

STP RESEARCH RESULTS

Student Mobility in the
B.C. Public Post-Secondary System

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Executive Summary

About this Research

This report features selected research findings on student mobility in the B.C. public post-secondary system, using data from the most recent annual STP update in Fall of 2018. All B.C. post-secondary registrants in B.C.'s 25 public post-secondary institutions from 2002/2003 to Fall 2018 are included. This study was conducted by the Student Transitions Project (STP), a collaborative research partnership involving B.C.'s education and advanced education ministries and post-secondary institutions.

Quick Facts

What is Student Mobility? Student mobility is the sequential or simultaneous enrollment of academic credit registrants in multiple B.C. public post-secondary institutions. ([page 10](#)).

How does the STP measure student mobility? The STP looks at all academic credit registrants in a single registration year and quantifies the proportion of these registrants who switched institutions, relative to their last registration period. ([page 11](#)).

What is the student mobility rate? In the most recent registration year, 2017/2018, there were approximately 344,000 academic credit registrants, of which 55,859 were enrolled in a different institution from their previous registration period. These mobile students represent 16.2% of academic credit registrants and this is the student mobility rate for 2017/2018. ([page 11](#)).

Which pathways did mobile students take into their current institution of registration? Students may take multiple pathways between multiple institutions. Among the 55,859 mobile students in 2017/2018, 11% of the 16.2% mobility rate was comprised of students switching institutions after last registering in 2016/2017. The remaining mobile students switched institutions after a stop out period of non-registration. Among all mobile students, the more common type of mobility is to switch to a new institution for the first time, rather than returning to an institution previously attended. ([page 12](#)).

About the STP

The Student Transitions Project is British Columbia's collaborative research project that measures student success from the K-12 to post-secondary systems. This effective system-wide partnership, involving B.C.'s education and advanced education ministries and public post-secondary institutions, is tracking student success by reporting on student transition rates to post-secondary education, student mobility among post-secondary institutions, and post-secondary completion and retention rates. STP is managed by a steering committee with representation from the two education ministries, public institutions and the B.C. Council on Admissions and Transfer (BCCAT).

STP Steering Committee Members

Robert Adamoski, Chair, STP Steering Committee and Director, Admissions and Research, BCCAT.

Stephen Salem, Director, Institutional Research & Registrar, Coast Mountain College.

Chelsea Chalifour, Executive Director, Post-Secondary Governance, Accountability & Analytics, Ministry of Advanced Education, Skills and Training.

Nicole Gardner, Director, Education Analytics, Ministry of Education.

Tony Eder, Executive Director, Academic Resource Planning, University of Victoria.

Special Thanks

The STP would like to thank the Ministry of Education, the Ministry of Advanced Education, Skills & Training and the B.C. public post-secondary institutions for collaborating in this research effort. Without their co-operation and data contributions, this research could not have been accomplished.



For More Information

A wealth of additional information is also available to post-secondary institutions seeking more detailed information on student transitions specific to their region or institution.



STP reports, newsletters and other public resources are available on the public Student Transitions Project web site at:

<http://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/data-research/student-transitions-project>

Which pathways did students take in or out of their institution of registration? By focusing on a single year of registration, the STP provides a Student Pathways Diagram for each institution, region and sector, as well as the B.C. public post-secondary system. These diagrams provide information on the source and pathways of student inflows from preceding years and outflows into the subsequent year. (page 13).

What are the trends in student mobility? The student mobility rate (16.2%) continues to decline in B.C. The growth in the number of mobile students has not kept pace with the growth in the total number of academic credit registrants over the last decade. The declining mobility rate is consistent with the fact that students have more opportunities to complete a Bachelor's degree in institutions that traditionally did not offer degrees, such as B.C. colleges and institutes. Fewer students need to switch institutions to complete a Bachelor's degree in B.C. (page 14).

Where do students enrol for a Bachelor's degree in B.C.? What are the trends? The majority (69.3%) of Bachelor's degree seekers in B.C. continue to enroll in RIUs, with smaller shares enrolling in TIUs (22.5%), College's (5.9%) and Institutes (2.6%). The overall growth in students seeking a Bachelor's degree in B.C. (+29% over the last decade) has occurred more slowly in RIU's (+23%) than B.C. colleges (+78%) and TIUs (+36%). As a result, a growing share of B.C.'s Bachelor degree seekers are enrolling in B.C. Colleges and TIUs, while the proportion enrolling in RIUs has declined roughly three percentage points. (page 15).

Due to growth in Bachelor's degree opportunities in B.C. colleges and TIU's, what is the impact on student mobility? By examining the changing volume of mobile students moving from any credential category at a College or TIU and subsequently moving into a Bachelor's degree, it is evident that students are more inclined to remain in the college or TIU to complete their Bachelor's degree, rather than switching to an RIU. (page 16).

How has the volume of students moving and continuing into Bachelor's degrees changed over the last ten years? The number of students moving into Bachelor's degree programs at research-intensive universities, from any credential category below a Bachelor's degree at other institutions, has been declining over the last ten years. (page 17).

How has the growth in international students affected the student mobility rate? International students are significantly less mobile than domestic students, with mobility rates about half that of domestic students. As international students increasingly represent a growing share of total post-secondary enrollment in B.C., this is putting downward pressure on the overall student mobility rate. (page 18).

Who are the mobile students? A typical mobile student in B.C. is a domestic female student who received a credential before switching institutions. She is likely an undergraduate student enrolled in a certificate/diploma or no program. Student mobility rates for various sub-populations are provided in this report. (page 19).

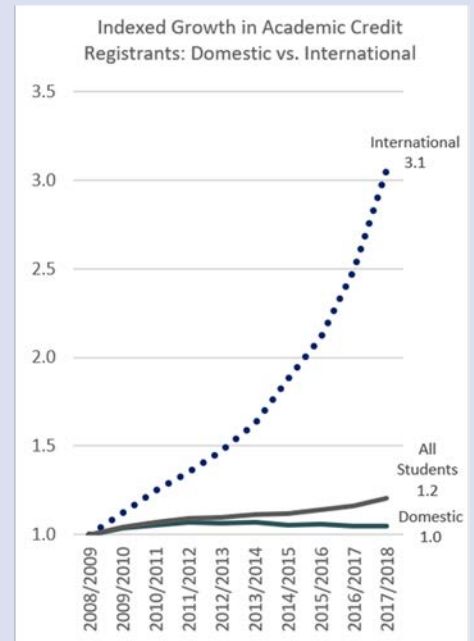
How many students moved between different institution types in B.C.? Among all 55,860 mobile students who switched institutions in 2017/2018, the vast majority, or about 43,800 students switched from one institution type to another. The two most popular routes are: (1) from colleges to research-intensive universities, and (2) from colleges to institutes, with roughly 5,700 students following each of these routes. (page x).

How many students moved between regions in B.C.? Among all 55,860 mobile students who switched institutions in 2017/2018, approximately 22,000 students switched from one region of B.C. to another. The majority of mobile students do not switch regions when they register, such that the largest group of mobile students switch institutions within the Mainland/Southwest region. (page 20).

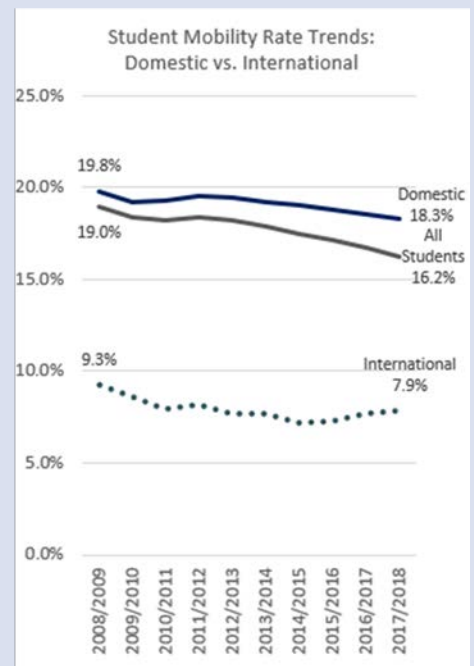
Among mobile students, how significant are the inter-relationships between the regions and institution types? The inter-relationships between institution types are relatively balanced because the volume of inflows and outflows of students moving between them are roughly equal. This is unlike the inter-relationship between regions because very little student mobility occurs between each of the regions, with the exception of significant student inflows and outflows to the Mainland/Southwest region. The majority of student mobility occurs entirely within the Mainland/Southwest region of B.C. (page 22).

What are the trends in mobile student inflows and outflows by institution type? Colleges and TIUs have an annual net outflow of mobile students of roughly 3,500 and 2,800 students respectively. By comparison, RIUs and Institutes generally have an annual net inflow of mobile students from other institutions. There is evidence of significant growth in the net inflow of mobile students into institutes from other institutions. (page 23).

International Student Growth



International Student Mobility Rate Trends



Student Mobility

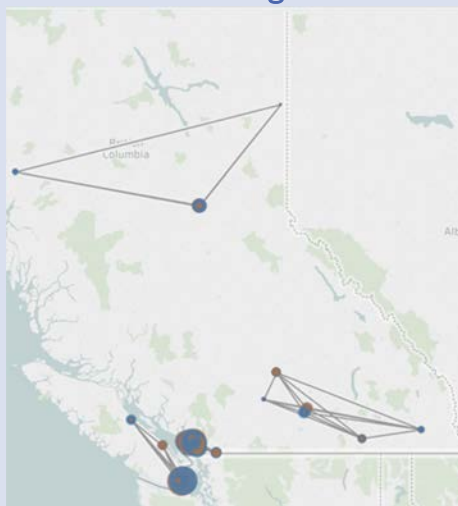
Between Institution Types



Between Regions



Within Regions



What are the trends in mobile student inflows and outflows by region? The largest share (approximately 37,000 or 66%) of all mobile students flowed into Mainland/Southwest institutions in 2017/2018 from other institutions. Roughly the same volume (36,000 or 64%) of mobile students leave the Thompson-Okanagan-Kootenays to enrol in institutions in other regions. A relatively small, but balanced flow of mobile students, move in/out of the Cariboo-North and Vancouver Island regions (page 24).

What proportion of student mobility occurs between institutions within the region? Among the 35,082 mobile students who did not stop out before switching institutions, 62% switched to an institution in a different region, whereas 38% switched to another institution within the same region. Most of this student mobility, from one year to the next, occurred within the Mainland/Southwest region. (page 25).

What is the average distance that mobile students travel when they switch institutions? The destination institution for mobile students of 2017/2018 was an average of 140 km from their previous institution. Students who switched institutions within the same region traveled about one-tenth the distance (29 km) of those who switched to an institution in a different region (286 km). Students switching in or out of Cariboo-North institutions traveled the furthest (450 km). (page 26).

What proportion of student mobility occurs between institutions within the same institution type? Among those 35,082 students who switched institutions without a stop out period, 24% switched to another institution of the same type. The most popular pathway was TIU to TIU (11% of the 24%). Proximity of institutions to each other is likely a factor in this type of student mobility. (page 27).

Do students move between every pair of institutions in the province? In aggregate, virtually every pair of institutions in the province has some student mobility between them. Among the 650 possible pairs of institutions that students could potentially move between, 96% (or 627 pairs of institutions) had one or more students moving between them. (page 28).

How many students follow the traditional transfer route from a B.C. College to Research-Intensive University? Less than 10% of the total volume of mobile students (or 4,648 students) is attributed to students following the traditional transfer pathway from a B.C. College to a B.C. research-intensive university. Roughly half of these students (46%) enrolled at SFU, 25% at UBCV, and 19% at UVic. (page 29).

Can the STP provide other indicators of student mobility? The STP will soon begin to explore and develop a cohort-based student mobility model. Such a model should allow the STP to provide a broader understanding of student mobility and registration patterns over a student's education career, from admission to an institution or program, through to exit, or credential completion. (page 30).

