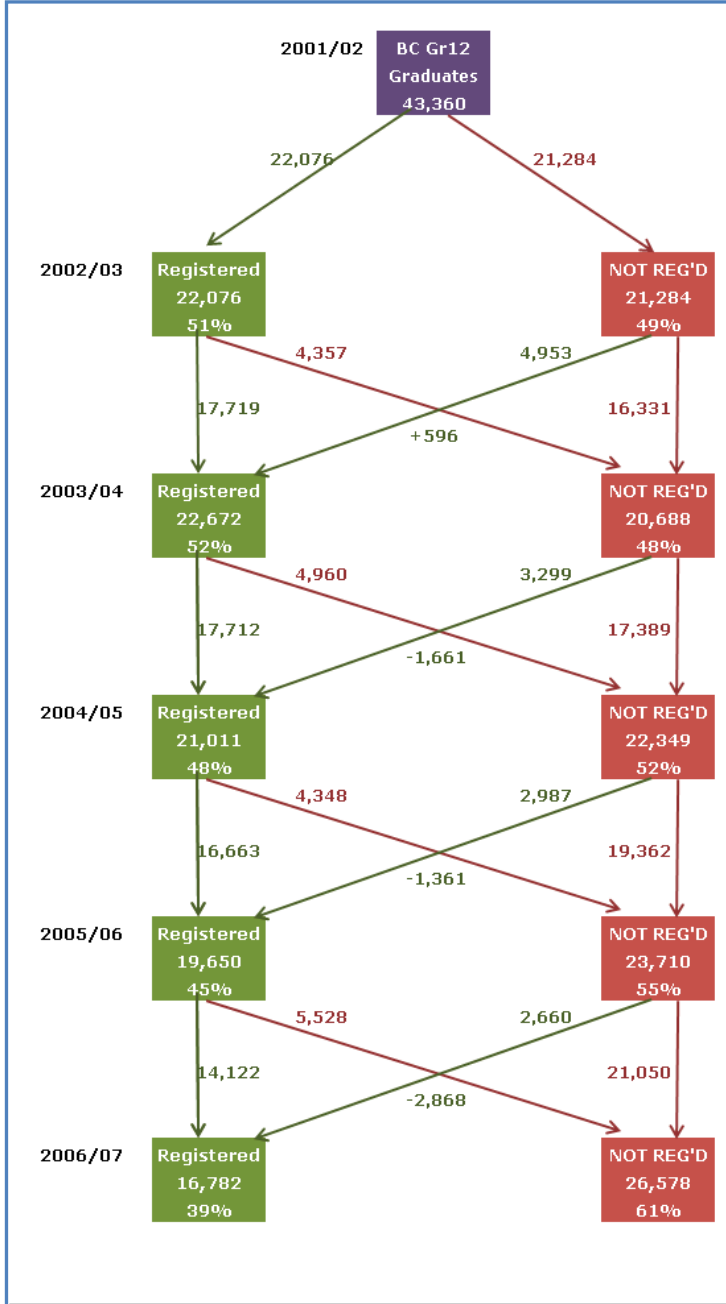


Figure 2 shows the volume and direction of student flows between registration and non-registration states for the cohort of 43,360 B.C. grade 12 graduates of 2001/02. From one year to the next, roughly 17,000 to 18,000 students remained registered in B.C. public post-secondary education in the first 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 B.C. public post-secondary system each year, at least until 2006/07 when the largest volume of students completed credentials (see Q4 and Q9).

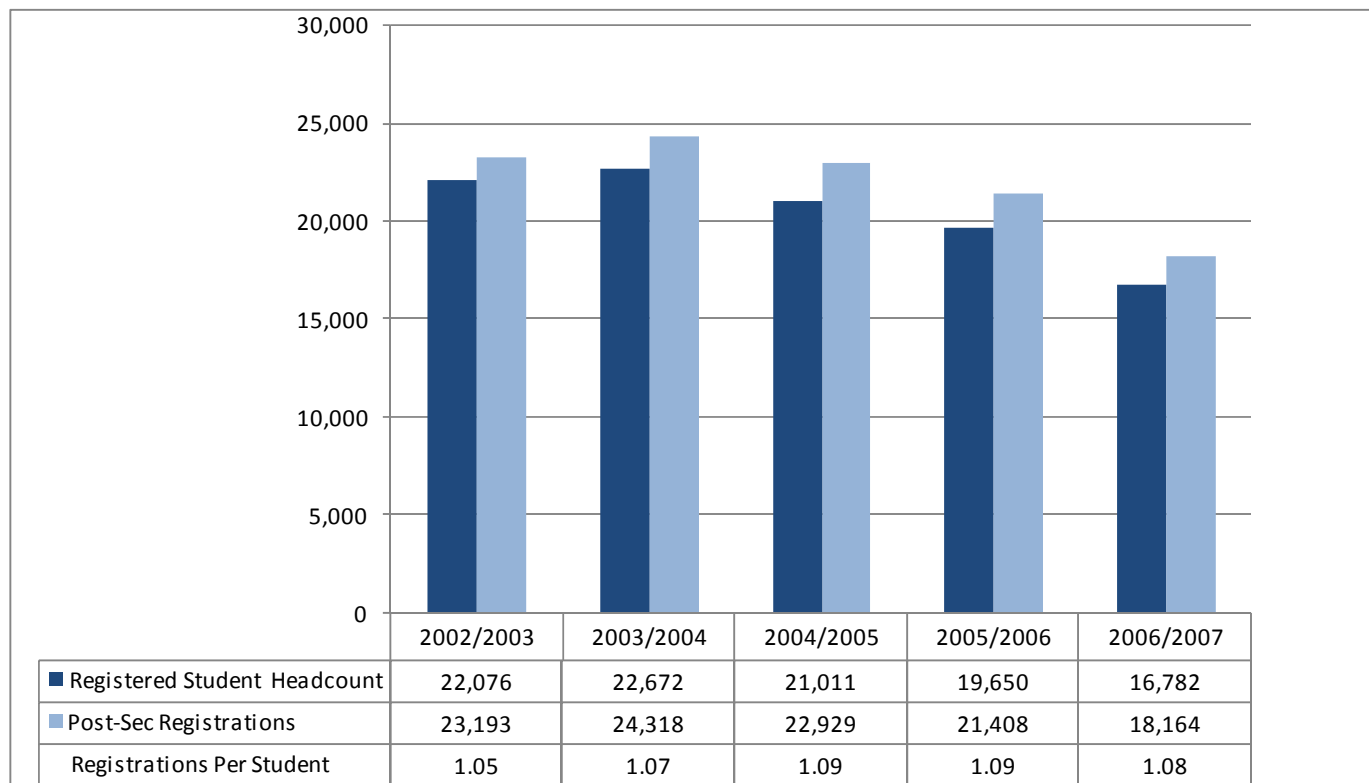
Net student flows are shown at the intersection of each inflow and outflow in the diagram. The net flow of +596 students in 2003/04 indicates that more students moved from a non-registered to registered state in this year than those who moved in the opposite direction. Over the succeeding three years, negative net flows imply that more grade 12 graduates of 2001/02 left the B.C. 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 B.C.'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 five to nine per cent of students were enrolled in more than one B.C. 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 B.C.'s transfer system.

