



February 2015

Highlights from the **Student Transitions Project** *Post-Secondary Student Mobility*

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

This newsletter summarizes results from a post-secondary student mobility study conducted under the guidance of the **Post-secondary Student Mobility** (PSM) Subcommittee of the **Student Transitions Project** (STP) (see inset boxes on **pages 1 and 4** to learn more about the PSM and STP).

In this latest study, the Student Transitions Project continues to describe and quantify the numerous education pathways of students as they enter, move between and exit B.C. public post-secondary institutions each year. This newsletter focuses exclusively on academic credit registrants in B.C.'s public post-secondary institutions registered over one or more years,

from Fall 2002 to Fall 2013.

In 2012/2013, there were roughly 434,000 unique headcount students¹ enrolled in B.C.'s 25 public post-secondary institutions, of which 314,000 students² were registered in academic credits only. STP's student mobility studies focus on the subset of academic credit registrants, as they between post-secondary institutions.

1. 434,000 total unique headcount in the B.C. public post-secondary system in 2012/2013 includes all students studying at the undergraduate, graduate and developmental level, excluding continuing education enrollments at B.C. research-intensive universities.
2. 314,000 unique academic credit registrants excludes students enrolled exclusively in non-credit or continuing education programs.

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 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.

Special Thanks: The STP would like to thank the Ministry of Education, the Ministry of Advanced Education 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.

Where to find more information: Additional information is also available to post-secondary institutions seeking more detailed information on student transitions specific to their region or institution.

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

http://www.aved.gov.bc.ca/student_transitions

**Research Results Prepared by Joanne Heslop, Manager,
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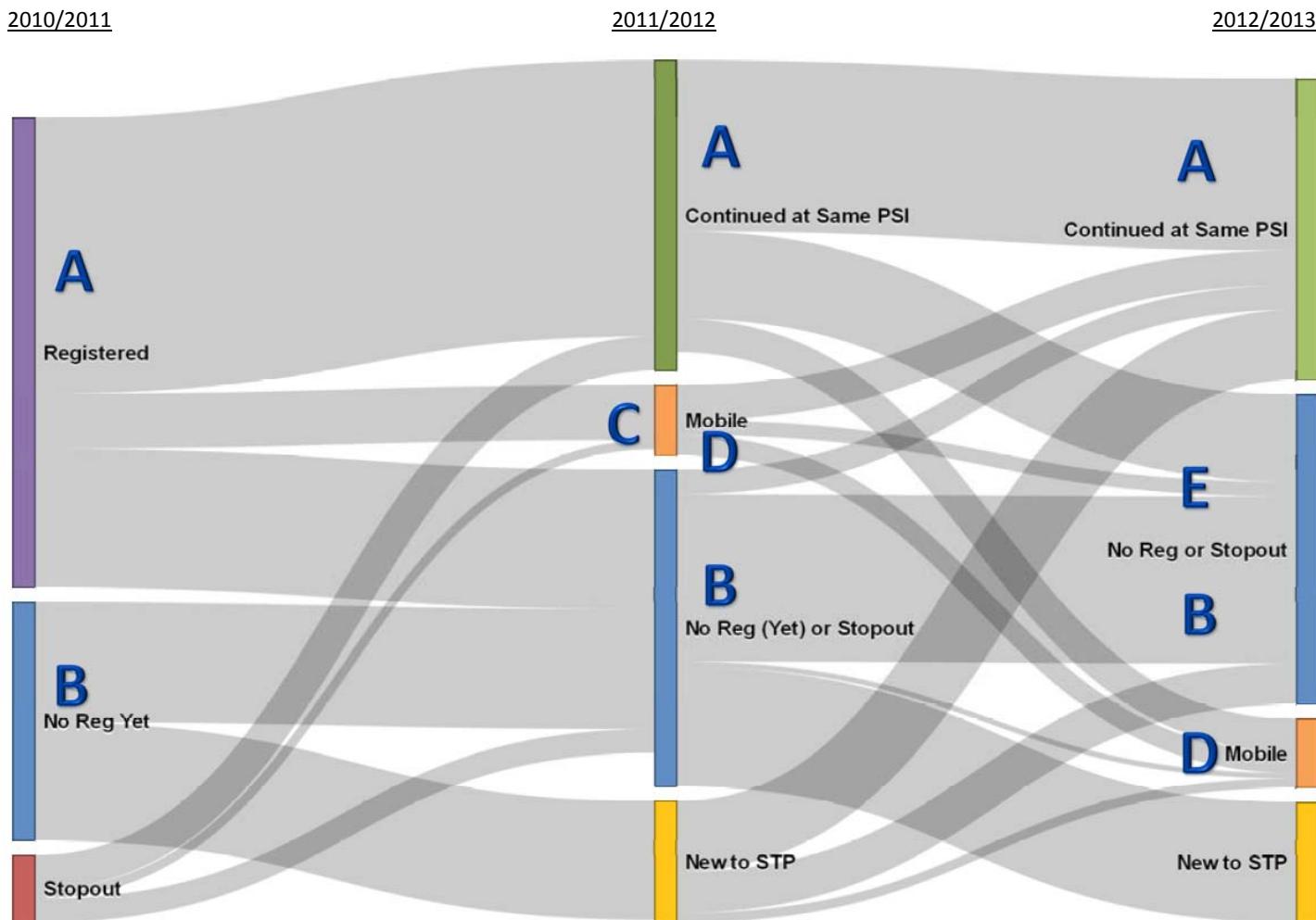
Following Student Flows Over a Multi-Year Period

As shown in the Sankey diagram³ below (see [Figure 1](#)), students in the B.C. public post-secondary system flow in and out of various states of registration and non-registration over a multi-year period (2010/2011 to 2012/2013). While the specific number of students is not shown, the proportion of students flowing from one registration state to another is visually apparent.

Five of the interesting student flow patterns are described here with corresponding labels provided in [Figure 1](#) for reference.