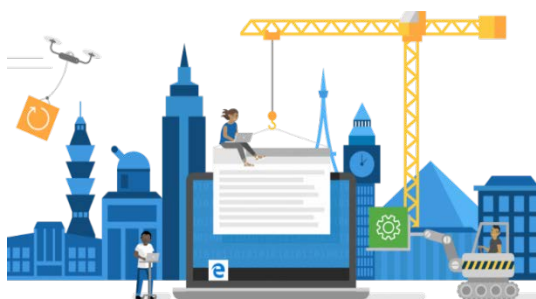


Image Source: <https://www.itprotoday.com>



Image Source: Martin Dee, UBC

Definitions

Student mobility is the movement of students (specifically registrants in post-secondary credit courses) from one B.C. public post-secondary institution to another.

Students take a variety of routes or **pathways** between institutions over time. When a student switches institutions, the student takes a **mobile student pathway**, otherwise a non-mobile pathway.

The **student mobility rate** is the proportion of students who took a mobile pathway to their registration in a given year, expressed as a percentage of all students registered in that year.

Mobile Student Pathways: Depending on the timing and type of mobility, four different mobile pathways are possible.

- a) **Move** – Switch institutions by moving to an institution never attended before
- b) **Stopout Move** – Switch institutions by moving to an institution never attended before, but after a stop out period of non-registration.
- c) **Return** – Switch institutions by returning to an institution previously attended
- d) **Stopout Return** - Switch institutions by returning to an institution previously attended, but after a stop out period of non-registration.

Non-Mobile Student Pathways: When students do not switch institutions, there are four other pathways they might have taken (or will take in the future).

- a) **New to STP** – New student to the STP with no previous record of registration (back to 2002/03) in any institution in the B.C. public post-secondary system.
- b) **Exit STP** – Left the B.C. public post-secondary system. There are no further record(s) of registration in the B.C. public post-secondary education system beyond this point in time (up to Fall 2011).
- c) **Continue** – Continue registration at the institution last attended in the previous time period.
- d) **Stopout Continue** – Continue at the institution last attended, but after a stop out period of non-registration. No other institutions were attended in the intervening period.

Introduction

○ What is Student Mobility?

Students take a variety of different routes through B.C.'s education system as they navigate their way through courses, programs and institutions to achieve their education goals. Students each have their own reasons for following their different education pathways, whether planned or unplanned. As a result, students frequently attend multiple institutions throughout their education career, both sequentially and simultaneously. **Student mobility** is the sequential or simultaneous enrollment of academic credit registrants in multiple B.C. public post-secondary institutions.



Photo Source: <https://www.sfu.ca/students/isap.html>

This report from the Student Transitions Project (STP) summarizes the latest student mobility research from the STP2018 data set, including post-secondary registrants in academic years 2002/2003 to 2017/2018, plus registrants in Fall 2018.¹ These STP research results focus on recurring and consistent trends and any significant changes. Additional background and context pertaining to overall post-secondary enrolment trends are also integrated throughout this report (see **Research Results Legend**). This report is available on the [STP website](#)².

Research Results Legend

The following symbols are used throughout this report to indicate the significance of each of the research findings.

- Recurring Consistent Trend
- ◆ Significant Change
- Context or Information

¹ The STP now has sixteen complete years of B.C. public post-secondary enrolments for 2002/2003 to 2017/2018 registrants, plus the partial 2018/2019 academic year (Fall 2018 only). Post-secondary enrollments outside of B.C. or in B.C. private institutions are excluded.

² The public STP website is located here: <http://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/data-research/student-transitions-project>

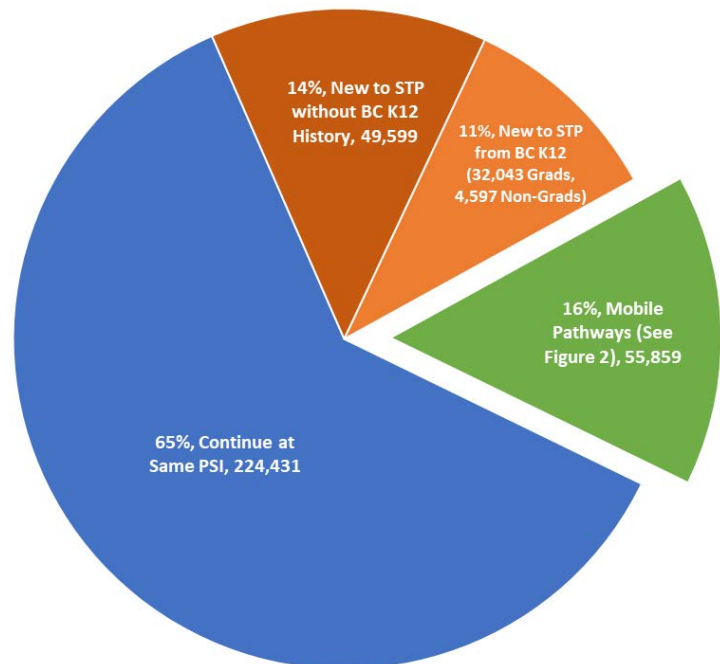
Research Results

○ How does the STP measure student mobility? What is the student mobility rate?

The STP looks at all academic credit registrants in a single registration year and quantifies the proportion of these registrants who switched institutions, relative to their last registration period. In the most recent registration year, 2017/2018, there were approximately 344,000 academic credit registrants, of which 55,859 were enrolled in a different institution from their previous registration period. These mobile students represent 16.2% of academic credit registrants and this is the **student mobility rate** for 2017/2018.

The majority of students (65%) continued in 2017/2018 at the same institution where they last registered. The balance of the registrants in the year are comprised of new students, with 11% coming from B.C. secondary schools and 14% with no record of B.C. secondary school attendance (see [Figure 1](#)).

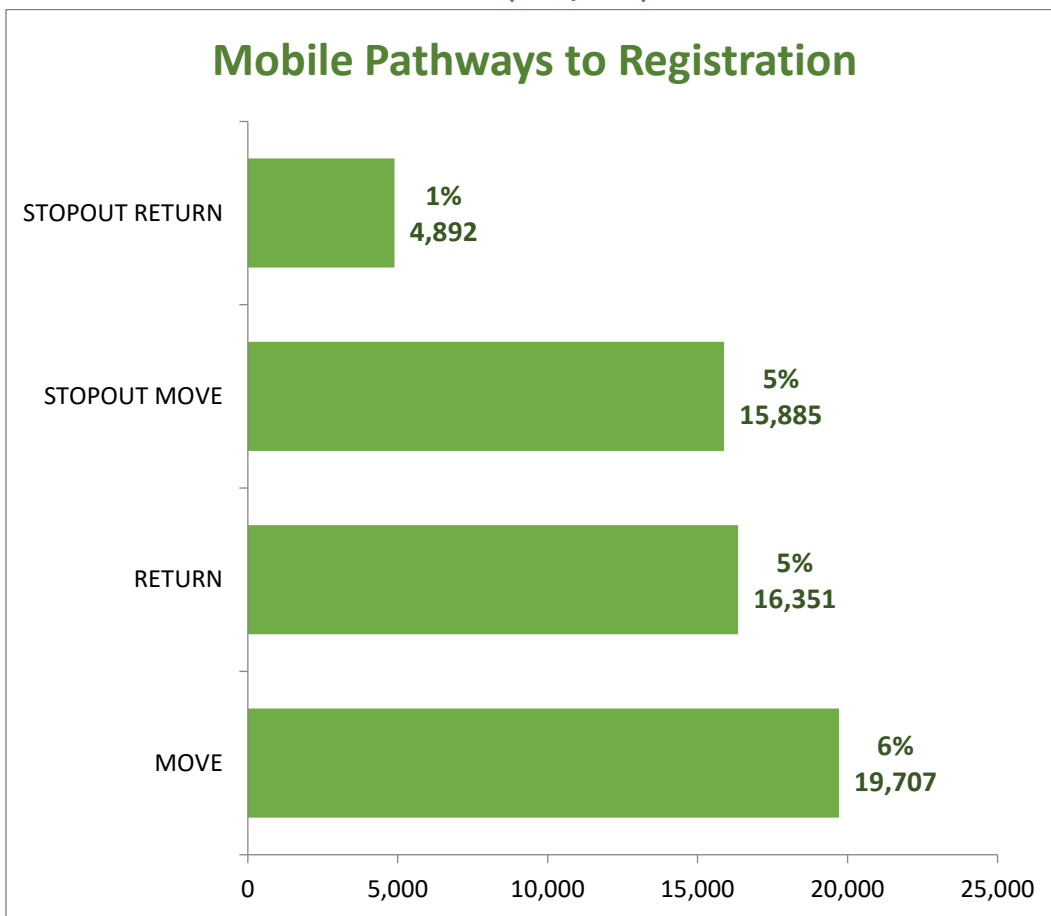
FIGURE 1: STUDENT MOBILITY RATE (2017/2018)



☑ Which pathways did mobile students take into their current institution of registration?

By taking a closer look at the 55,859 mobile students of 2017/2018, it is possible to identify whether the student switched institutions after last registering in 2016/2017 (11%), or switched institutions after a stop out period of non-registration (6%). The STP can also identify whether the student took the most common pathway of ‘moving’ (11%) to a new/different institution for the first time, or if they took the less common pathway of ‘returning’ (6%) to an institution they had attended previously (but not most recently). The most common mobile pathway taken by 19,707 students was a direct move to a new institution without a stop out period (6%). See [Figure 2](#).

FIGURE 2: MOBILE PATHWAYS TO REGISTRATION (2017/2018)



Which pathways did students take in or out of their institution of registration?

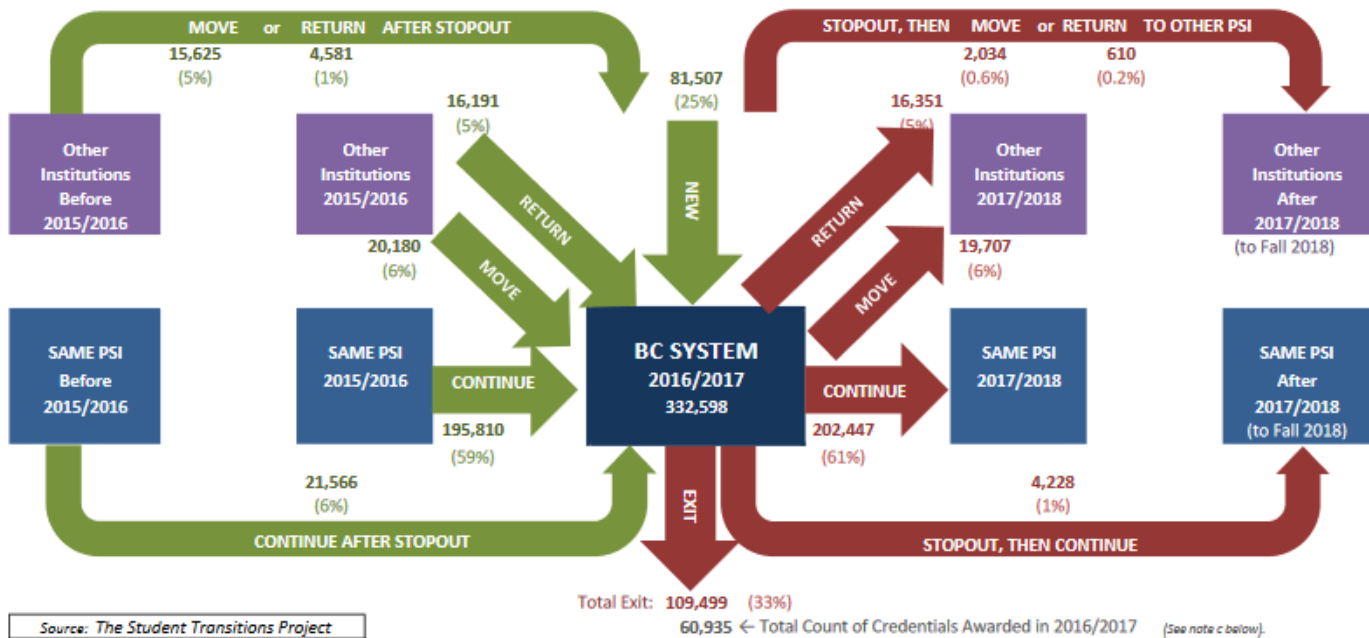
The STP student mobility model helps us understand the numerous pathways that students take from one year to the next, as they navigate through B.C.'s public post-secondary system. Students may enter the post-secondary system for the first time, or they may continue at the same institution where they last registered. Some students will switch institutions, while others may exit the system (with or without a credential). While the majority (roughly 60%) of students continue to enrol in the same institution where they last registered, the various other pathways that students take are depicted in **Figure 3**³.