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



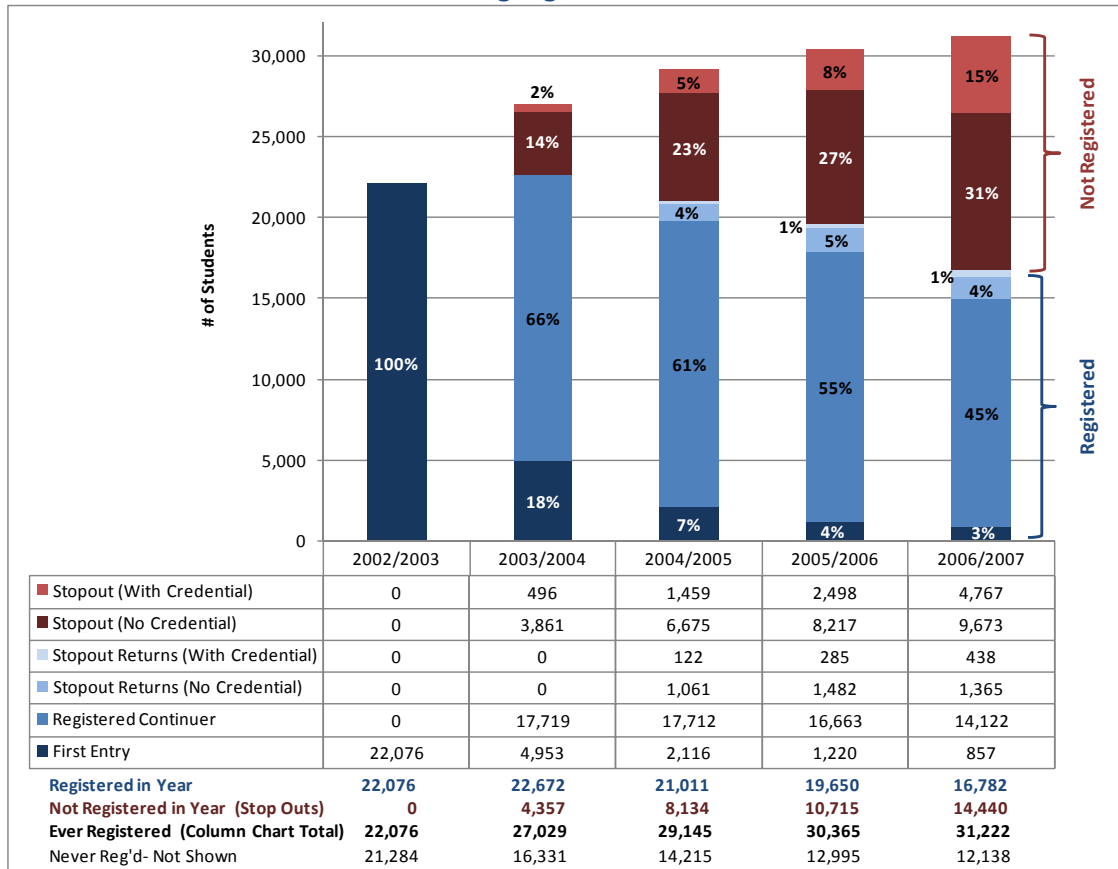
Q4. Stop Outs: How many of the B.C. Grade 12 graduation cohort attended B.C. public post-secondary institutions, left for a period, and then returned?

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 per cent of registrants in 2003/04 (3,861 students), to 23 per cent and 27 per cent in the next two years, reaching 31 per cent 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 B.C. 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 per cent) 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 per cent in 2005/06 and then 13 per cent in 2006/07¹.

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



¹ 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 B.C. public post-secondary institutions?

