Readiness and Reverse:

Dimensions of Mobility in BC Public Post-Secondary Education

A Further Analysis of the Survey of Movers

Prepared for BCCAT by Patricia Beatty-Guenter, Success Analytics

February 2015

Research by

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EXECUTIVE SUMMARY

This paper explores student mobility pathways of BC public post-secondary students. Using survey data collected from students who had moved from one institution to another during 2011, results by region and sector are presented. These data are used to identify mobility patterns amongst institution types using terms adopted from recent literature on this topic. The mobility patterns are described in this paper as:

- **Linear mobility** - 39 percent of the respondents moving along an upward trajectory such as from a college to a university;
- **Lateral mobility** - 27 percent of the respondents moving to the same type of institution; and,
- **Reverse mobility** - 34 percent of the respondents moving in a direction that appears to be backwards.

Responses to key questions related to student motivations for moving among institutions were used to identify some important concepts in mobility, especially how student readiness for transfer affects successful mobility.

Responses to key questions related to student motivations for moving among institutions were used to identify some important concepts in mobility, especially how student readiness for transfer affects successful mobility. Secondary analysis of the survey data involved combining responses to key questions to create categories that reveal a way to interpret student mobility experiences.

The linear mobility pattern and transfer experiences characterized by readiness for transfer are found to be positive and productive. The reverse mobility pattern is analyzed and discussed, identifying a need for a deeper understanding of this phenomenon and the policy implications implied. A discordant aspect to the reverse mobility pathway is revealed, providing some evidence about which little has been written.

Recommendations for further study are made, particularly about students whose mobility patterns (e.g. from universities to colleges) and variables (e.g. transfer readiness) that have not so far been included in the BC survey projects.

1. BACKGROUND

The 2012 survey of students who changed BC public post-secondary institutions between the 2010/11 academic year and Fall 2011 provides an opportunity to hear from mobile students about their experiences when changing institutions. The report *A Survey of Movers* (BCCAT, 2013a) published in January 2013 provides a system level view and insights about sector movement that had not previously been available in British Columbia.

The purpose of this project... is to provide a more detailed analysis of the data collected by the Survey of Movers, to align those data with some related studies, and to place the findings in a broader context of educational and policy issues.

For this paper, data collected for the Survey of Movers is used to further analyze the survey responses, identifying differences in the experiences of students moving within and between BC regions and sectors. The discussion of student mobility includes examination of directions other than toward research universities and reasons not typical of the dominant transfer pathway upon which the BC Transfer System was designed initially.

The purpose of this project, commissioned by the BC Council on Admissions and Transfer (BCCAT) in 2014, is to provide a more detailed analysis of the data collected by the Survey of Movers, to align those data with some related studies, and to place the findings in a broader context of educational and policy issues.

Objectives of this project are:

1. To analyze the Survey of Movers data, investigating regional, sectoral and other underlying patterns previously not considered;
2. To place the findings in the context of broader educational and policy issues in British Columbia, in other jurisdictions, and in context of the original report;
3. To identify areas for future information gathering; and
4. To provide recommendations for improving transfer practices.

Understanding the experiences of post-secondary students as they move within programs, between programs, and between institutions is central to the mission of the BC Council on Admissions and Transfer.

> The BC Council on Admissions & Transfer (BCCAT) oversees the BC Transfer System, enabling important links between the BC post-secondary institutions, the education ministries, and the public and private education sectors. BCCAT facilitates admission, articulation, and transfer arrangements among BC post-secondary institutions for the benefit of students. (BCCAT, 2014)

The BCCAT regularly engages in research to gauge the success of students in navigating post-secondary pathways. For more than two decades, BCCAT has worked with BC public universities to produce research demonstrating this student success (Lambert-Maberly, 2010). Recent similar studies have explored the success of students transferring in Ontario, between the Ontario Colleges of Applied Arts and Technology (CAATs) and the universities of Nipissing, Brock, Trent and York (Drewes, Maki, Lew, Wilson & Stringham, 2012). These studies often concentrate on documenting the success of transfer students at their receiving university. Findings demonstrate the success of the transfer process; although in the Ontario studies, one third of the students expecting transfer credit received less credit than they expected (p. 12). Analysis in this paper includes the topic of successful transfer in light of data provided by the respondents to the Survey of Movers.