The focus of the diagram is the population of academic credit registrants in 2016/2017. The source and pathways of student inflows from preceding years are shown on the left, while the destination of student outflows are shown on the right.

The central core of the diagram shows relatively balanced numbers of students flowing directly into and out of the B.C. public post-secondary system in 2016/2017 from the immediately preceding (2015/2016) and following (2017/2018) academic years.

Reaching beyond the center of the diagram, from the far left to the far right, the student inflows and outflows cover a multi-year, but unbalanced, period of time. Up to thirteen years of inflows are shown on left, but only one year plus one Fall term is shown on the right. As a result, the number of inflowing stopout moves and returns (15,625 and 4,581) are not balanced with the number of outflowing stopout moves and returns (2,034 and 610).

FIGURE 3: STUDENT PATHWAYS IN THE B.C. PUBLIC POST-SECONDARY EDUCATION SYSTEM



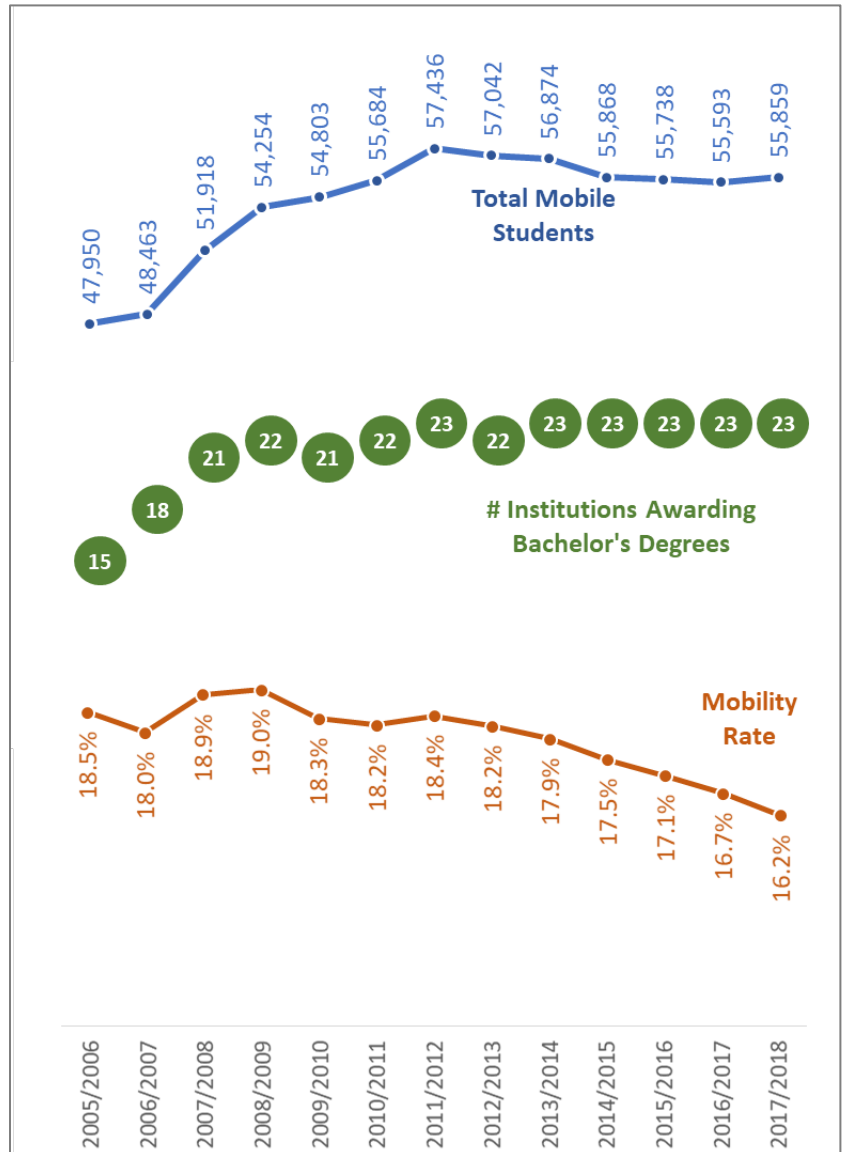
³ Student Pathways Diagrams are provided on the STP website for each institution, each region and each institution type at: https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/data-research/stp/student_pathways_system_region_sector.pdf

What are the trends in student mobility?

The **student mobility rate** (16.2%) continues to decline in B.C. This is the proportion of all academic credit registrants in the year who followed a mobile pathway (i.e. switched from the institution where they last registered) to their current institution of registration in 2017/2018.

Over the last decade, the number of mobile students has remained roughly in the range of 55,000 to 57,000 students, increasing 3% over the ten years. Over this same time period, the total number of academic credit registrants increased 20%, from 286,000 to 344,000. This indicates that the growth in the number of mobile students has not kept pace with the growth in the total number of academic credit registrants. The declining mobility rate is consistent with the fact that students have more opportunities to complete a Bachelor’s degree in institutions that traditionally did not offer degrees, such as B.C. colleges and institutes. See **Figure 4**.

FIGURE 4: STUDENT MOBILITY TRENDS, 2005/2006 TO 2017/2018



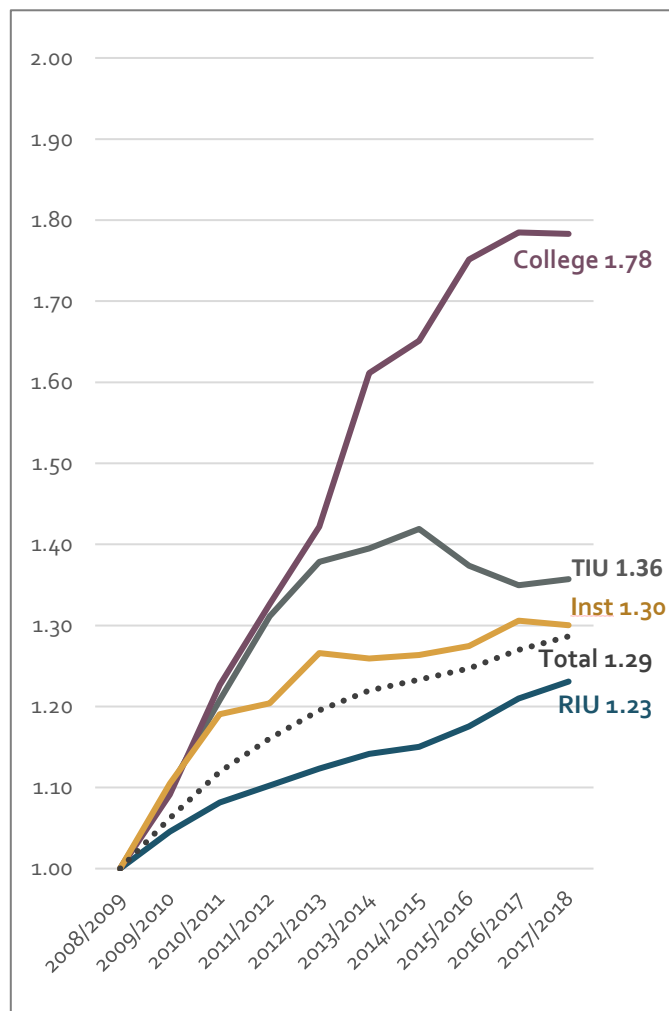
◆ Where do students enrol for a Bachelor’s degree in B.C.? What are the trends?

Since the introduction of the 2002 Degree Authorization Act, the province of B.C. has seen rapid growth in the number of institutions offering Bachelor’s degrees. This has resulted in a growing share of B.C.’s public post-secondary students enrolling in and earning a Bachelor’s degree. Where do they enrol? What is the growth rate? What has shifted?

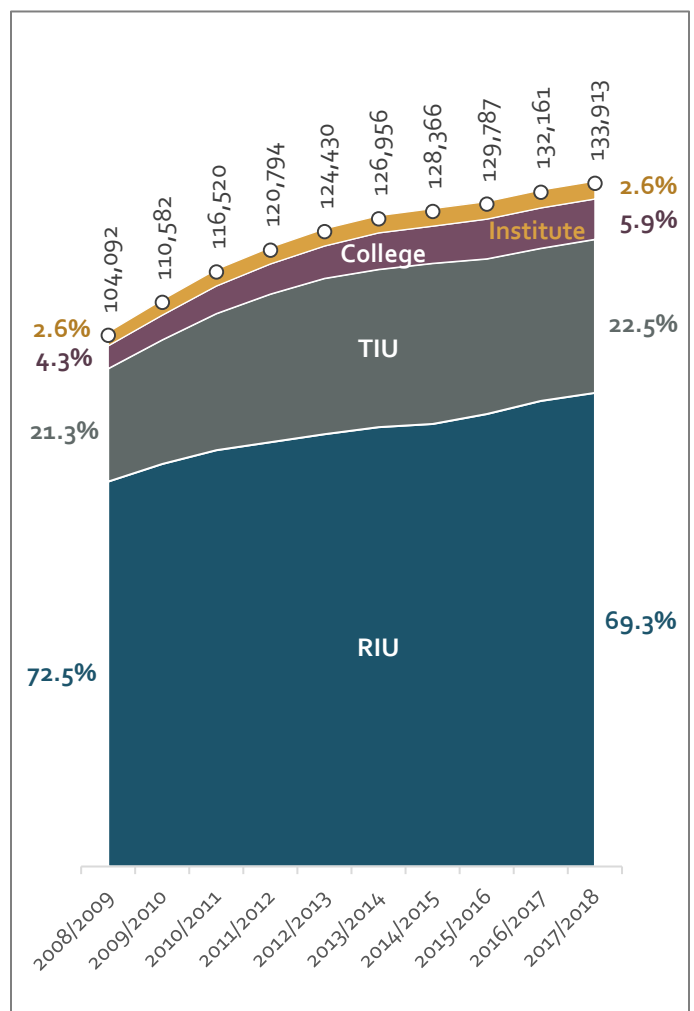
- **Where:** The majority (69.3%) of Bachelor’s degree seekers in B.C. continue to enroll in RIUs, with smaller shares enrolling in TIUs (22.5%), College’s (5.9%) and Institutes (2.6%).
- **Growth rate:** The overall growth in students seeking a Bachelor’s degree in B.C. (+29%) has occurred more slowly in RIU’s (+23%) than B.C. colleges (+78%) and TIUs (+36%). See [Figure 5A](#).
- **Changing proportions:** The unequal growth rate in Bachelor’s degree registrants across B.C.’s institution types over the last decade has resulted in a growing share of B.C.’s Bachelor degree seekers enrolling in B.C. Colleges and TIUs, while the proportion enrolling in RIUs has declined roughly three percentage points. See [Figure 5B](#).