Among the 2001/02 grade 12 graduates who registered in B.C. public post-secondary education within one year of high school graduation, the single largest destination was university (17 per cent), followed by university college (15 per cent), urban college (12 per cent), small college (five per cent) and institute or agency (three per cent). After enrolling in the B.C. 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 period². 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 students³. 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 B.C. 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.

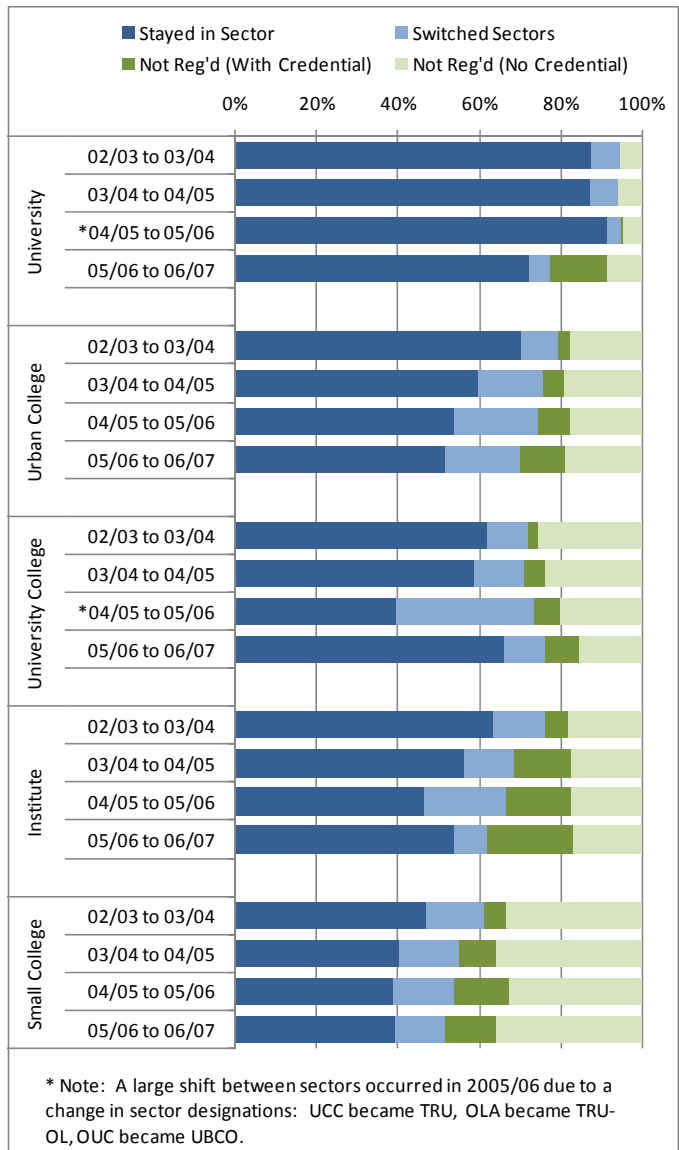
Small colleges have a net outflow of students to all other post-secondary sectors.

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

B.C.'s post-secondary students are relatively mobile and the B.C. Transfer System is responsible for a significant volume of that movement. Students move between each of B.C.'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 B.C. 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**. 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 per cent of continuing registrants switched institutions from one year to the next.

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



² Institutional designations in this study are those that were in place for the period of this study.

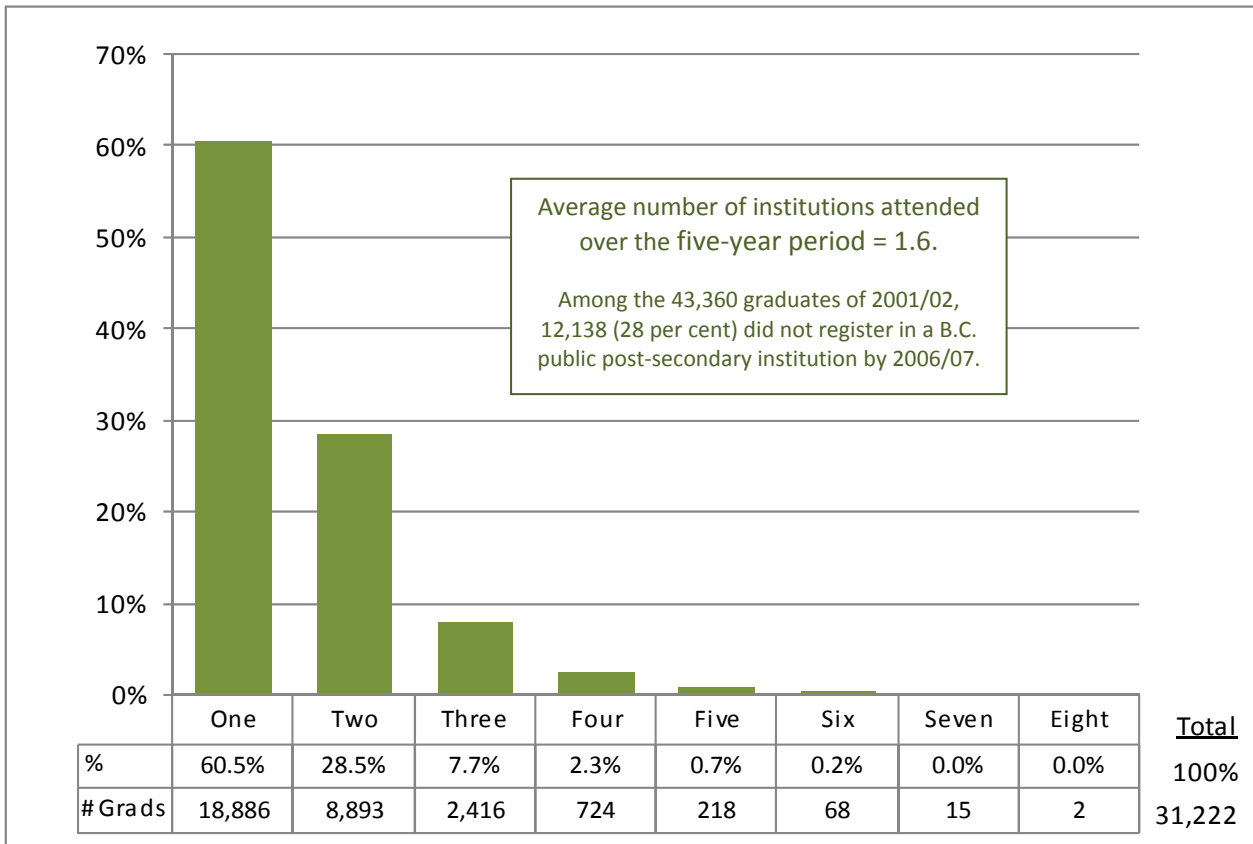
³ Transfer students are admitted to university on the basis of having completed a minimum number of credits in transferable courses in a college, university college, or institute.