- A. Registered students who continue at the same institution as the previous year are the dominant flow pattern;
- B. Non-registrants are also common as students enter and exit the system over multiple years;
- C. Mobile students who switch institutions represent a relatively small proportion of the student flows;
- D. Nearly one-third of mobile students in 2011/2012 switched institutions again in 2012/2013;
- E. About 20% of the students who switched institutions in 2011/2012 were no longer registered in 2012/2013.

Figure 1: Student Flows Over a Multi-Year Period (2010/2011 to 2012/2013)



3. A Sankey diagram is a flow diagram in which the arrows are shown proportionally to the amount of flow. These diagrams are typically used to visualize the amount of flow between processes, but they are also useful for visualizing student flows.

Mobile Students Decline as More Students Remain at the Same Institution

The B.C. public post-secondary system has seen a 17% growth rate in unique academic credit registrants over the last six years, increasing from 269,000 in 2006/2007 to 314,000 in 2012/2013 (see Figure 2). Among credit registrants, the number of new students each year has remained relatively stable, but continuing students are on the rise while mobile students are declining.

New Students: The number of new students each year has remained at roughly 80,000 students.

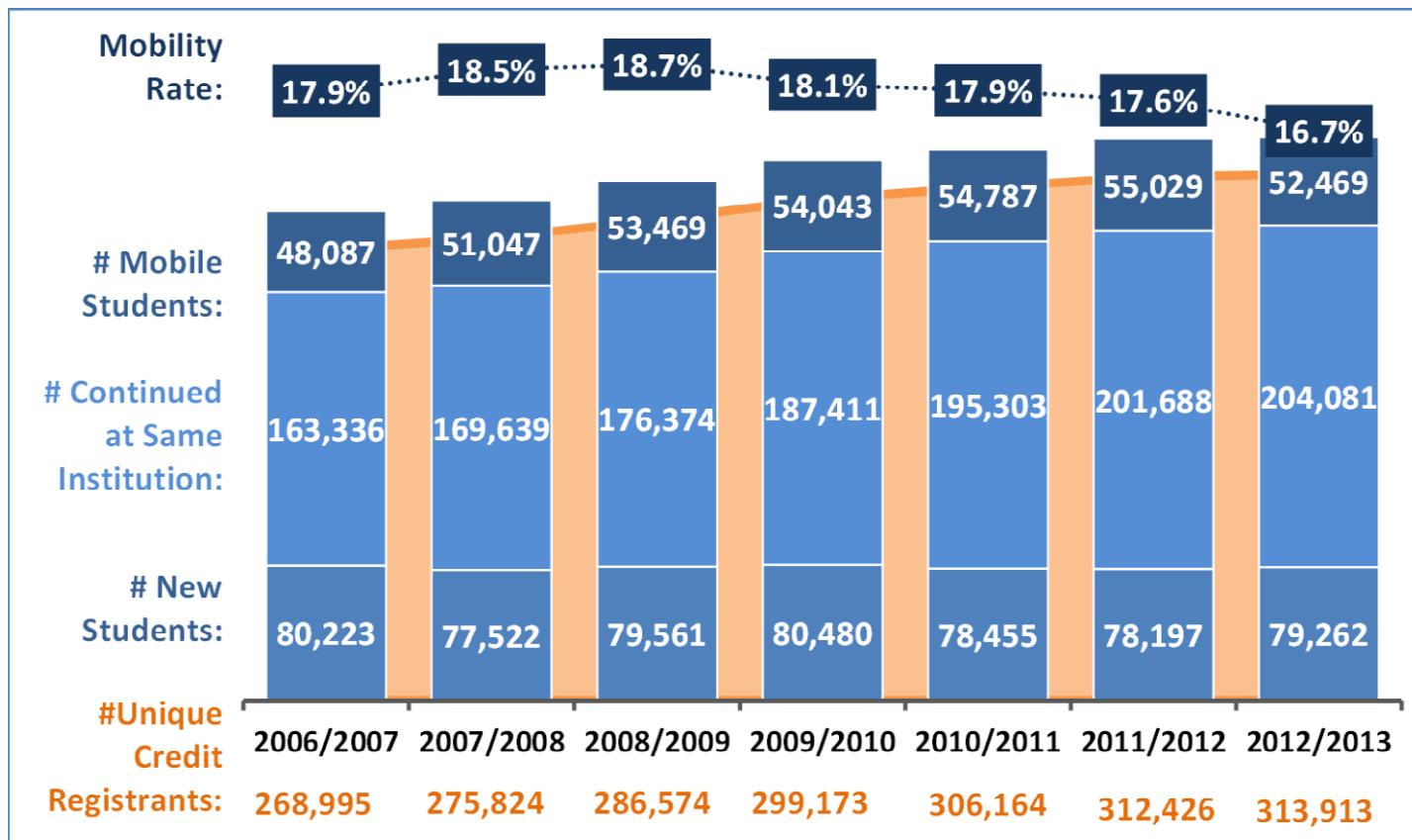
Continuing students: Most of the overall growth in academic credit registrants arises from students continuing at the same institution where they last registered in a preceding year.

Mobile students: This group of students who switched institutions from one year to the next have been declining⁴ since 2008/2009 and the number is currently hovering around 52,500 to 55,000 students in each of the last three years.

Please note that recent operational changes in enrollment data submissions to the STP has affected the number of mobile students reported in this year's results (when compared to information reported previously). For consistency and accuracy of current and historical mobility trends, **all mobility figures from 2002/2003 onward are restated each year.**

What changes occurred and how does this affect the mobility findings? Thompson Rivers University (TRU) formerly provided enrollments for their open learning students as a separate institution (TRU-OL). Students frequently enroll sequentially or simultaneously at TRU and TRU-OL and they were interpreted as mobile students in former STP mobility studies. These students, amounting to about 2,000 per year, will no longer be reported as switching between TRU and TRU-OL because they are now considered to be registrants at a single institution (TRU).