FIGURE 5: GROWTH IN BACHELOR’S DEGREE SEEKERS IN B.C., BY INSTITUTION TYPE

(A) INDEXED GROWTH IN BACHELOR’S DEGREE SEEKERS



(B) CHANGE IN % SHARES OF BACHELOR DEGREE SEEKERS

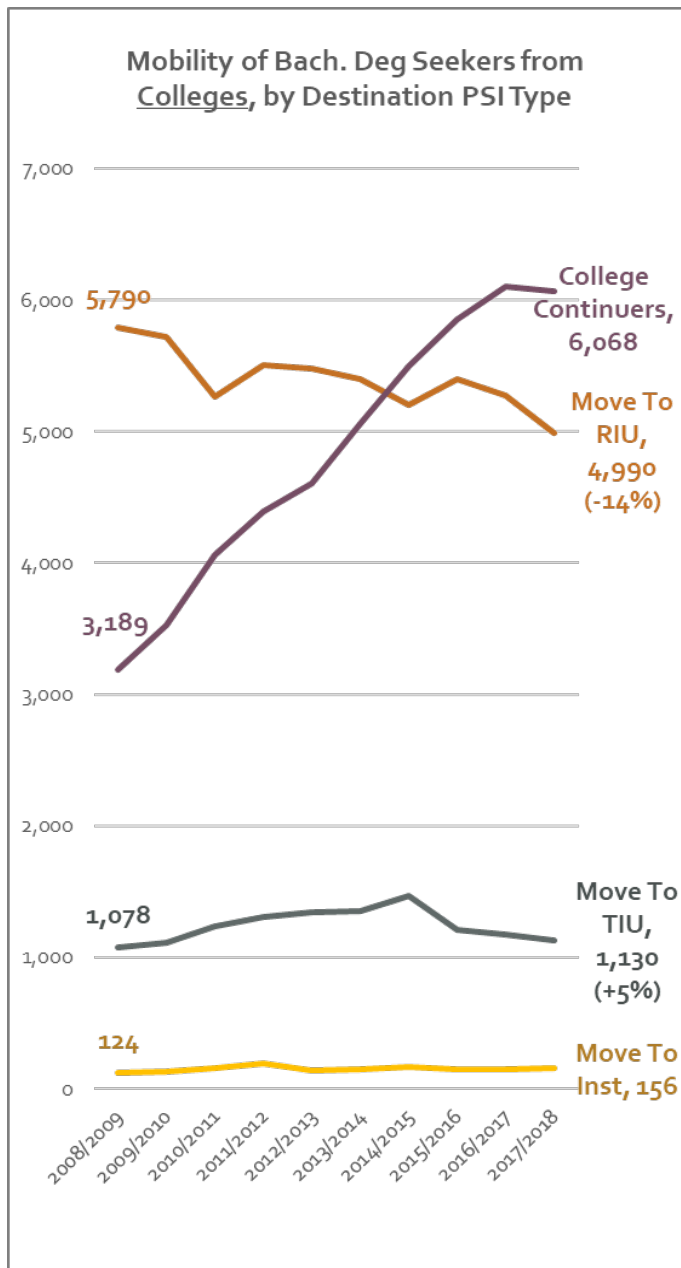


◆ Due to growth in Bachelor’s degree opportunities in B.C. Colleges and TIU’s, what is the impact on student mobility?

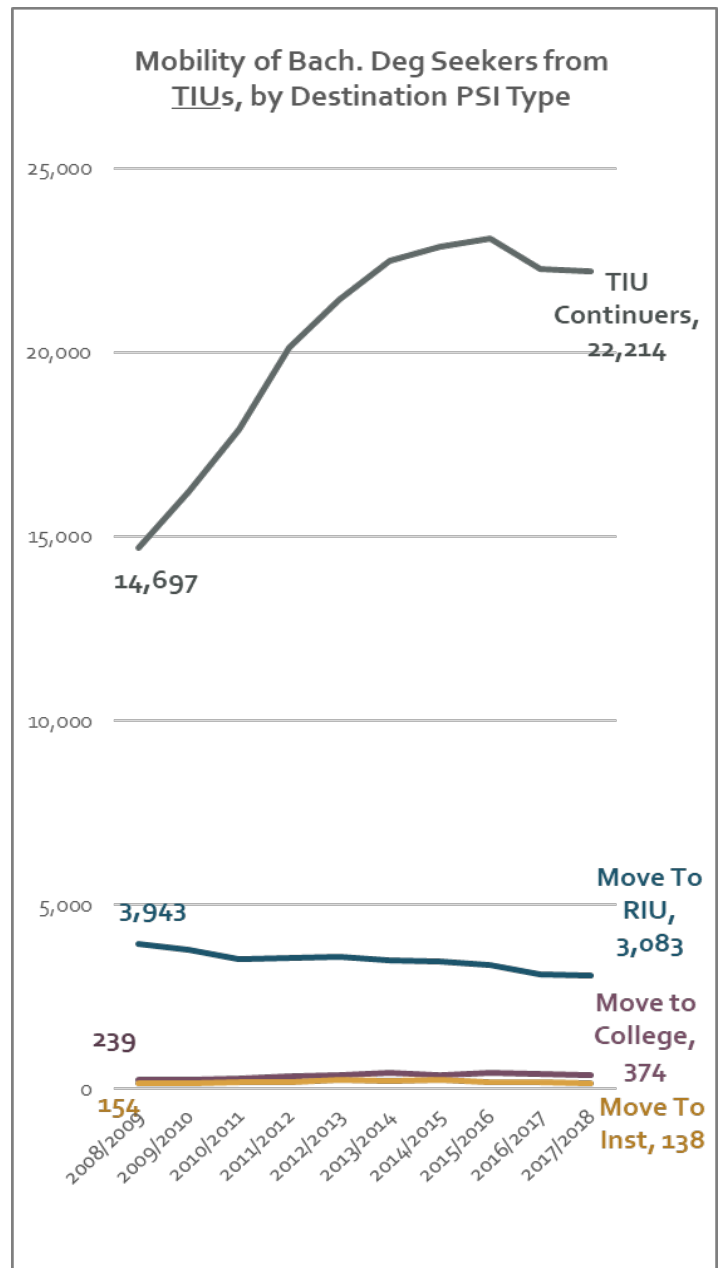
By examining the changing volume of mobile students moving from any credential category at a college or TIU and subsequently moving into a Bachelor’s degree, it is evident that students are more inclined to remain in the college or TIU to complete their Bachelor’s degree, rather than switching to an RIU. See **Figure 6**. In numerous programs, it is no longer necessary to move to an RIU to complete a Bachelor’s degree.

FIGURE 6: BACHELOR’S DEGREE GROWTH AND THE IMPACT ON STUDENT MOBILITY FROM:

(A) B.C. COLLEGES



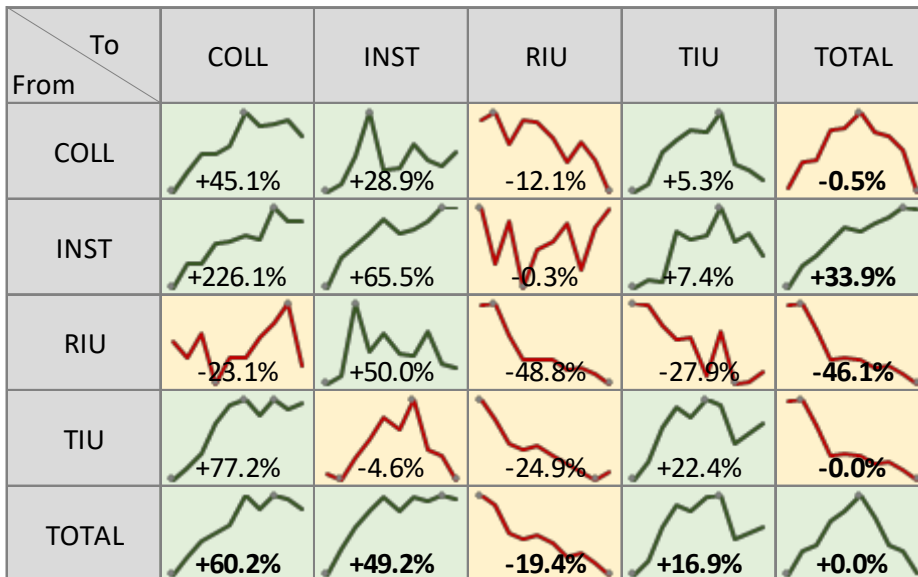
(B) TEACHING-INTENSIVE UNIVERSITIES (TIUs)



◆ How has the volume of students moving and continuing into Bachelor’s degrees changed over the last ten years?

Looking exclusively at students who moved into a Bachelor’s degree program from any credential category below a Bachelor’s degree, it is evident that the number of students moving into Bachelor’s degree programs at RIU’s from other institutions has been declining. **Figure 7** provides a student mobility matrix between institution types over the last ten years, condensed into 10-year trend lines. The vertical column in the matrix showing students entering RIU Bachelor’s degrees from other institution types reveals declining trends from all institution types, for an overall decline of 19.4%.

FIGURE 7: TEN-YEAR TRENDS IN STUDENT MOBILITY BETWEEN INSTITUTION TYPES



Declining trend from all
PSI Types into RIU
Bachelor’s Degrees

◆ How has the growth in international students affected the student mobility rate?

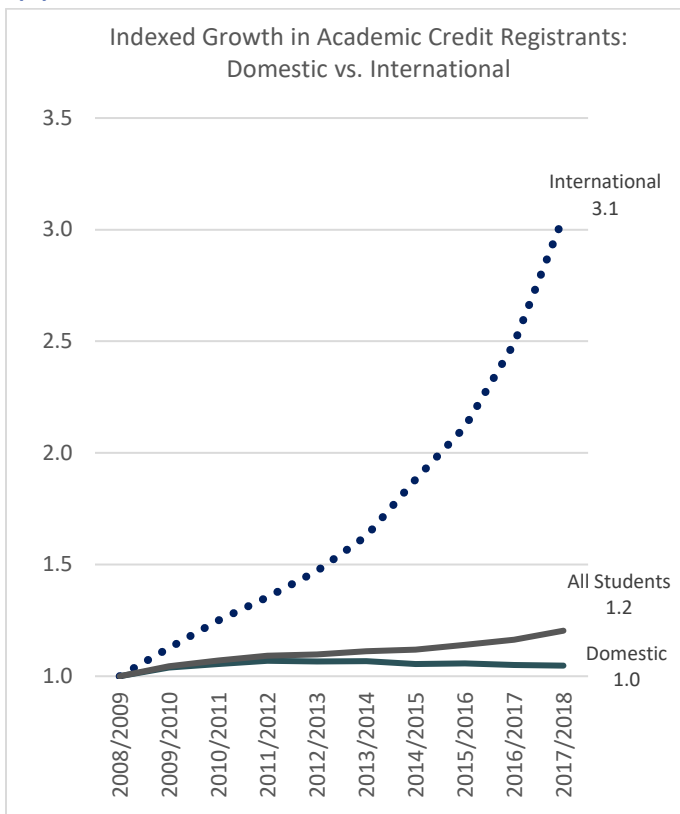
The B.C. public post-secondary system has seen significant growth in international student enrollments, such that three times as many international students are registered in academic credits in 2017/2018, compared to ten years ago (see [Figure 8A](#)).

International students are defined in the inset box on the [next page](#). International students are significantly less mobile than domestic students, with mobility rates about half that of domestic students⁴.