Q6. Student Mobility Volume: What is the number of B.C. public post-secondary 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 per cent of the 2001/02 grade 12 graduates) enrolled in B.C. 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 per cent attended just one institution, 28.5 per cent attended two and 11.0 per cent attended three or more institutions (see *Figure 6*).

B.C.'s public post-secondary students are relatively mobile, given that roughly 40 per cent 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 B.C. Public Post-Secondary Education Between 2002/03 and 2006/07



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

A total of 22,076 B.C. grade 12 graduates of 2001/02 immediately enrolled in B.C. public post-secondary education in 2002/03, of which 18,382 (83 per cent) 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 B.C. public post-secondary system for five years (51 per cent). For others continuously enrolled, 13 per cent stayed in the system for just one year, 11 per cent for two years, eight per cent for three years and 17 per cent 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 per cent) remained registered at the same institution for the duration of their enrollment. As shown in **Table 1**, the longer students remained enrolled in the B.C. public post-secondary system, the less likely they were to stay at the same institution, declining from 85 per cent for those who enrolled for two years to 49 per cent among those who remained continuously enrolled for five years.

Table 1: per cent of Immediate Entry Students of the 2001/02 Grade 12 Graduation Class Who Enrolled Continuously at the Same B.C. Public Post-Secondary Institution

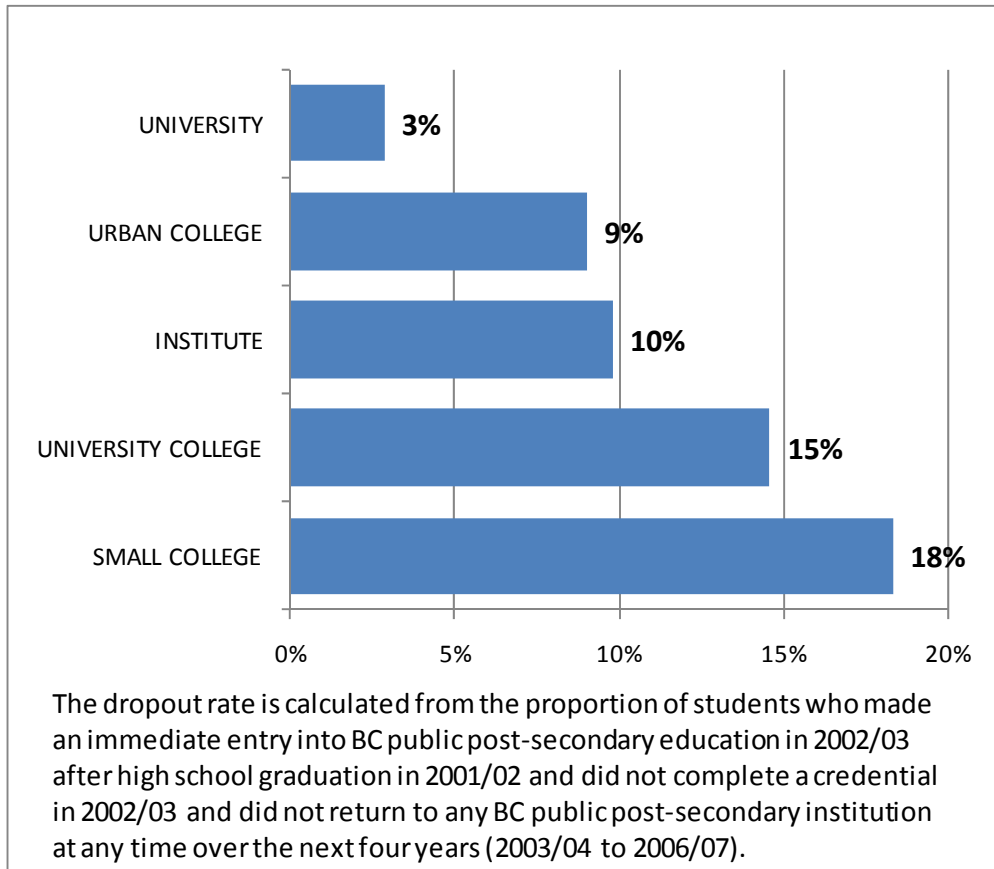
Continuous Enrollment Duration of Immediate Entry Students	(A) Number of Students Enrolled Continuously	(B) Number Enrolled Continuously at Same PSI	(C=B/A) % of Immediate-Entry Students Enrolled Continuously at Same PSI
One Year	2,403 (13%)	2,403 (20%)	100%
Two Years	1,996 (11%)	1,706 (15%)	85%
Three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

Q8. Dropout Rates: What proportion of immediate-entry B.C. Grade 12 graduates, left a B.C. 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 per cent) 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*).