2. DATA AND APPROACH

The current report has its foundation in the research and analysis previously reported as the BCCAT *Survey of Movers*, 2013, a study commissioned in 2011 to understand the "meanings students gave to their own mobility" (Cowin, 2013, p. 21). The findings affirmed the value of the transfer process, with high levels of student satisfaction with the institutions and evidence of students realizing their goals through the mobility made possible by the BC Transfer System.

Survey results reported in the *Survey of Movers* Report were collected from students who had been enrolled at a BC public post-secondary institution during 2010-11 and were enrolled at a different BC public post-secondary institution in Fall 2011. They were surveyed via an online survey between March and June 2012 by BC Stats. From a final student cohort of 5,932, surveys were administered online and completed by 1,623 respondents (27.4 percent response rate).

These survey data have been analyzed for this report with additional interest in developing a deeper understanding of student pathways and success in mobility in BC. Additional analyses for this paper include student age, institution region and greater detail on dimensions that affect student satisfaction with the transfer process. BC Stats, who confidentially retain the survey data under agreements with system partners, provided specific data tables requested for this project.

2.1 Data Caveats

Details of cohort selection are provided In Appendix A. Some differences in the survey results are evident when compared to results for all movers reported by Heslop (2012) using the Student Transitions Project (STP). Examination of the STP cohort file data revealed that students were excluded from the survey if simultaneously enrolled at two or more institutions, or sequentially enrolled at two or more institutions within one academic year. Also, with regard to data availability, the largest research university did not participate in the Survey of Movers, and this impacts the proportion of respondents moving to the research universities sector. However, with those caveats, the Survey of Movers provides new insights using a larger group of student movers than has been previously surveyed, and contributes to our developing understanding of student mobility patterns.

2.2 Terminology

In a summary report for BCCAT, Cowin (2013) provides a synthesis of key BC research on mobility and transfer. This history of key studies makes it clear that our evolving understanding of student movement has benefitted greatly from the efforts expended to understand this complex system. Cowin defines transfer to mean the group of mobile students who receive credit at their subsequent institution for courses completed at their original institution, regardless of the basis for admission to the receiving institution. Mobile students may or may not transfer credits. This terminology has been adopted for this paper, so that results for students who transferred credit make up only a subset of all mobile student respondents.

Cowin (2013) points out that previous studies of student movement at an institutional level have given way to system perspectives that promote the focus on movers. This change facilitates re-conceptualization: many dropouts can be viewed as movers. With regard to transfer, he concludes that: "an effective transfer system allows students to extract the maximum benefit from the geographic and programmatic diversity of the province's post-secondary system in a manner that is flexible and efficient" (Cowin, 2013, p. 22). This analysis focuses on how this diversity helps movers in achieving their goals.

The discussion that follows relies on understanding student responses in relation to the institution they were enrolled in during 2010-11 and the institution they subsequently attended in Fall 2011. In the Survey of Movers 2013 report, these institutions are often called the *original* institution and the *destination* institution. These terms will be used when required by context, especially when a direct link to that report is made. More often in this paper the 2010-11 institution will be referred to as the *sending* institution. We cannot assume that the 2010-11 institution was the original post-secondary institution: respondents may have attended other institutions prior to 2010-11, including the one they were enrolled in during Fall 2011. The destination institution will be called the Fall 2011 institution or the *receiving* institution. Sending and receiving as descriptors for the relationship among institutions has a considerable history in the BC Transfer System. However, we have learned that describing certain institutions as sending institutions and others as receiving institutions has proven to be too simplistic since every institution functions as both a sending and receiving institution[1]. The Survey of Movers is part of the new perspective on mobility in BC post-secondary education, providing a rich data source about student experience with mobility and transfer within this dynamic system.

Cowin (2013) points out that previous studies of student movement at an institutional level have given way to system perspectives that promote the focus on movers. This change facilitates re-conceptualization: many dropouts can be viewed as movers.

[1] The Student Transitions Project (STP) has published a number of reports on the mobility of students that demonstrate this multi-directional quality. See http://www.aved.gov.bc.ca/student_transitions.

2.3 Approach to Analysis

The first part of this paper examines selected variables from the Survey of Movers respondent data. Regional and sectoral aspects of the student responses are explored, and put in context of some recent research findings from other jurisdictions. The second part develops some conceptual labels that help to explain dimensions of student readiness and reverse transfer patterns. Finally, the third part makes some recommendations to further explore the policy questions related to the student transfer experience.