Figure 3: Student Mobility Trend (2006/2007 to 2012/2013)



4. Some of the initial growth in the number of mobile students was due to the incremental increase in the number of preceding years of available enrollment history (back to 2002/03), thus increasing the pool of returning stop outs included in the mobility rate. It appears that a steady state has now been reached as returning stop outs have leveled off at roughly 6% or 7% of the 17% total student mobility rate.

Student Mobility Rate is Declining

The **student mobility rate** is the proportion of the total unique headcount credit registrants who moved from one institution to another, or returned to a previously attended institution, after last enrolling elsewhere. In the most recent year for which data is available (2012/2013), the student mobility rate was 16.7% or (roughly 52,500 mobile students ÷ 314,000 unique academic credit registrants). Each year, student mobility rates are recalculated and restated to ensure any updates and operational changes to student enrollment figures are included in the latest rates.

As shown in **Figure 2**, the fairly stable student mobility rate has remained around 17% to 18% each year, with roughly 50,000 to 55,000 students moving among B.C. public post-secondary institutions annually. The student mobility rate provides a simple gauge of student movement in the B.C. public post-secondary system each year and minor annual fluctuations in this rate are expected. The gradual decline in the student mobility rate is likely due to the numerous new opportunities available to students to complete a bachelor's degree or

other credentials at a single institution, without the need to transfer elsewhere for completion.

The student mobility rate has declined from a high of roughly 19% in 2008/09 to its current level near 17%. When the timing of student movement is examined, evidence suggests a declining proportion of students switching institutions from the immediately preceding year (dropping from 13% to 11%) is primarily responsible for the overall drop in the student mobility rate. This is because the proportion of mobile students who switched institutions after a stopout period has remained relatively constant at 6%.

Post-Secondary Student Mobility (PSM) Sub-committee

This post-secondary student mobility research was conducted under the auspices of the Student Transitions Project (STP). The mobility analysis and this newsletter was prepared by Joanne Heslop with research directions provided by the Post-secondary Student Mobility Sub-committee of STP. The sub-committee membership includes representatives from across post-secondary sectors.

Robert Adamoski, Associate Director, Admissions and Research, BCCAT (Chair)

Frank DiPuma, Manager, Institutional Research, Capilano University

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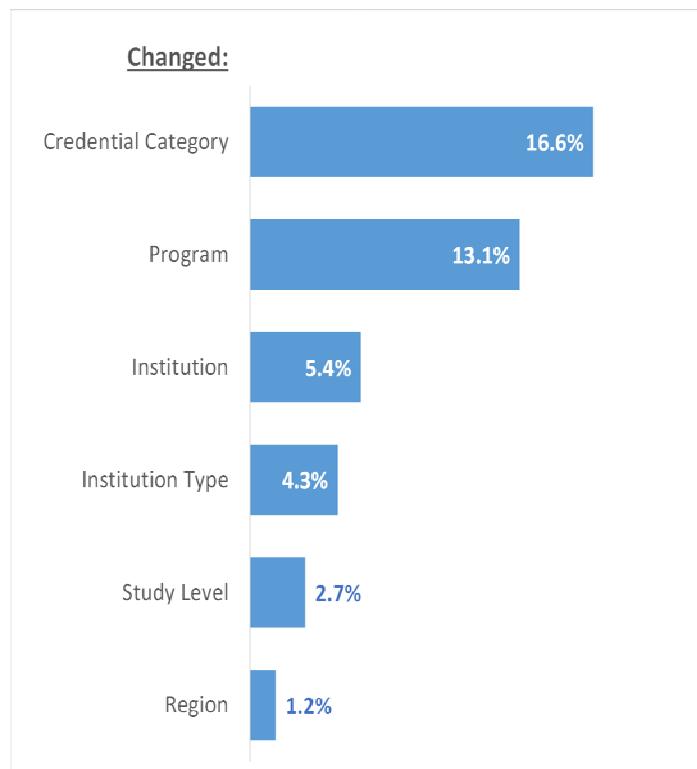
Dimensions of Continuing Student Mobility

The **student mobility rate** shown in **Figure 2** measures the proportion of unique headcount students registered in a year who were last enrolled at a different institution. This student mobility measure is derived from all students registered in the current time period (313,913 unique students registered in academic credits in 2012/2013), including those who are new to the system, continuing students from the previous year, and students returning after a stop out period of non-registration.

Another measure of student mobility, the **continuing student mobility rate**, is restricted to students who continued their registration from one year to the next, at the same or a different institution (198,343 students continued from 2011/2012 to 2012/2013). New students and returning stopouts are excluded from this measure.

The STP can track the mobility of continuing students and quantify the proportion who switch regions, study levels, institution types, institutions, programs or credential category from one year to the next. These continuing student mobility rates are shown in **Figure 3** along various dimensions. The chart indicates that switching credential categories (16.6%) is the most common type of student movement among continuing students, while switching regions is the least common (1.2%).