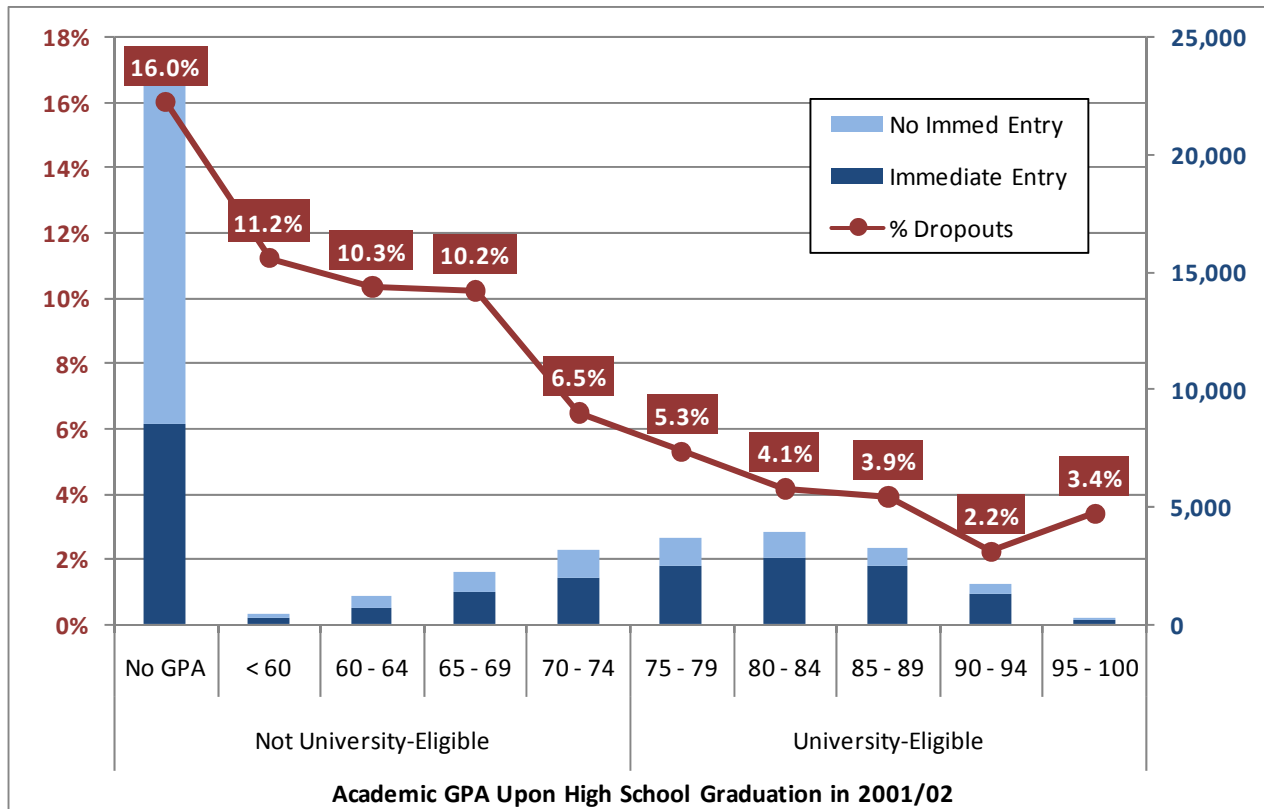
Numerous reasons may exist for higher attrition rates in small colleges, such as lower GPA levels of high school graduates who enrolled in small colleges (see *Figure 8*), attractive employment opportunities in the local economy of the college region, and differences in parental education levels (which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