Some new variables were created to facilitate the reanalysis of the Survey of Movers results, simplifying the data by creating groupings along common themes or dimensions. These foster thematic understanding of results by reducing complexity through grouping attributes with similar meanings. Groupings were based on the earlier work on student retention strategies (Beatty-Guenter, 1994) and many years of experience working in the BC public post-secondary system.

Five key questions and responses to be grouped for the new attributes were identified for this analysis. Staff members at BC Stats performed the re-coding of the data and provided data tables using these new variables. Although these distributions were not subject to factor analysis, that would be a logical next step in testing the concepts proposed in this paper. Specifically, the statistical rigour of factor analysis with a fully representative sample could be used to evaluate the validity of these categories or attributes. Appendix B contains a description of the new variables and maps the original responses to the new variables.

3. REGIONS AND SECTORS

The diverse geography of British Columbia and the history of its public post-secondary system encourage analysis by region for important social policy questions. For the purpose of this secondary analysis, Region is defined as having four categories: *Lower Mainland*, *Vancouver Island*, *Interior* and *Kootenays*, and *Northern BC*[2]. A grouping of institutions into these four regional categories is shown in Appendix B. The location of the institution was used to allocate respondents to a region, both for sending and receiving institutions. Each respondent had two variables for this concept – region of sending institution and region of receiving institution. These categories are consistent with groupings used by the BC Student Outcomes (http://outcomes.bcstats.gov.bc.ca) surveys, especially in the Diploma, Associate Degree and Certificate Student Outcomes (DACSO).

Table 1 (next page) shows the number and percent percentage of respondents by region of sending and receiving institution. While respondents in the survey sample were from post-secondary institutions across all the regions, the largest percentage of respondents was associated with institutions in the Lower Mainland (56 percent of respondents from a Lower Mainland sending institution and 60 percent at a Lower Mainland receiving institution).

[2] This division follows the groupings established by Student Transitions Project (STP) (Heslop 2012), except Interior and Kootenays region, which is called Thompson-Okanagan-Kootenay in STP.

TABLE 1: Number and Percent of Respondents by Region of Receiving Institution and Region of Sending Institution in 2012 Survey of Movers[3]