Figure 3: What % of Continuing Students Changed Some Aspect of their Education, from 2011/2012 to 2012/2013? – Continuing Student Mobility Rates by Education Dimension (N=198,343)

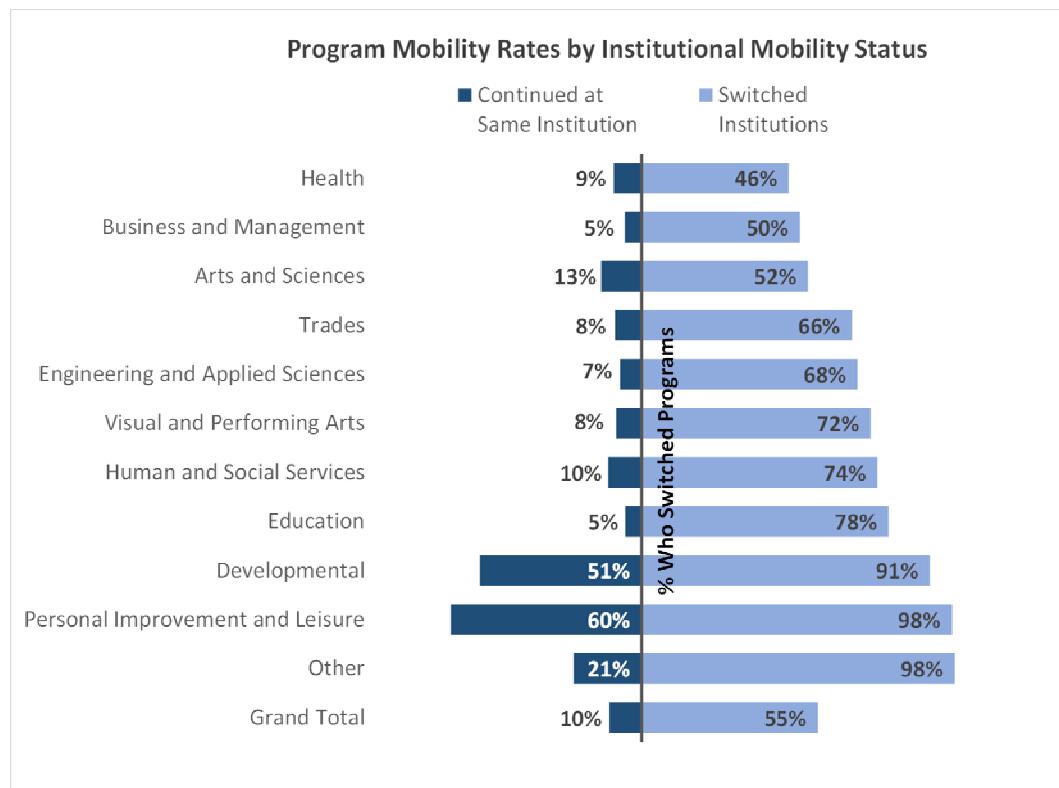


Program Mobility of Continuing Students

Program mobility, or the proportion of continuing students⁵ in the B.C. public post-secondary education system who switched from one program to another is 13.1%. These program switchers continued at the same or different institution, from one year to the next (2011/2012 to 2012/2013). A number of observations about the program mobility of continuing students are evident in **Figure 4**.

- Students who switched institutions were much more likely to switch programs at the same time (55%), compared to those who stayed at the institution where they last registered (10%).
- Regardless of program last enrolled in, switching programs was consistently more common among students who switched institutions than students who remained at the same institution.
- The rates of program switching varied across programs. Program mobility was more common among students last registered in Developmental or Personal Improvement and Leisure programs. The most common destination of students switching out of these programs was Arts and Sciences.
- Among students in Arts and Sciences programs who switched institutions and programs in the following year, the top two program destinations were Business and Health.
- Among students originating in other programs who switched institutions, the most common program destination in the following year was Arts and Sciences.
- The higher rates of program switching among students

Figure 4: Program Mobility Rates by Institutional Mobility Status



moving between institutions may suggest that students typically change institutions in order to pursue a different program. Results from the [Survey of Movers](#) conducted by B.C. Stats for the B.C. Council on Admissions and Transfer are consistent with this finding. For some students, the change in program was intended from the outset, while for other students it is the result of a change in their original plans.

In a future study, the STP will take a closer look at **credential mobility**, or the extent to which students switch from one credential category to another. Do students ladder from a lower to higher level credential? Or do they switch from a higher-level to a lower-level credential? Do they move laterally within the same credential category, but in a different program? Do they switch institutions when they change credential categories or do they remain in the same institution? Do they complete one credential before they switch to another?

5. **Continuing students** are those who were registered in the B.C. public post-secondary education system in one year (2011/2012) and then registered again in the following year (2012/2013), either at the same and/or different institution(s) in the B.C. public system.

Student Pathways into B.C. Public Post-Secondary Registration in 2012/2013

There were roughly 314,000 students registered in academic credits in B.C.'s 25 public post-secondary institutions in 2012/2013. Where did these students come from? (See Figure 5)