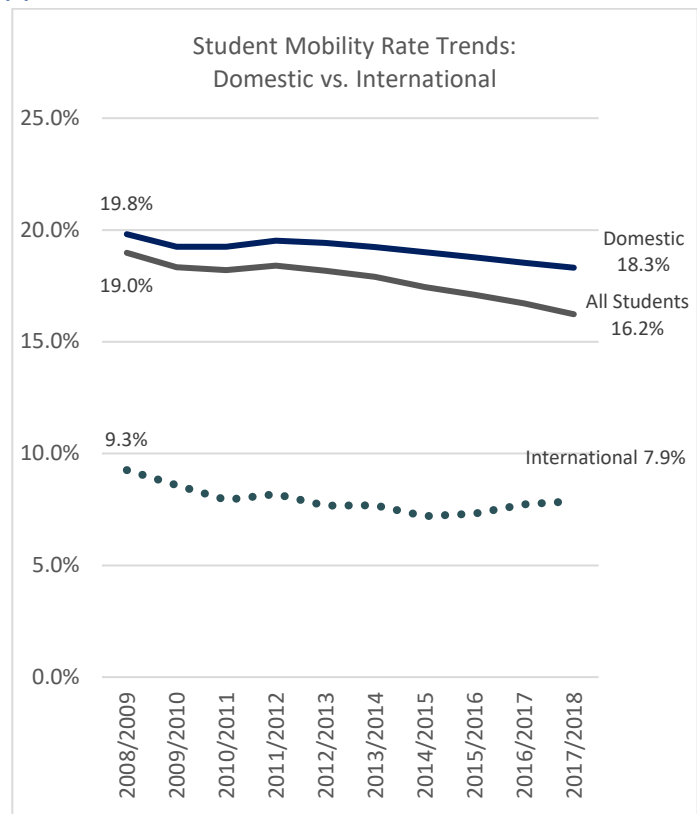
International students continue to represent a growing share of total post-secondary enrollment in B.C., with international students now representing 16% of total headcount enrollment in the B.C. public post-secondary system, up significantly from about 6% ten years ago.⁵ Since international students continue to have consistently lower student mobility rates than domestic students, the growth in international students continues to put downward pressure on the overall student mobility rate. At the same time, the mobility rates of both domestic and international students have declined over the last decade. See [Figure 8B](#).

FIGURE 8: TEN-YEAR TRENDS IN DOMESTIC VS. INTERNATIONAL STUDENTS

(A) GROWTH IN ACADEMIC CREDIT REGISTRANTS



(B) STUDENT MOBILITY RATE TRENDS



⁴ The mobility rates shown here are derived from all mobile students who last registered in a different institution in the preceding year or after one or more years of non-registration.

⁵ [STP Research Results: Student Transitions & Enrolment Trends](#), Appendix C, June 25, 2109.

Who are the mobile students?

A typical mobile student in B.C. is a domestic female student who received a credential before switching institutions. She is likely an undergraduate student enrolled in a certificate/diploma or no program. Student mobility rates for various sub-populations are provided in [Figure 9](#).⁶

FIGURE 9: STUDENT MOBILITY RATES OF STUDENTS CONTINUING IN THE B.C. SYSTEM FROM 2016/2017 TO 2017/2018, BY STUDENT GROUP

Student Group	Mobile Students	Total Registrant	% Share of Mobile StdnTs	% Share of All Registrants	Student Mobility Rate
Gender:					
Female	20,357	118,665	58%	55%	17.2%
Male	14,745	97,748	42%	45%	15.1%
Aboriginal Status:					
Aboriginal	2,350	10,551	7%	5%	22.3%
Non-Aboriginal	32,732	205,876	93%	95%	15.9%
Visa Status:					
Domestic	30,611	177,600	87%	82%	17.2%
International	4,471	38,827	13%	18%	11.5%
Age:					
19 to 25	21,072	122,690	60%	57%	17.2%
26 to 55	10,355	63,579	30%	29%	16.3%
18 and younger	4,880	31,750	14%	15%	15.4%
56 and older	387	2,683	1%	1%	14.4%
Earned Credential Before Moving:					
Credential Received	4,631	12,414	13%	6%	37.3%
No Credential	30,923	205,610	88%	95%	15.0%
Program Area:					
Personal Improvement & Leisure	363	879	1%	0%	41.3%
Other	301	1,032	1%	0%	29.2%
Health	4,149	20,106	12%	9%	20.6%
Arts and Sciences	18,129	90,166	52%	42%	20.1%
Developmental	930	4,713	3%	2%	19.7%
Human and Social Services	3,478	18,643	10%	9%	18.7%
Trades	1,159	6,773	3%	3%	17.1%
Business and Management	4,799	38,408	14%	18%	12.5%
Visual and Performing Arts	703	6,302	2%	3%	11.2%
Engineering and Applied Sciences	3,343	30,153	10%	14%	11.1%
Education	749	7,227	2%	3%	10.4%
Study Level:					
Developmental	935	4,741	3%	2%	19.7%
Undergraduate	33,768	195,113	96%	90%	17.3%
Graduate	668	17,491	2%	8%	3.8%
Credential Category at Origin PSI:					
None	10,009	27,796	29%	13%	36.0%
Associate Degree	4,426	12,791	13%	6%	34.6%
Other	3,790	13,314	11%	6%	28.5%
Advanced Diploma	214	1,040	1%	0%	20.6%
Short Certificate	464	2,291	1%	1%	20.3%
Diploma	5,181	26,291	15%	12%	19.7%
Certificate	2,765	14,148	8%	7%	19.5%
Developmental Credential	491	3,075	1%	1%	16.0%
Apprenticeship	315	2,338	1%	1%	13.5%
Advanced Certificate	76	635	0%	0%	12.0%
Bachelors Degree	10,563	99,517	30%	46%	10.6%
Post-Degree Certificate	101	974	0%	0%	10.4%
First Professional Degree	223	2,774	1%	1%	8.0%
Post-Degree Diploma	298	3,964	1%	2%	7.5%
Graduate Certificate	21	290	0%	0%	7.2%
Masters Degree	514	11,124	1%	5%	4.6%
Graduate Diploma	25	734	0%	0%	3.4%
Doctorate	79	5,294	0%	2%	1.5%
Grand Total All Students Registered in both 2016/2017 and 2017/2018	35,082	216,427	100%	100%	16.2%

What is an international student?

An **international student** is any non-Canadian citizen who does not have permanent residency status in Canada and is participating in a program of study at an education institution in Canada. International students are defined differently in each of two different post-secondary data sources provided to the STP.



The **Central Data Warehouse (CDW)** institutions (all post-secondary institutions excluding Research universities) define international students on the basis of the fees the students pay. Students who pay international fees are classified as international students. It is also assumed that international exchange students pay domestic fees and are therefore counted as domestic students in this study.

The **Research-Intensive Universities (RIUs)** identify international students according to the student visa status. The following visa status values are provided to the STP: Diplomat, Minister, Other, Student Visa, Visitor and International Exchange. International exchange students are included in this analysis.

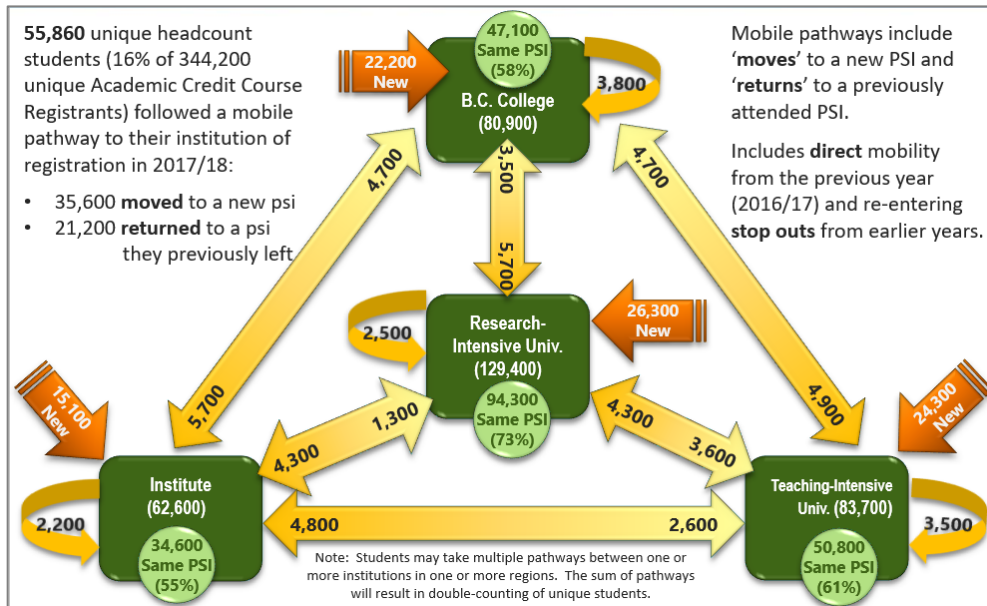
⁶ The mobility rates shown here are derived from mobile students who last registered in a different institution in the preceding year. Students who moved/returned after one or more stop out years of non-registration are excluded.

☑ How many students moved between different institution types in B.C.?

Among all 55,860 mobile students who switched institutions in 2017/2018, the vast majority, or about 43,800 students switched from one institution type to another. The STP has helped to debunk the myth that students primarily move only from colleges to research-intensive universities. As shown in **Figure 10**, students move in all directions between all institution types, but the two most popular routes are: (1) from colleges to research-intensive universities, and (2) from colleges to institutes, with roughly 5,700 students following each of these routes.

FIGURE 10: STUDENT MOBILITY BETWEEN INSTITUTION TYPES (2017/2018)

(A) STP INSTITUTION TYPE MOBILITY DIAGRAM



B.C. Public Post-Secondary Institutions by Institution Type

B.C.'s public post-secondary institutions belong to one of four institution types or sectors, as defined by the Ministry of Advanced Education, Skills and Training. All student mobility information in this study assigns each institution to its current institution type, as defined below.

Colleges – Camosun College, College of New Caledonia, College of the Rockies, Douglas College, Langara College, North Island College, Northern Lights College, Coast Mountain College (formerly Northwest Community College), Okanagan College, Selkirk College, Vancouver Community College.

Institutes – British Columbia Institute of Technology, Justice Institute of British Columbia, Nicola Valley Institute of Technology.

Teaching-Intensive Universities (TIUs) – Capilano University, Emily Carr University of Art + Design, Kwantlen Polytechnic University, Royal Roads University, Thompson Rivers University, Vancouver Island University, University of the Fraser Valley.

Research-Intensive Universities (RIUs) – Simon Fraser University, University of British Columbia (including University of British Columbia, Okanagan), University of Northern British Columbia, University of Victoria.

(B) CHORD DIAGRAM OF PSI-TYPE MOBILITY



(C) INSTITUTION-TYPE MOBILITY MATRIX

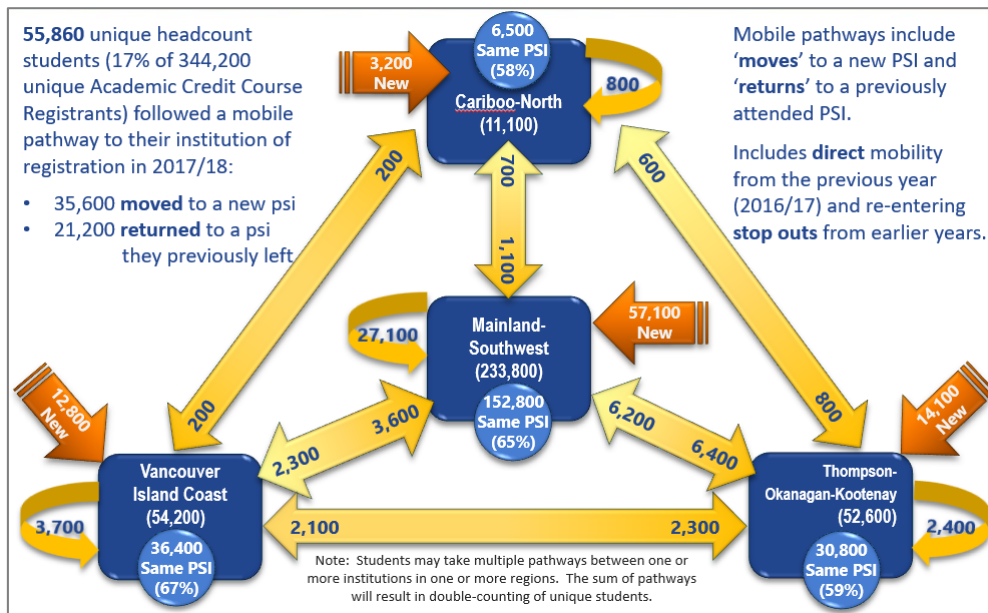
To \ From	COLL	INST	RIU	TIU	TOTAL
COLL	3,839	5,735	5,726	4,916	19,480
INST	4,651	2,220	1,304	2,612	10,531
RIU	3,457	4,309	2,476	3,608	13,550
TIU	4,730	4,794	4,303	3,520	16,749
TOTAL	16,003	16,437	13,188	13,968	55,859

☑ How many students moved between regions in B.C.?