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



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

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



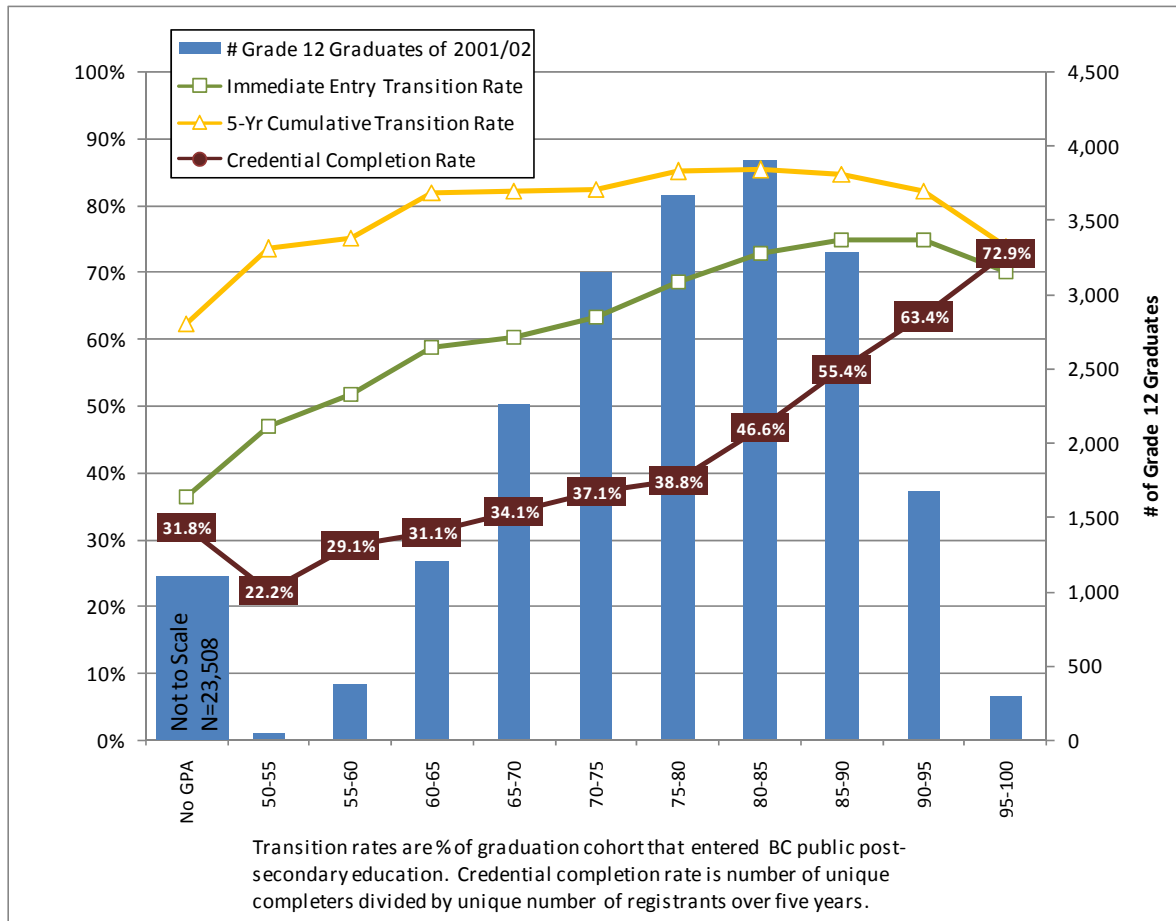
Notes: (a) The dropout rate is calculated from the proportion of students who made an immediate entry into BC public post-secondary education in 2002/03 after high school graduation in 2001/02 and did not complete a credential in 2002/03 and did not return to any BC public post-secondary institution 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 B.C. Grade 12 graduates completed a credential from a B.C. public post-secondary institution?

Within five years of B.C. grade 12 graduation in 2001/02, a total of 31,222 students (72 per cent) had registered for at least one term in the B.C. public post-secondary education system. Five years later, by the end of the 2006/07 academic year, 11,977 students (or 38 per cent⁴ of registrants) completed 13,039 credentials. The two main types of credentials awarded were Bachelor’s or first professional degrees (40 per cent of the total credentials awarded), certificates (31 per cent) and diplomas (21 per cent)⁵.

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

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



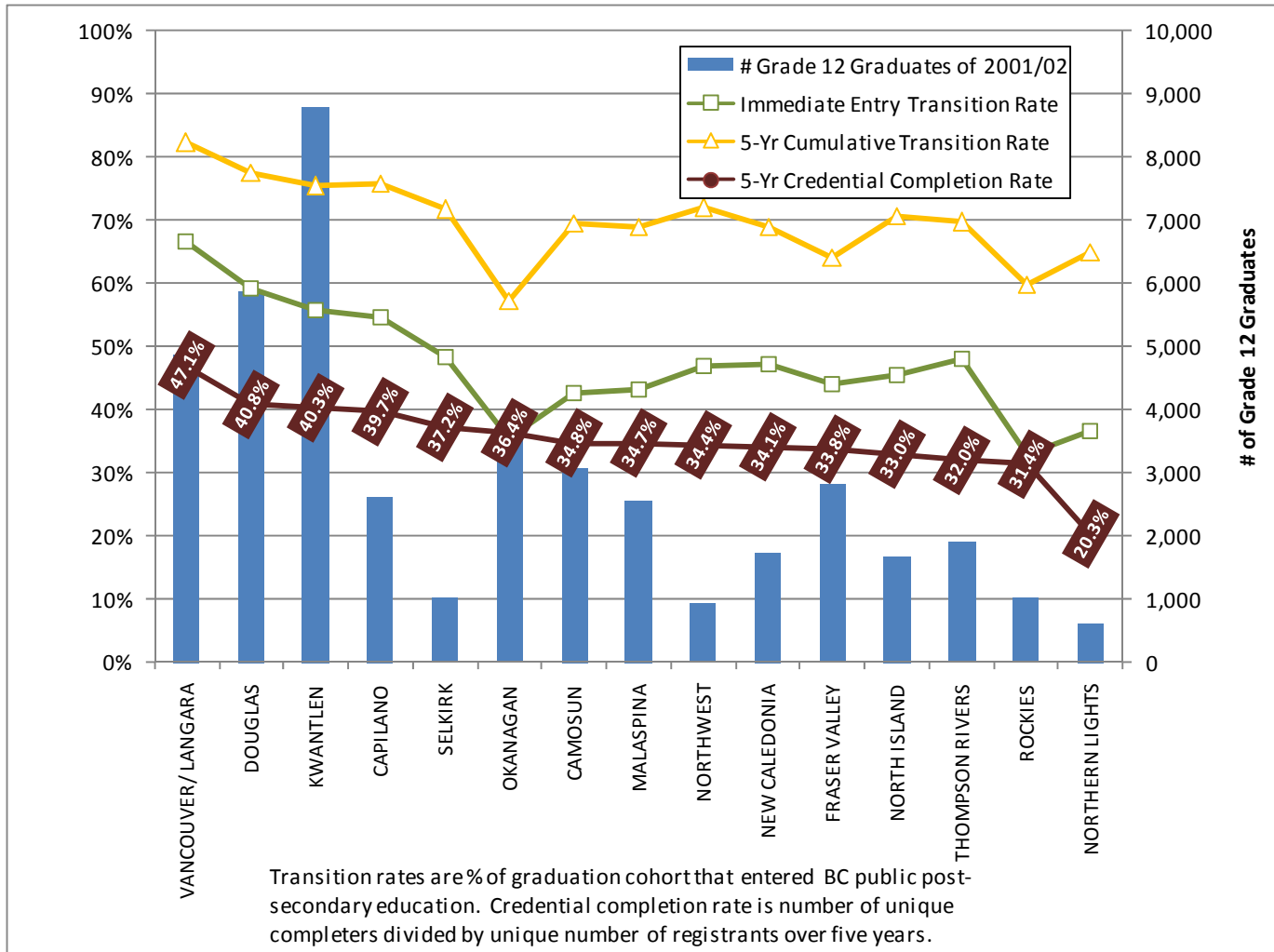
⁴ This credential completion rate is calculated for all completers who registered over the five-year period, including both direct and delayed entry students. The five-year credential completion rate calculated exclusively for 22,076 immediate-entry students is 44 per cent, based on 11,096 credentials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