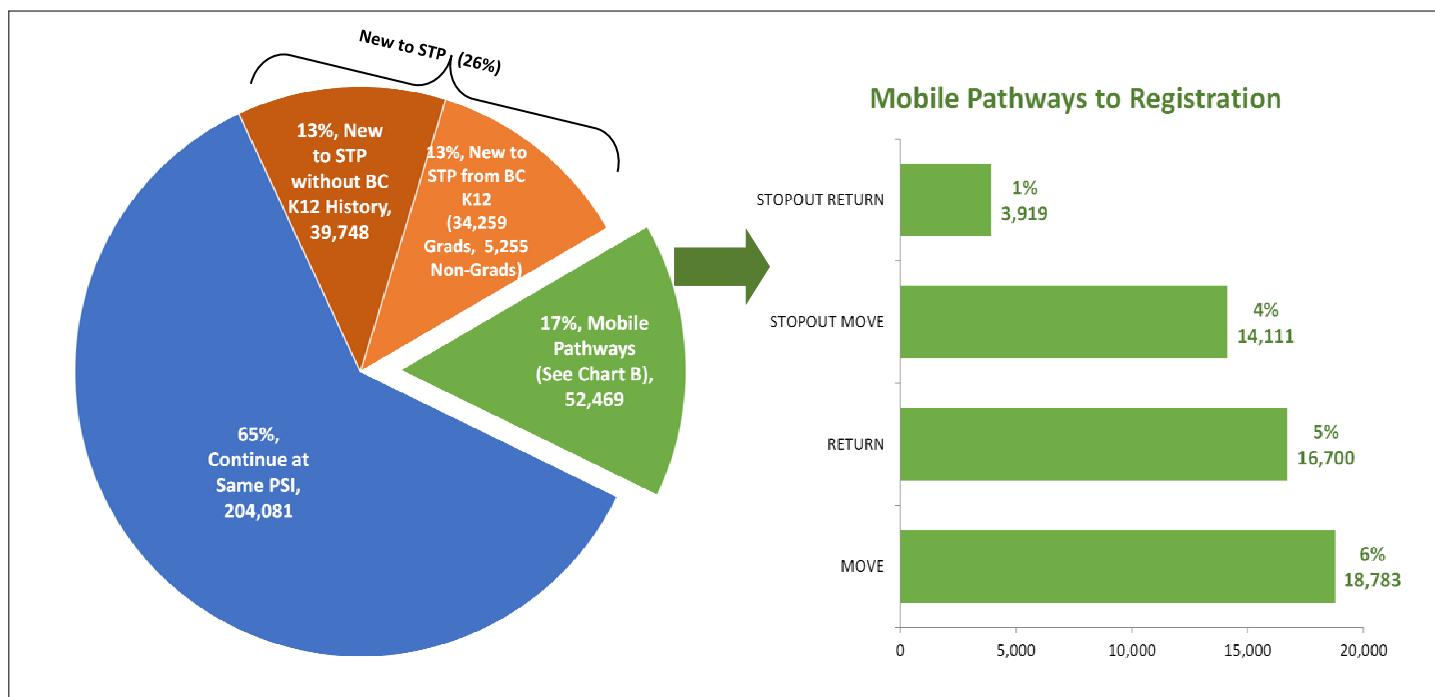
- 65% were **continuing** students at the same institution where they last registered, including 59% who last registered in 2011/2012, and 6% who last registered in 2010/2011 or earlier (after stopping out in the previous year or longer)
- 26% were **new** to the B.C. system, of which roughly half were former students from B.C.'s K-12 system (including roughly 34,000 grade 12 graduates and 5,000 non-graduates) and the other half (40,000) had no previous history⁶ in the B.C. K-12 system.
- 17% were **mobile** students, including 11% who were last registered in the previous year, and 6% who last registered

prior to 2011/2012, after stopping out for at least one year. These students followed at least one of four possible mobile pathways:

- 6% moved from one institution to a new institution they never attended previously;
- 5% returned to an institution previously attended, after last registering elsewhere;
- 4% moved from one institution to another, after a stop out period; and
- 1% returned to a previously attended institution after a stop out period.

Note that students may attend multiple institutions in a year, either simultaneously or sequentially, thus creating multiple pathways in a single year.

Figure 5: Pathways to Post-Secondary Registration in 2012/2013



6. New students to the B.C. public post-secondary system without any previous B.C. K-12 enrollment history includes: (a) students without a Personal Education Number (PEN), (b) students who graduated from the BC K-12 system before 1991, and (c) students who graduated outside of B.C., such as students from other Canadian provinces and international students who graduated in another country.

Student Pathways Diagrams

The Student Transitions Project continues to help education planners understand that students take a variety of education pathways through B.C.'s public post-secondary institutions in an effort to achieve their education goals. To further broaden our understanding, the recent [Survey of Movers](#) informed us that students choose these mobile pathways through the education system for a variety of reasons.

The [Student Transitions Project](#) depicts the routes students take over a multi-year period in a series of Pathways Diagrams provided on the Student Transitions Project web site. These diagrams are available for each of B.C.'s 25 post-secondary institutions, each of the four regions and four sectors of B.C., and for the B.C. System overall (see [Figure 6](#)). For more information and interpretation of these pathways diagrams, please refer to the [Definitions](#) inset box.

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 the student takes a **non-mobile student 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).

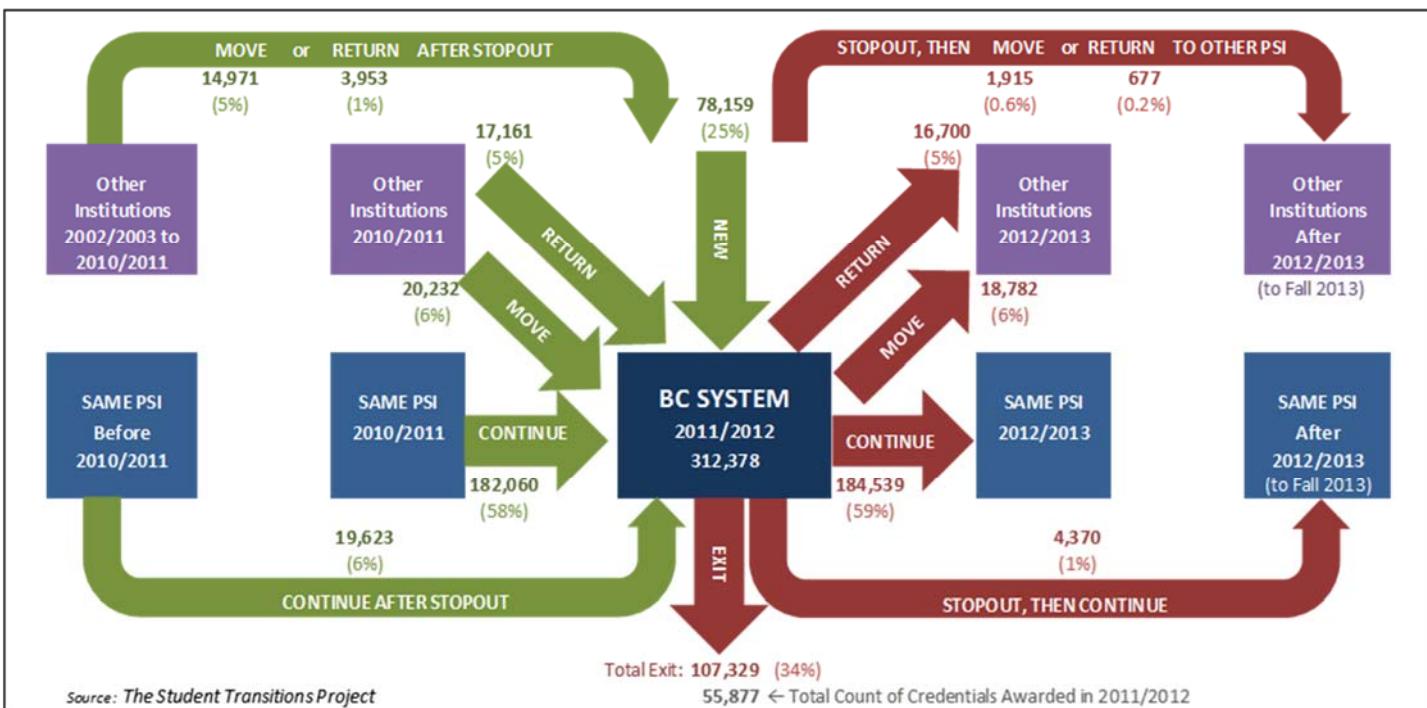
a) **New to STP** – New student to the STP with no previous record of registration (back to 2002/03) in any institution in the B.C. public post-secondary system.