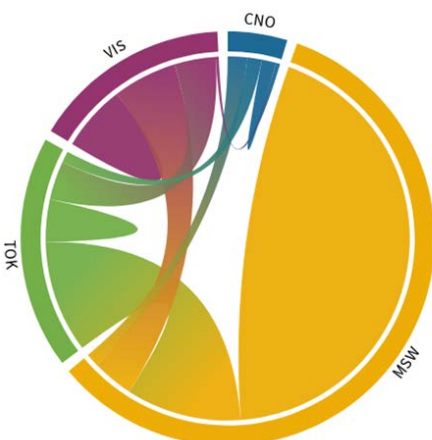
Among all 55,860 mobile students who switched institutions in 2017/2018, approximately 22,000 students switched from one region of B.C. to another (see **Figure 11**). The majority of mobile students do not switch regions when they register, such that the largest group of mobile students switch institutions within the Mainland/Southwest region. This is the most populated region of the province, where the largest number of post-secondary institutions are located; and the most popular destination region for those who switched regions when they switched institutions.

FIGURE 11: STUDENT MOBILITY BETWEEN REGIONS (2017/2018)

(A) STP REGIONAL MOBILITY DIAGRAM



(B) CHORD DIAGRAM OF REGIONAL MOBILITY



(C) REGIONAL MOBILITY MATRIX

To / From	CNO	MSW	TOK	VIS	TOTAL
CNO	793	1,073	804	233	2,789
MSW	728	27,120	6,394	2,299	35,938
TOK	641	6,216	2,353	2,143	11,118
VIS	162	3,555	2,294	3,678	9,363
TOTAL	2,186	37,015	11,588	8,001	55,859

B.C. Public Post-Secondary Institutions by Region

B.C. public post-secondary institutions are located in urban and rural regions of the province. For the purpose of tracking the mobility of students around the province, the STP has assigned each of the post-secondary institutions to one of the following four geographic regions.

Cariboo-North Region (CNO)

College of New Caledonia (CNC), Northern Lights College (NLC), Coast Mountain College (CMTN, formerly NWCC), University of Northern British Columbia (UNBC).

Mainland-Southwest Region (MSW)

British Columbia Institute of Technology (BCIT), Capilano University (CAPU), Douglas College (DOUG), Emily Carr University of Art + Design (ECU), Justice Institute of B.C. (JIBC), Kwantlen Polytechnic University (KPU), Langara College (LANG), Simon Fraser University (SFU), University of British Columbia, Vancouver (UBCV), University of the Fraser Valley (UFV), Vancouver Community College (VCC).

Thompson-Okanagan-Kootenay Region (TOK)

College of the Rockies (COTR), Nicola Valley Institute of Technology (NVIT), Okanagan College (OKAN), Thompson Rivers University (TRU), Selkirk College (SEL), University of British Columbia, Okanagan (UBCO).

Vancouver Island/Coast Region (VIS)

Camosun College (CAM), North Island College (NIC), Royal Roads University (RRU), University of Victoria (UVIC), Vancouver Island University (VIU).

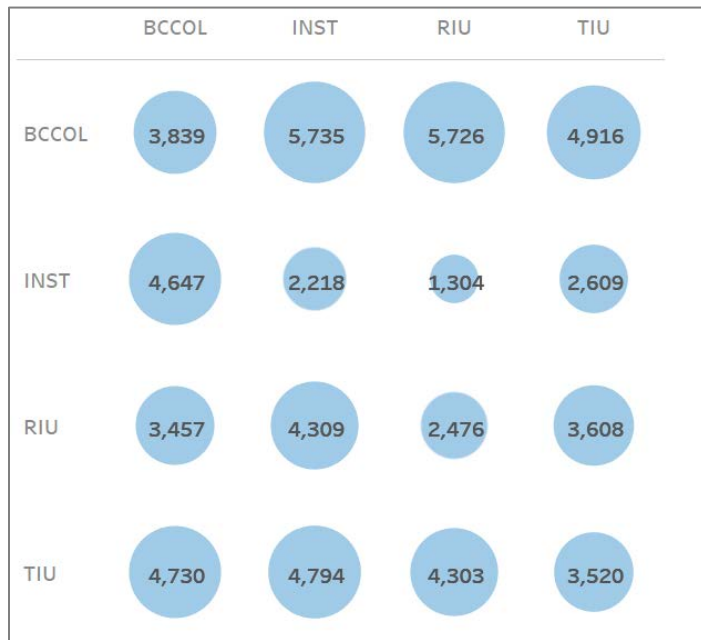
Among mobile students, how significant are the inter-relationships between the regions and institution types?

The inter-relationships between **institution types** are relatively balanced, as demonstrated by the roughly equal volume of mobile students flowing between virtually all pairs of institution types in the B.C. public post-secondary system (see **Figure 12A**). With the exception of the less-popular mobility pathways, from institutes to RIUs (1,304), inter-institute mobility (2,218) and mobility between RIUs (2,476), an average of roughly 4,300 students flow between each of the remaining pairs of institution types in B.C.

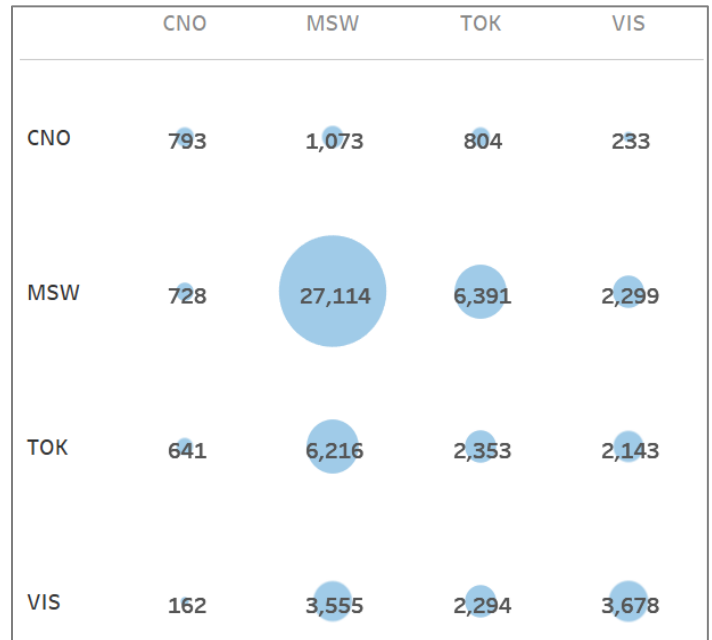
By comparison, the inter-relationship between institutions in different **regions** of B.C. is relatively weak, with the exception of a large volume of mobile students flowing into and out of the Mainland/Southwest region (see **Figure 12B**). Mobility between institutions within the Mainland/Southwest region forms the strongest relationship.

FIGURE 11: 2017/2081 STUDENT MOBILITY INTER-RELATIONSHIPS

(A) BETWEEN INSTITUTION TYPES



(B) BETWEEN REGIONS



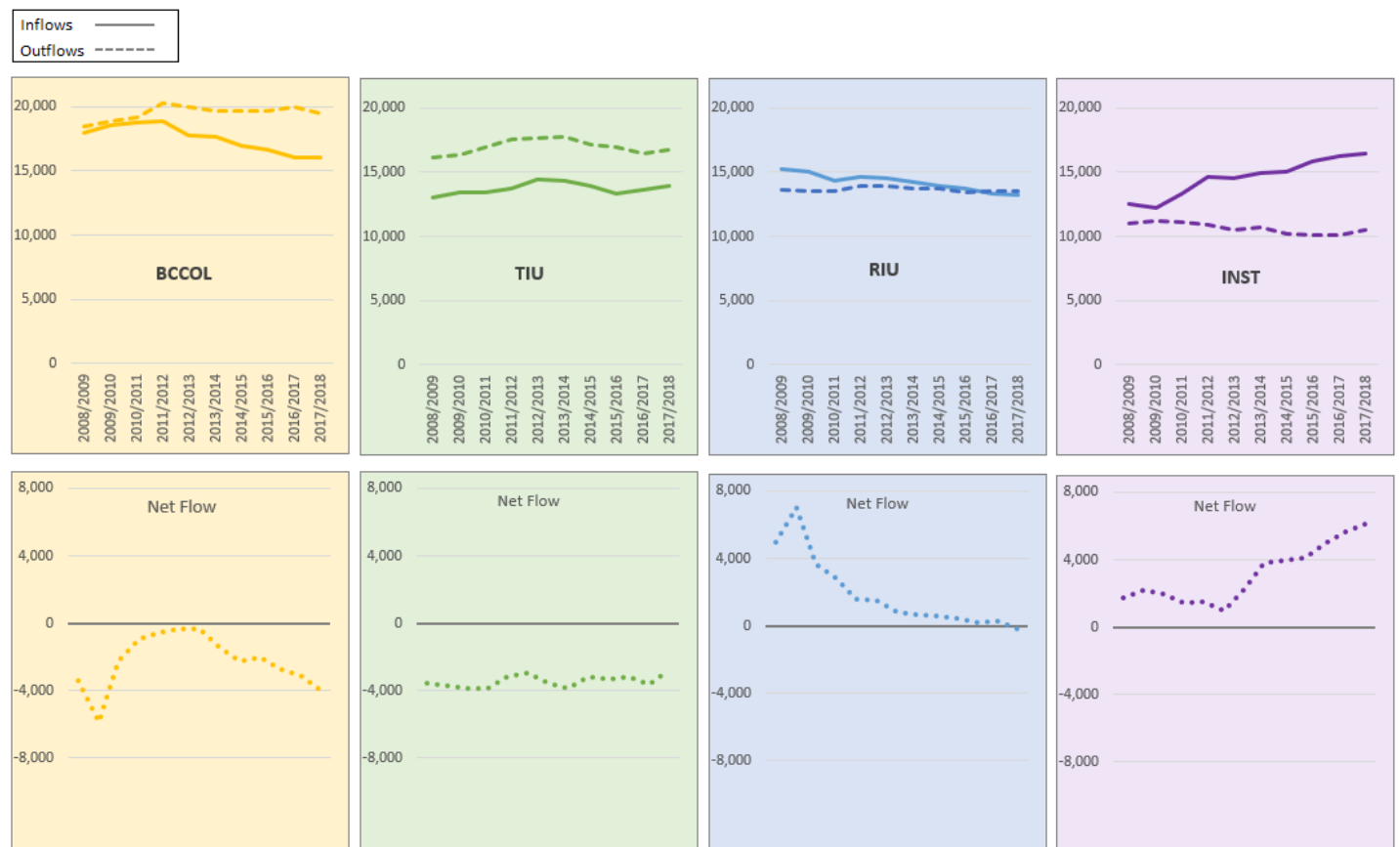
◆ What are the trends in mobile student inflows and outflows by institution type?

Among the four institution types (colleges, institutes, TIUs and RIUs), the majority of mobile students last registered in a B.C. college (19,480 or 35%) or TIU (16,749 or 30%) and subsequently moved to another institution in 2017/2018. Students may move to another institution in the same sector, such as college to college, or a different sector, like college to RIU. Each year among mobile students, the total number flowing out of colleges and TIUs to other institutions exceeds the number of students flowing into colleges and TIUs from other institutions. As a result, **colleges and TIUs have an annual net outflow of mobile students** of roughly 3,500 and 2,800 students respectively.

By comparison, **RIUs and Institutes generally have an annual net inflow of mobile students** from other institutions. It is also evident that the net inflow of mobile students into institutes from other institutions is growing (up 89% over the decade), while the flow of mobile students into RIUs from other institutions is becoming more balanced, after a 2% decline in student inflows to RIUs over the last decade. See **Figure 13**.