⁵ Apprenticeship credentials are not included in STP.

Student Transitions Project

Figure 10 compares transition rates to completion rates across the regions from which students graduated from high school⁶. 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



⁶ Grade 12 graduates are classified into a college region, based on the geographic location of their high school of graduation.

Conclusion: B.C.'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 B.C.'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 B.C. public post-secondary education within one year of high school graduation, increasing to 72 per cent within five years of graduation and reaching at least 78 per cent when other non-B.C. public and B.C. private post-secondary destinations are accounted for⁷.
- The majority of students pursuing post-secondary education remain registered from year to year, while a smaller proportion flow into and out of the post-secondary 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 per cent) attended more than one B.C. public post-secondary institution over the five year period, with 28.5 per cent attending two institutions and 11.0 per cent 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 (five to nine per cent per year).
- Of those who enrolled immediately in B.C. public post-secondary education after graduation, the largest proportion (51 per cent) 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 per cent remained at the same institution.
- There is evidence of high dropout rates among immediate entry students with low GPAs 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 B.C.'s public post-secondary education system, or elsewhere. A survey planned for 2009 might reveal some of the reasons for this phenomenon⁸.
- Within five years of grade 12 graduation, 72 per cent of 2001/02 grade 12 graduates enrolled in B.C. public post-secondary education, of which 38 per cent completed a credential. Credential completion rates are much higher (49 per cent) among students who graduated from high school with university-eligible⁹ GPAs, with completion rates ranging from 39 per cent for grade 12 graduates in the 75-80 GPA range to 73 per cent among students in the 95-100 high school GPA range.

⁷ 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 B.C. and in B.C. private institutions. This is by no means a complete accounting of post-secondary transitions because students may still attend non-B.C. institutions or B.C. private institutions without applying for StudentAid or redeeming Passport stamps to do so.

⁸ The Short Stay and Early Leavers Survey is a collaborative project of the B.C. public post-secondary institutions and the Ministry of Advanced Education and Labour Market Development. This survey of students who last registered in B.C. 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.

⁹ University-eligible graduates had an Academic GPA upon high school graduation of 75 per cent or higher.

Appendix A: B.C. 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	Thomson Rivers University - Open Learning
	UBC	University of British Columbia
	UBCO	University of British Columbia (Okanagan)
	UNBC	University of Northern British Columbia
	UVIC	University of Victoria
University Total		
Grand Total		

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 colleges 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 B.C. Public Post-Secondary Sectors by B.C. 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)

	Post-Secondary Sector	Post-Secondary Sector Where Registered Yr2 (2003/04)					Reg Both Yr1 & Yr2	Reg Yr1; Total Reg'd NoReg Yr2	Total Reg'd Yr1	Compl in Yr1
		Institute	Small college	Urban College	University College	University				
Post-Sec Sector Where Registered Yr 1 (2002/03)	Institute	868 63.5%	11 0.8%	75 5.5%	50 3.7%	36 2.6%	1,040 76%	326 24%	1,366 100%	131 10%
	Small college	35 1.7%	940 46.8%	45 2.2%	108 5.4%	101 5.0%	1,229 61%	779 39%	2,008 100%	182 9%
	Urban College	215 4.2%	7 0.1%	3,564 70.3%	97 1.9%	153 3.0%	4,036 80%	1,034 20%	5,070 100%	224 4%
	University College	208 3.2%	40 0.6%	243 3.8%	4,002 61.9%	154 2.4%	4,647 72%	1,819 28%	6,466 100%	257 4%
	University	105 1.5%	40 0.6%	241 3.4%	109 1.5%	6,272 87.5%	6,767 94%	399 6%	7,166 100%	0 0%
	Reg Both Yr1 & Yr2	1,431 67%	1,038 64%	4,168 74%	4,366 72%	6,716 93%	17,719 (a)	4,357 (b)	22,076 (c)	
No Reg Yr1; Reg Yr2	698 33%	591 36%	1,489 26%	1,708 28%	467 7%	4,953 (d)	16,331 (e)	21,284 (f)		
Total Reg Yr2	2,129 100%	1,629 100%	5,657 100%	6,074 100%	7,183 100%	22,672 (g)	20,688 (h)	43,360 (i)	794 (j) 4%	
Compl in Yr2	476 22%	240 15%	533 9%	508 8%	6 0%			1,763 (k) 8%	88%	