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.

Figure 6: Student Pathways in the B.C. Public Post-Secondary Education System



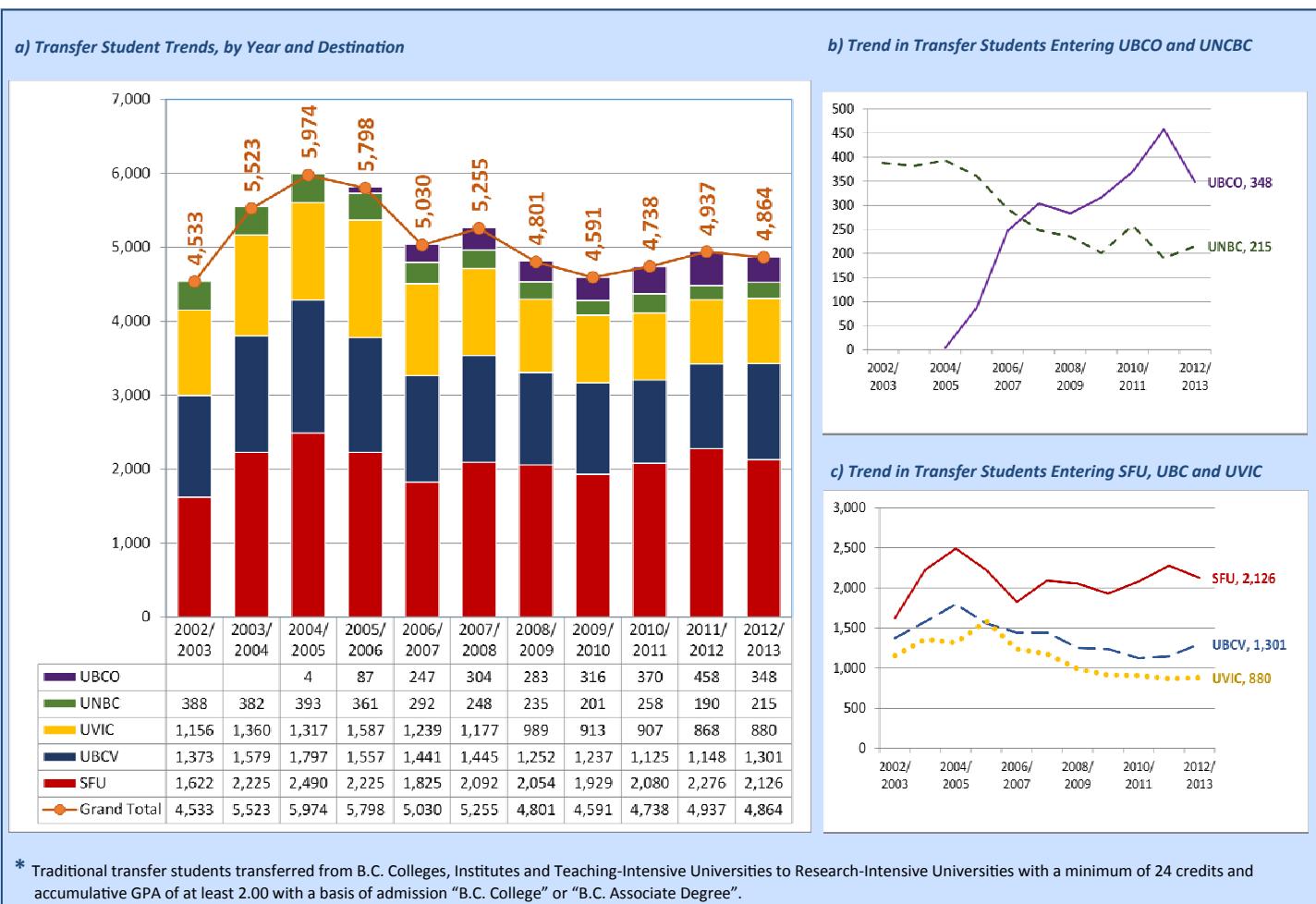
Traditional Transfer Students

The B.C. college transfer system has become more widely understood as a student mobility system. We now appreciate that the traditional transfer pathway⁷ from a B.C. college or institute to a B.C. research-intensive university is just one of the many routes that students may take through B.C.'s post-secondary system towards earning a bachelor's degree or other post-secondary credential or other personal education goals. For more information, see **Student Mobility Between Institution Types** and **Student Mobility Between Regions** in this newsletter. B.C.'s increasingly complex post-secondary system now offers opportunities for students to complete baccalaureate programs in virtually any of B.C.'s 25 public post-secondary institutions, including B.C. colleges, institutes, teaching-intensive universities or research-intensive universities.