These shifts in student inflows and outflows by institution type are likely related to changes in the post-secondary landscape in B.C. about a decade ago. These changes include the creation of teaching-intensive universities and an Okanagan campus of UBC (or UBCO) and expanded opportunities for students to complete degrees in nearly all of the public post-secondary institutions in the province.

FIGURE 13: TEN-YEAR TREND IN NET FLOWS BETWEEN INSTITUTION TYPES



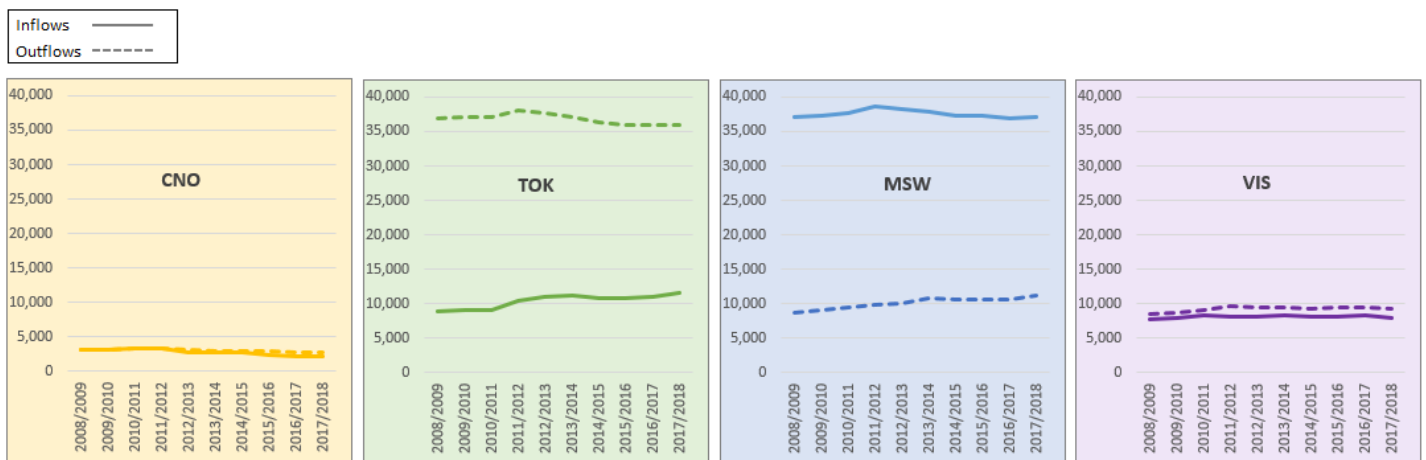
☑ What are the trends in mobile student inflows and outflows by region?

The majority of B.C.'s public post-secondary institutions are located in the **Lower Mainland** and this explains why the largest share (approximately 37,000 or 66%) of all mobile students flowed into Mainland/Southwest institutions (MSW) in 2017/2018 from other institutions. These students originated at institutions located either within or outside the MSW region. See [Figure 14](#) (this page) and [Figure 15](#) (next page).

A nearly identical, although reversed flow of students, occurs in the **Thompson-Okanagan-Kootenays** (TOK) region, with roughly 36,000 (or 64%) of mobile students leaving institutions in this region to enrol in other institutions. Thompson Rivers University (TRU) plays a significant role in the volume of mobile student inflows and outflows, accounting for about two-thirds of the student mobility into and out of the six institutions in the region (COTR, NVIT, OKAN, SEL, TRU, UBCO).

Compared to the other two regions of B.C., a relatively small, but balanced flow of mobile students move in/out of **Cariboo-North** (CNO) and **Vancouver Island** (VIS) institutions. The share of mobile students in these two regions combined represents about 10,000 to 12,000 (or 20%) of all mobile students in 2017/2018.

FIGURE 14: TEN-YEAR TREND IN NET FLOWS BETWEEN B.C. REGIONS

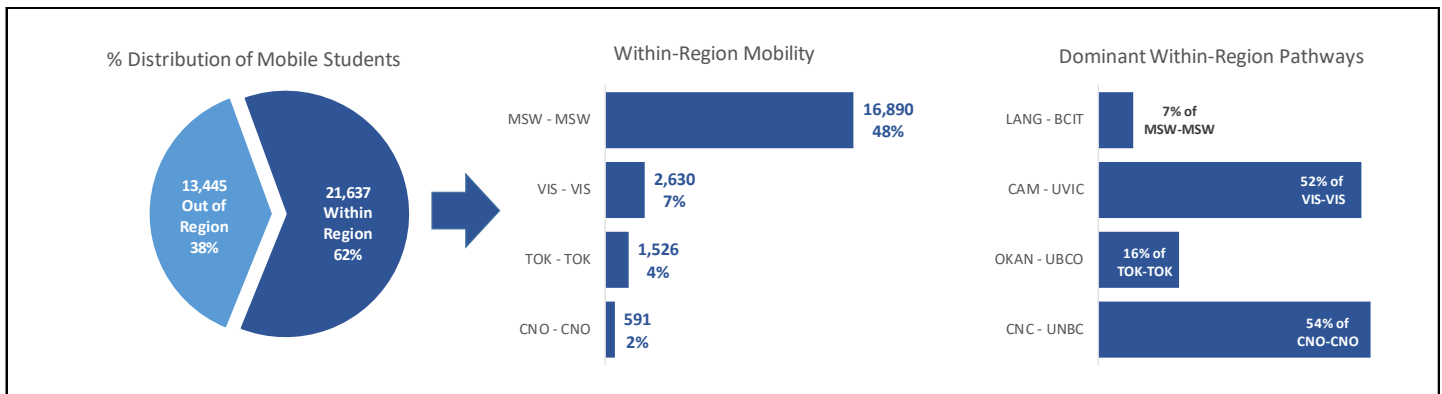


☑ What proportion of student mobility occurs between institutions within the region?

Among those 35,082 students who switched institutions from 2016/2017 to 2017/2018 (without a stop out period of non-registration), 62% of the students enrolled in another institution within the region, while 38% switched to an institution outside of the region. The vast majority of these within-region mobile students were students who switched institutions within the Mainland/Southwest region. See **Figure 15**.

Among those who switched institutions within the region, it is interesting to note the significance of selected student pathways between single pairs of institutions in a region, such as Camosun College to UVic (52% of the mobility within the Vancouver Island region) and CNC to UNBC (54% of the mobility within the Cariboo-North region).

FIGURE 15: WITHIN-REGION STUDENT MOBILITY



☑ What is the average distance that mobile students travel when they switch institutions?

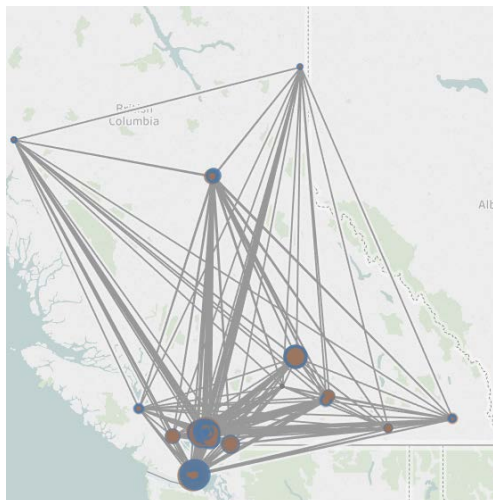
Among those 55,850 mobile students who switched institutions from their previous registration period to their current 2017/2018 institution, their destination institution was an average of 140 km from their previous institution. See [Figure 16A](#).

- Thompson Rivers University (TRU) provides Open Learning opportunities through online and distance education to students located anywhere in the province (or anywhere in the world). As a result, the 140 km average distance “traveled” by mobile students is slightly inflated by distance learners who did not physically relocate to attend TRU. By excluding the 7,513 mobile students entering TRU⁷, the average distance traveled by the remaining mobile students is reduced to 121 km.
- Students who switched into or out of institutions in the **Cariboo-North** from any other institution traveled about six times the distance of those who switched into or out of Mainland/Southwest institutions to any other institution (approximately 75 km vs 450 km).
- Among those 33,929 students who stayed within the **same region** when they switched institutions, their destination institution was an average of 29 km from their previous institution (see [Figure 16B](#)). The distance between institutions largely depended upon the size of the region. By comparison, the 23,661 students who **switched regions** when they switched institutions traveled roughly ten times the distance, or an average of 286 km, between their current and previous institution.
- Students who switched institutions within the **same type of institution**, such as college to college or TIU to TIU, traveled further (166 km, on average) than those who switched to a **different institution type** (133 km). **Traditional transfer students**, from colleges to RIU’s traveled an average of 140 km between institutions.

FIGURE 16: 2017/2018 MOBILITY MAPS

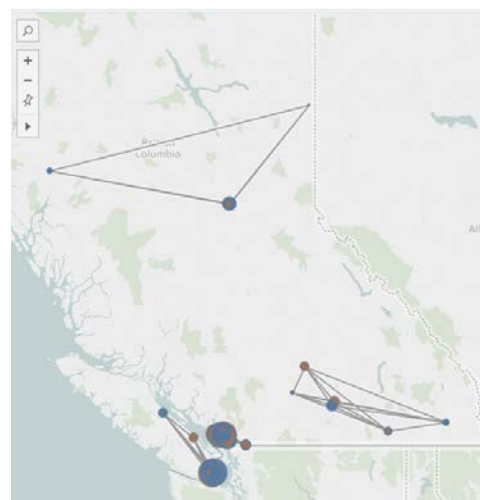
(A) ALL MOBILITY BETWEEN ALL INSTITUTIONS (N=55,850)

AVERAGE DISTANCE TRAVELED = 140 KM



(B) WITHIN-REGION STUDENT MOBILITY (N=33,929)

AVERAGE DISTANCE TRAVELED = 29 KM



⁷ Open Learning and on-campus learning cannot be identified separately for TRU students in the STP.

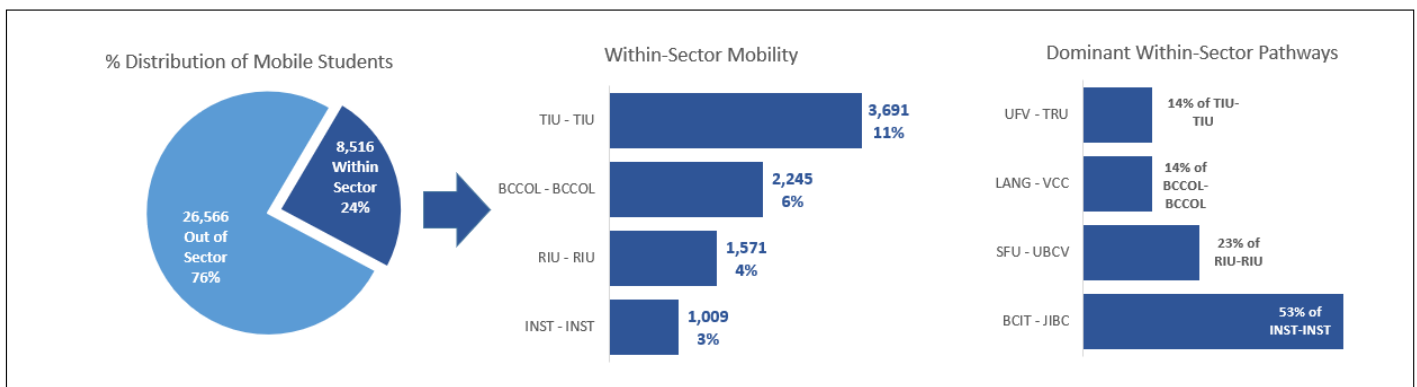
☑ What proportion of student mobility occurs between institutions within the same institution type?

Among those 35,082 students who switched institutions from 2016/2017 to 2017/2018 (without a stop out period of non-registration), 24% enrolled in another institution within the same institution type. The most popular route with the same institution type was TIU to TIU, accounting for 11% (of the 24%) of mobile students who switched institutions within the same institution types.