* % 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-Secondary Sector	Post-Secondary Sector Where Registered Yr3 (2004/05)					Reg Both Yr2 & Yr3	Reg Yr2; Total Reg'd NoReg Yr3	Total Reg'd Yr2	Compl in Yr2
		Institute	Small college	Urban College	University College	University				
Post-Sec Sector Where Registered Yr 2 (2003/04)	Institute	1,195 56.1%	19 0.9%	107 5.0%	76 3.6%	64 3.0%	1,461 69%	668 49%	2,129 100%	476 22%
	Small college	51 3.1%	662 40.6%	40 2.5%	63 3.9%	84 5.2%	900 55%	729 36%	1,629 100%	240 15%
	Urban College	250 4.4%	13 0.2%	3,371 59.6%	148 2.6%	495 8.8%	4,277 76%	1,380 27%	5,657 100%	533 9%
	University College	218 3.6%	37 0.6%	213 3.5%	3,575 58.9%	277 4.6%	4,320 71%	1,754 27%	6,074 100%	508 8%
	University	160 2.2%	24 0.3%	201 2.8%	104 1.4%	6,265 87.2%	6,754 94%	429 6%	7,183 100%	6 0%
	Reg Both Yr2 & Yr3	1,874 77%	755 60%	3,932 82%	3,966 79%	7,185 97%	17,712 (a)	4,960 (b)	22,672 (c)	
No Reg Yr2; Reg Yr3	567 23%	511 40%	891 18%	1,084 21%	246 3%	3,299 (d)	17,389 (e)	20,688 (f)		
Total Reg Y3	2,441 100%	1,266 100%	4,823 100%	5,050 100%	7,431 100%	21,011 (g)	22,349 (h)	43,360 (i)	1,763 (j) 8%	
Compl in Yr3	517 21%	216 17%	771 16%	610 12%	34 0%			2,148 (k) 10%	85%	

* % 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).

Student Transitions Project

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

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

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

* % who reg'd both years and stayed in same sector.

Notes:

- 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.
- 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.
- The number of credential completers is shown in the perimeter of each table, including the % of registrants in the year who completed.
- See Appendix A for a list of B.C. 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.

Table A 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 B.C. 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 B.C. 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 B.C. public post-secondary system in 2002/03 - these are the delayed-entry students into the institute sector.

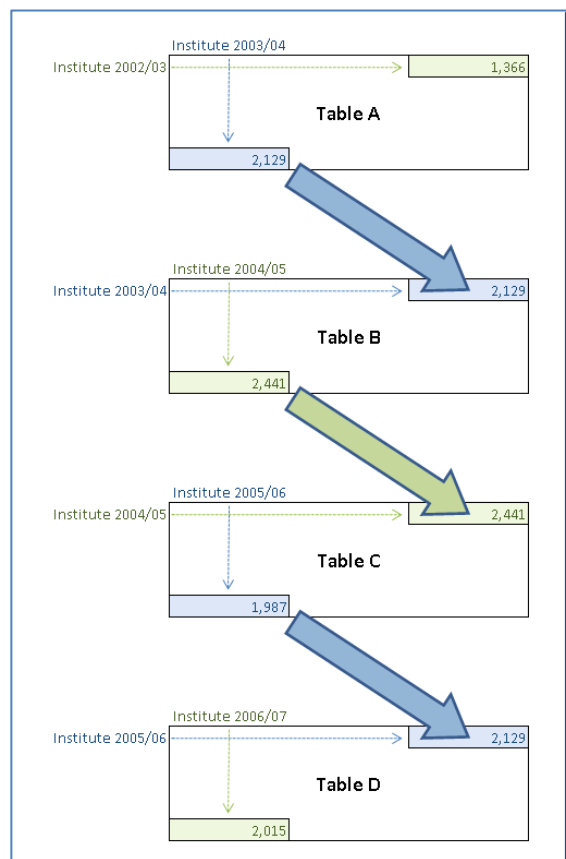
The lower right corner of the matrix shows the following total registrants in the B.C. public post-secondary system, across all sectors:

- 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 per cent of registrants in 2002/03).
- k) 1,763 students completed a credential in 2003/04 (or 8 per cent 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 per cent of registrants) and 476 students completed a credential in 2003/04 (or 22 per cent 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



Student Transitions Project

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 per cent 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 B.C. 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 $205 - 107$.

Table C 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.

Table D 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 B.C. 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 per cent. Of those who were enrolled in the institute sector in 2006/07 (2,015), 378 students completed a credential (or 19 per cent 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, B.C. Council on Admissions and Transfer.

Bob Cowin, Director, Institutional Research, Douglas College.

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

Jacqui Stewart, Director, Information 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 B.C. public post-secondary institutions¹⁰ 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 B.C., 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^a, Emily Carr University of Art and Design^b, Kwantlen Polytechnic University^c, Thompson Rivers University^d, Royal Roads University, University of the Fraser Valley^e, Vancouver Island University^f.

Definitions:

Secondary school (or high school) graduate — a B.C. 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 B.C. 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 B.C. 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 B.C. 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 per cent-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.

¹⁰ 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: ^aCapilano College, ^bEmily Carr Institute of Art and Design, ^cKwantlen University College, ^dCariboo College, ^eUniversity College of the Fraser Valley, and ^fMalaspina University-College.