As shown in **Figure 7**, the traditional transfer pathway to a B.C. research-intensive university is taken by roughly 5,000 students per year. While the number of transfer students had reached a peak of nearly 6,000 students in 2004/2005, the trend has smoothed out to the current level of 4,864 students, roughly in line with last year's 4,937 students.

7. "Transfer students" have traditionally been defined as students who transferred to a research-intensive university (RIU) from a B.C. college, institute or teaching-intensive university with a minimum of 24 credits and a cumulative GPA of at least 2.00 with a basis of admission of B.C. College or B.C. Associate Degree.

Figure 7: 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 accumulative GPA of at least 2.00 with a basis of admission "B.C. College" or "B.C. Associate Degree".

Student Mobility Between Regions of B.C.

Figure 8 shows the number and direction of students flowing between each of the four regions of B.C. in 2012/2013. A remarkable balance of student flows is evident between each of the four regions of B.C. Among those students who switched institutions in 2012/13, roughly equal numbers of students entered each region as those who left.

The only exceptions are:

- the net inflow of 700 students into the Mainland-Southwest region from Vancouver Island, and
- the net inflow of 500 students into the Thompson-Okanagan-Kootenays from the Mainland-Southwest region.

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.

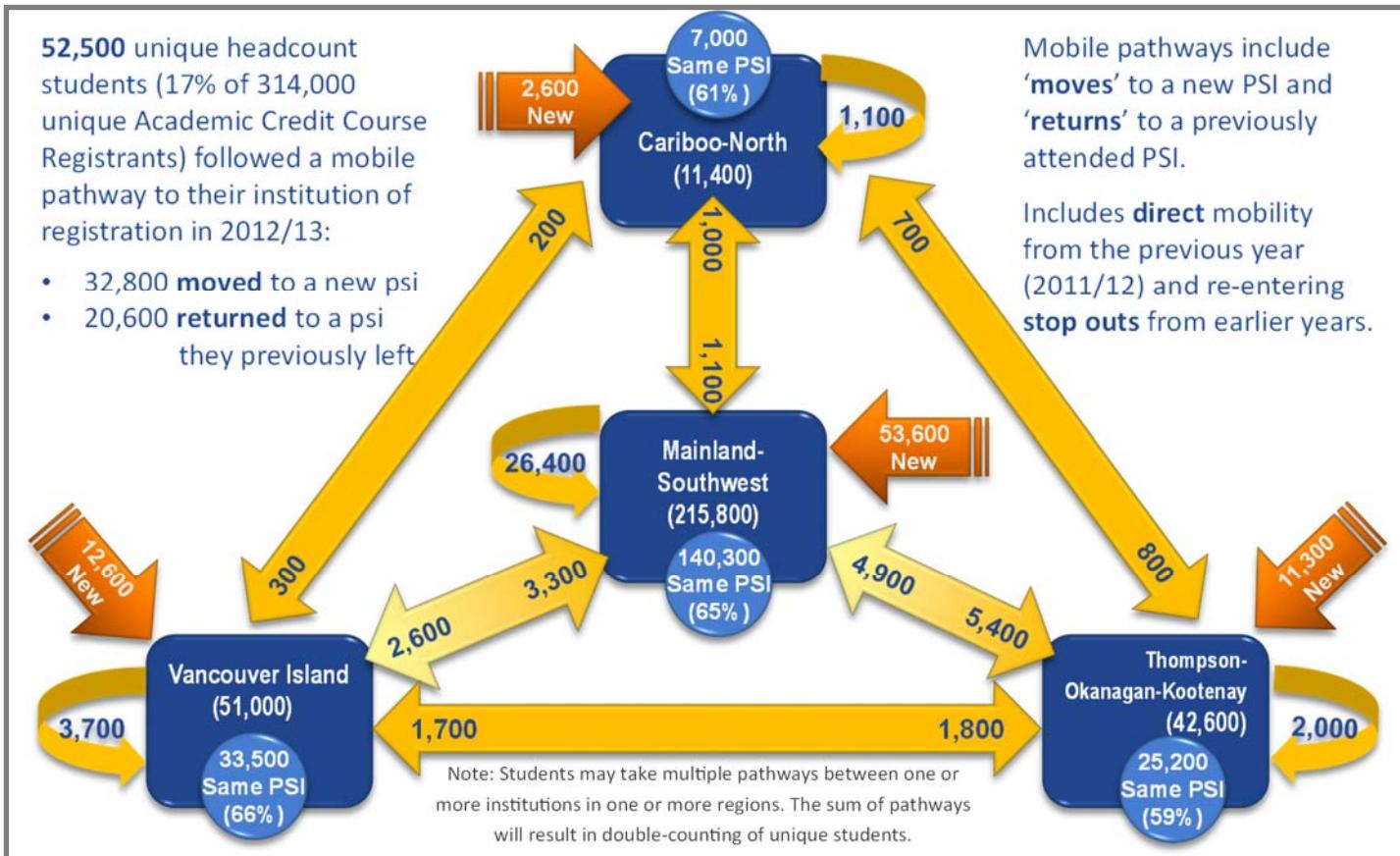
Cariboo-North Region – College of New Caledonia, Northern Lights College, Northwest Community College, University of Northern British Columbia.

Mainland-Southwest Region – British Columbia Institute of Technology, Capilano University, Douglas College, Emily Carr University of Art + Design, Justice Institute of B.C., Kwantlen Polytechnic University, Langara College, Simon Fraser University, University of British Columbia, University of the Fraser Valley, Vancouver Community College.

Thompson-Okanagan-Kootenay Region – College of the Rockies, Nicola Valley Institute of Technology, Okanagan College, Thompson Rivers University, Selkirk College, University of British Columbia (Okanagan).