Students who switched institutions within the same institution type were likely influenced by the close proximity of the institutions. This is evident among the dominant within-sector pathways: UFV to TRU (mobility between TIUs), Langara to VCC (mobility between colleges), SFU to UBCV (mobility between RIUs) and BCIT to JIBC (mobility between institutes). See [Figure 17](#).

The more dominant pathway of mobile students is to switch institution types. This is the case for 76% of mobile students (or triple the number who stayed in the same institution type). Roughly half of these out-of-sector mobile students took one of the three most common pathways between institution types: College to RIU (5,114), or College to TIU (3,666), or TIU to RIU (3,691).

FIGURE 17: WITHIN-SECTOR STUDENT MOBILITY

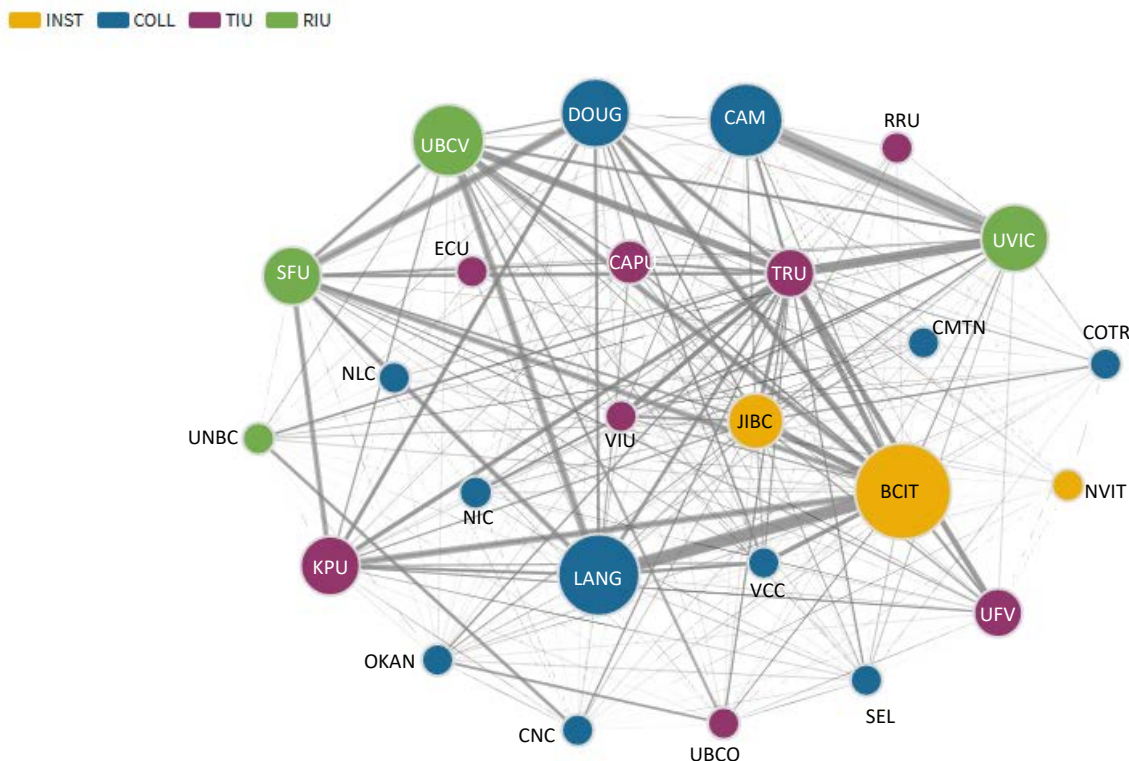


☑ Do students move between every pair of institutions in the province?

The student mobility data shows that groups of students do move between virtually every pair of institutions in the province; and the pathway between some pairs of institutions is much more common than others. Among 35,082 mobile students attending one or more of the 26 institutions (who moved or returned to another institution) from 2016/2017 to 2017/2018, there are a total of 650 possible pairs of institutions that students could move between, of which 627 (or 96%) of these pairs have one or more students moving between them.

The network diagram in [Figure 18](#) shows all of the student mobility (for moves and returns between all 26 institutions) from 2016/2017 to 2017/2018. This diagram shows the 627 pathways taken by 35,082 mobile students between pairs of 26 B.C. public post-secondary institutions. Each dot represents an institution, colored by institution type. The more dominant pathways (thicker lines) and the relative size of the institutions (larger circles) help to interpret dominant pathways and the role each institution plays in student mobility in B.C.

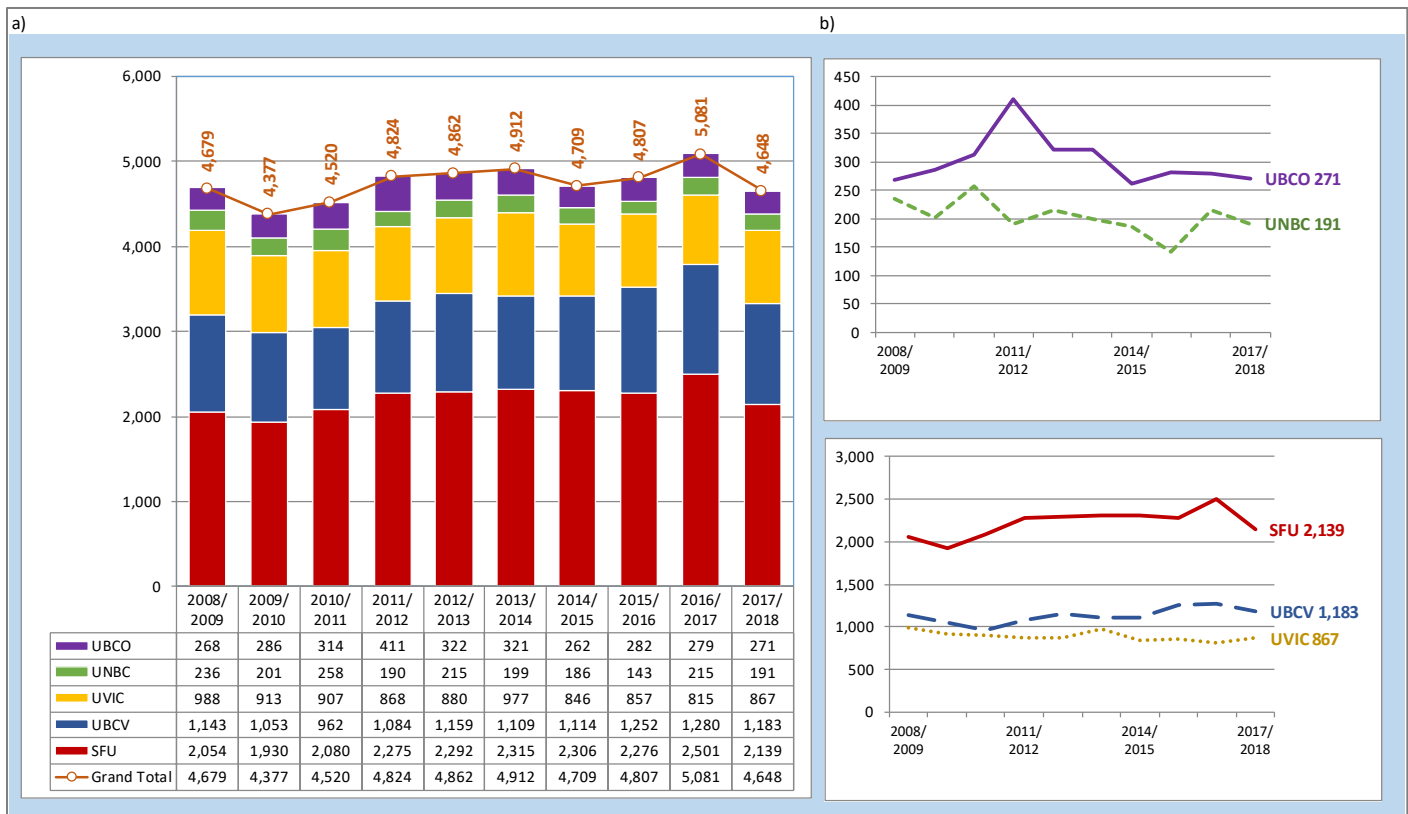
FIGURE 18: STUDENT MOBILITY BETWEEN INSTITUTIONS (EXCLUDING STOPOUTS)



☑ How many students follow the traditional transfer route from a B.C. College to Research-Intensive University?

Less than 10% of the total volume of mobile students is attributed to students following the traditional transfer pathway from a B.C. College to a B.C. research-intensive university. In the most recent year, 2017/2018, there were a total of 4,648 such students, representing 8.3% of all mobile students. Almost half of these students enrolled at SFU (46%) and 90% combined enrolled at the three large and established research-intensive universities: SFU, UVic and UBC, Vancouver. See **Figure 19**.

FIGURE 19: NUMBER OF TRADITIONAL TRANSFERS STUDENTS* BY ACADEMIC YEAR AND DESTINATION RESEARCH-INTENSIVE UNIVERSITY



* Traditional transfer students transferred from B.C. Colleges, Institutes and Teaching-Intensive Universities to Research-Intensive Universities with a minimum of 24 credits and a cumulative GPA of at least 2.00 with a basis of admission “B.C. College” or “B.C. Associate Degree”.

○ Can the STP provide other indicators of student mobility?

B.C.'s student mobility model was originally developed in the early 2000's for planning capacity and predicting the flow of transfer students from colleges to research-intensive universities. The original model was later transferred from BCCAT to the STP in 2008, where it was subsequently enhanced to accommodate and measure multiple student pathways from one year to the next.

During the course of the model's evolution, its purpose expanded beyond the narrow objective of predicting college transfer student flows into RIUs. The current STP student mobility model has successfully broadened our understanding of the multi-directional flow of students between all institution types, including colleges, institutes, RIUs and TIUs. Despite these leaps in our knowledge and access to student mobility information in B.C., the STP student mobility model still has its limitations.

What are the limitations of the current STP mobility model? The student mobility model simply quantifies the year-over-year change in each student's registration state and registration place at a given point-in-time, but does not quantify the extent to which these students were mobile over a multi-year period or the duration of their education. The model was not designed to accommodate the longitudinal tracking of a cohort of students, from their initial entry to an institution/program, through subsequent institutions/programs attended, and to credential completion/exit. As a result, the current mobility model is not equipped to address important longitudinal mobility-related questions, such as:

- How many institutions do students attend over the course of their education in the B.C. public post-secondary system?
- What proportion of students switched institutions, from time of first entry to an institution or program through to credential completion or last registration?
- What proportion of registrants attended more than one institution (simultaneously or sequentially)?
- How frequently, and for how long, do students stop out for a period of non-registration during the course of their education?

A 2015 longitudinal cohort study conducted by the STP, [*B.C. Bachelor's Degree Completers of 2013/2014*](#), found that 22,655 Bachelor's degree completers of 2013/2014 attended an average of 1.24 B.C. public post-secondary institutions during their progress towards a Bachelor's degree; and 45.6% of the cohort attended more than one institution before completing their degree.

In order to provide longitudinal student mobility measures, similar to those described above, the STP will soon begin to explore and develop a cohort-based student mobility model. Such a model should allow the STP to provide a broader understanding of student mobility and registration patterns over a student's education career, from admission to an institution or program, through to exit, or credential completion. The ability to explore the information by entry/exit institution and entry/exit program is important to the success and utility of a longitudinal mobility model.

Conclusion

The STP's Post-Secondary Student Mobility studies are conducted annually or biennially, depending on project priorities. The methodology for tracking student movement has evolved over the years and will continue to evolve as the STP strives to provide meaningful and useful information in support of the management and planning of programs in the B.C. public post-secondary education system.



Photo Source: https://science.ubc.ca/sites/science.ubc.ca/files/new_student_guide_banner.jpg