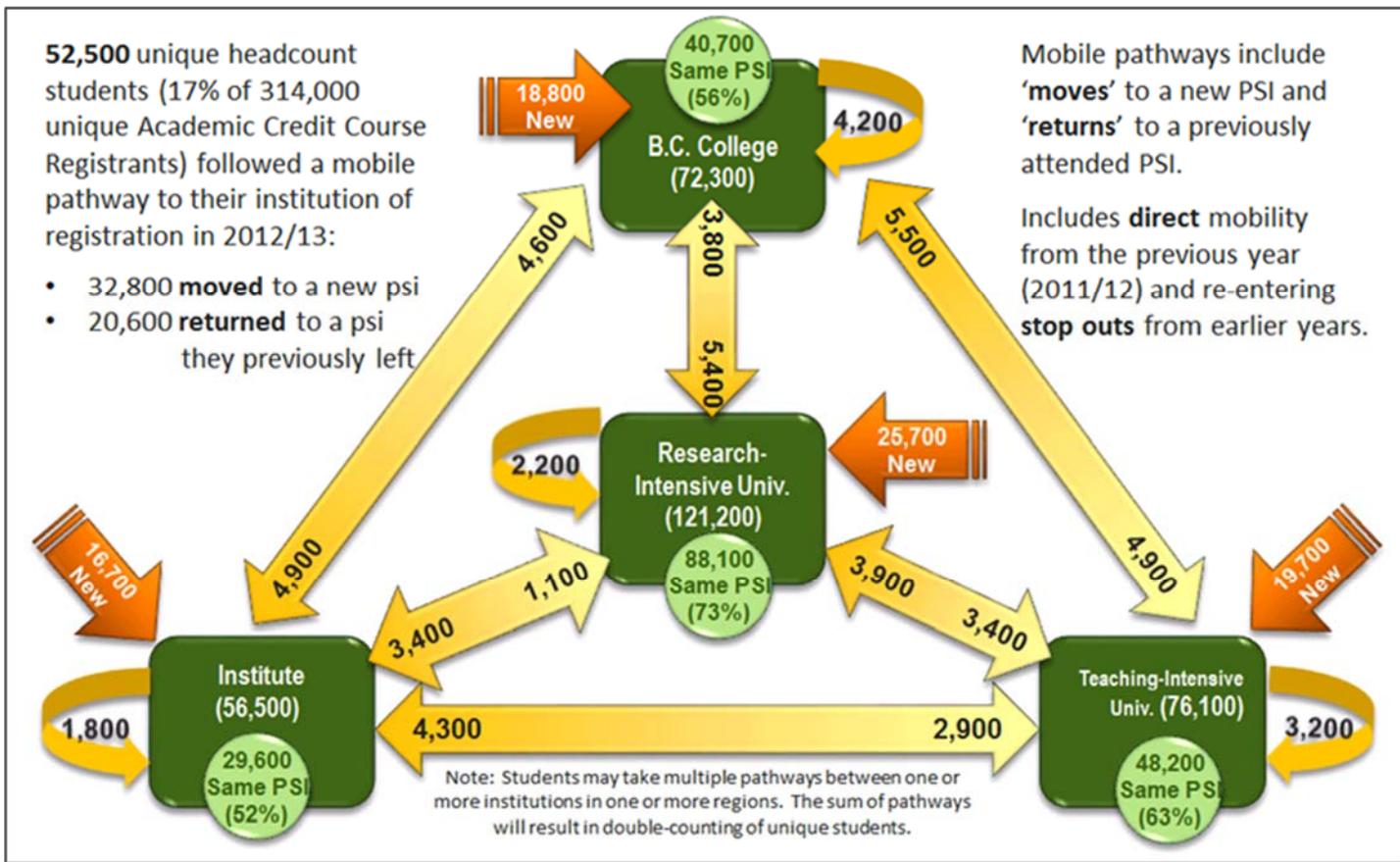
Vancouver Island Region – Camosun College, North Island College, Royal Roads University, University of Victoria, Vancouver Island University.

Figure 8: Student Mobility Between Institutions and Regions⁸ in the B.C. Public Post-Secondary System (2012/13)⁹



8. The [sector mobility](#) and [regional mobility](#) diagrams are also available on the public [STP web site](#).

9. Student flows between regions in this year's regional mobility diagram are similar to figures reported in last year's newsletter; however, a large number of Thompson Rivers University Open Learning students (formerly reported in a separate institution, TRU-OL) are now included with all other Thompson Rivers University students at a single institution (TRU). Students who switched in and out of TRU-OL and TRU were formerly reported as mobile students within the region, but now they are considered to be continuing students who remained at TRU. Therefore, last year's regional mobility diagram reported 3,900 mobile students who switched institutions within the Thompson-Okanagan-Kootenays region, whereas this year there are about half-as many (2,000 students).

Figure 9: Student Mobility Between Institutions and Sectors¹⁰ in the B.C. Public Post-Secondary System (2012/13)

Student Mobility Between Institution Types

The mobility diagram in **Figure 9** shows the number and direction of student flows between institution types. Some of the student pathways are more dominant in one direction than the opposite direction:

- the traditional transfer pathway from B.C. colleges to research-intensive universities;
- the flow of students from teaching-intensive universities to all other institution types; and
- the flow of students from research-intensive universities to institutes.

Conclusion

The STP's Post-Secondary Student Mobility studies are conducted annually. The STP's methodology for tracking student movement between institutions has evolved and improved over time, but the approach used over the last three years has remained unchanged. Over this time period, the B.C. public post-secondary system is also experiencing a small decline in the proportion of students who are changing institutions, from one year to the next.

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. Institution designations have changed over time and these are the current groupings by institution type. Any historical mobility information in this study assigns each institution to its current institution type, as defined below.

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

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

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

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

The STP will continue to conduct student mobility studies on an annual basis in order to broaden our understanding of student pathways throughout B.C.'s public post-secondary education system.

10. The [sector mobility](#) and [regional mobility](#) diagrams are also available on the public [STP web site](#).