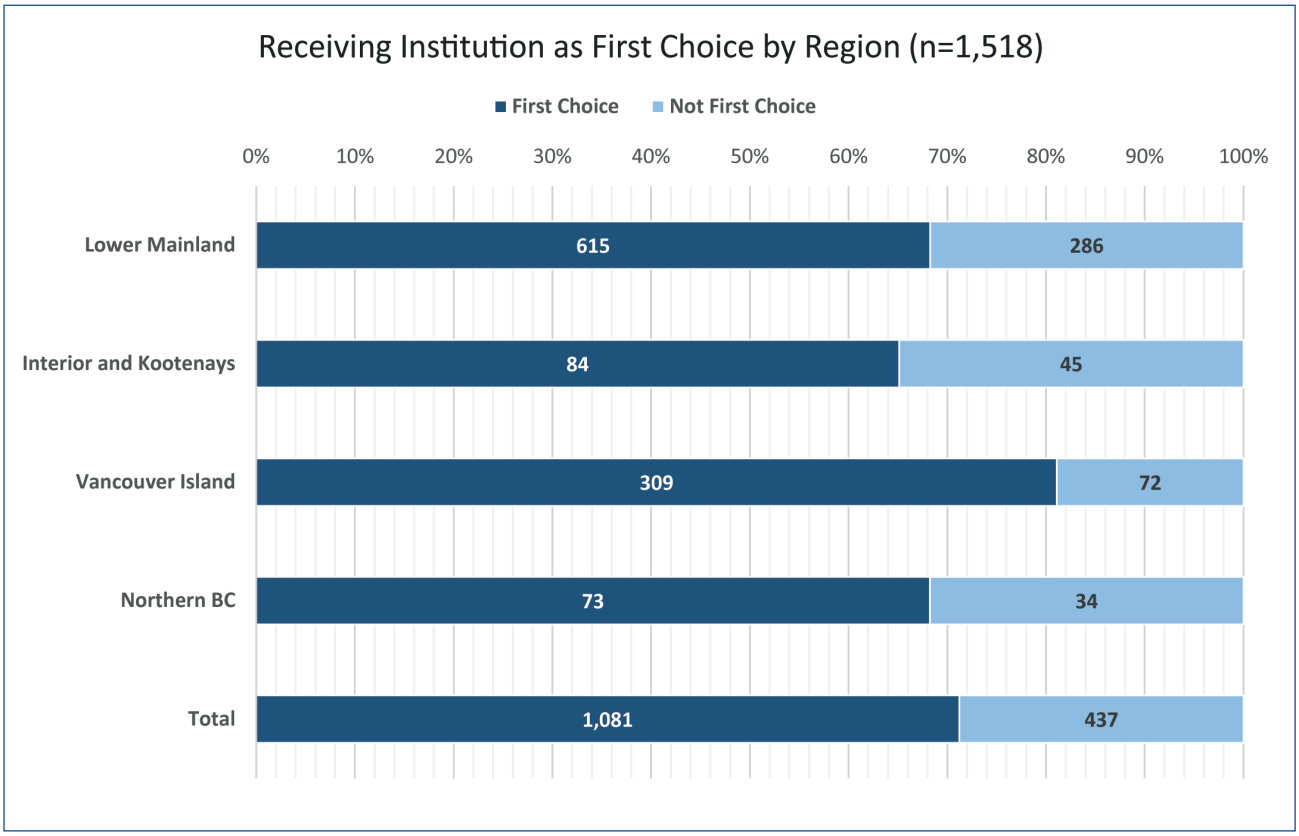
Region of Sending Institution	Region of Receiving Institution: Lower Mainland	Vancouver Island	Interior and Kootenays	Northern BC	Total
Lower Mainland	763	73	52	28	916
	83.3%	**8.0%**	**5.7%**	**3.1%**	**100%**
Vancouver Island	91	230	25	11	357
	25.5%	**64.4%**	**7.0%**	**3.1%**	**100%**
Interior and Kootenays	98	81	59	20	258
	38.0%	**31.4%**	**22.9%**	**7.8%**	**100%**
Northern BC	19	12	7	54	92
	20.7%	**13.0%**	**7.6%**	**58.7%**	**100%**
Total	**971**	**396**	**143**	**113**	**1,623**
	59.8%	24.4%	8.8%	7.0%	100%

In terms of all regions, the largest percentage of survey respondents come from a sending institution in the same region as their receiving institution: 68 percent went to an institution in the same region as their sending institution. This was particularly evident in the Lower Mainland, where 83 percent of the respondents stayed within the same region: the Lower Mainland contains 11 of the 25 public post-secondary institutions in BC. Vancouver Island had 64 percent staying within the region, followed by almost 59 percent of those in Northern BC, but only 23 percent of those in the Interior and Kootenays. If respondents did not stay within their own regions, they were most likely to go to an institution in the Lower Mainland in Fall 2011.

One way to measure the success of the mobility system provided by the BC higher education system is to ascertain whether students are able to access the education that they want at the location that they want it. Respondents were asked to indicate whether their receiving institution was their first choice: the results by region of receiving institution are shown in Figure 1. Overall, 71 percent of the respondents indicated that they had enrolled at their first choice of receiving institution. Respondents moving to a Vancouver Island receiving institution were the most likely to be enrolled in their first choice institution, with 81 percent at their first choice institution. In the other regions, between 65 and 68 percent of the respondents enrolled at their first choice receiving institution.

[3] NOTE: These regional results are different from STP reported mobility data (Heslop 2012) due to differences in the survey scope (identified in Appendix A) and data availability. However, both studies are generally consistent, with students from the Lower Mainland most likely to stay within their region, while students from the Interior and Kootenays were most likely of the four regions to move to an institution in another region.

FIGURE 1: Number and Percent of Respondents as First Choice of Receiving Institution in 2012 Survey of Movers



Respondents were more likely to change sector than they were to change region, a finding germane to the discussion of educational pathways that follows. The sector classification used in the Survey of Movers 2013 is based on legislative mandate: research-intensive university (4 institutions); teaching-intensive university (7 institutions); and college and institute (14 institutions). These categories are based on groupings made in provincial legislation (BC Ministry of Advanced Education 2014) and are shown in Appendix B. To simplify discussion, the word "intensive" will not be used, and the research-intensive and teaching-intensive universities will be called research universities and teaching universities.

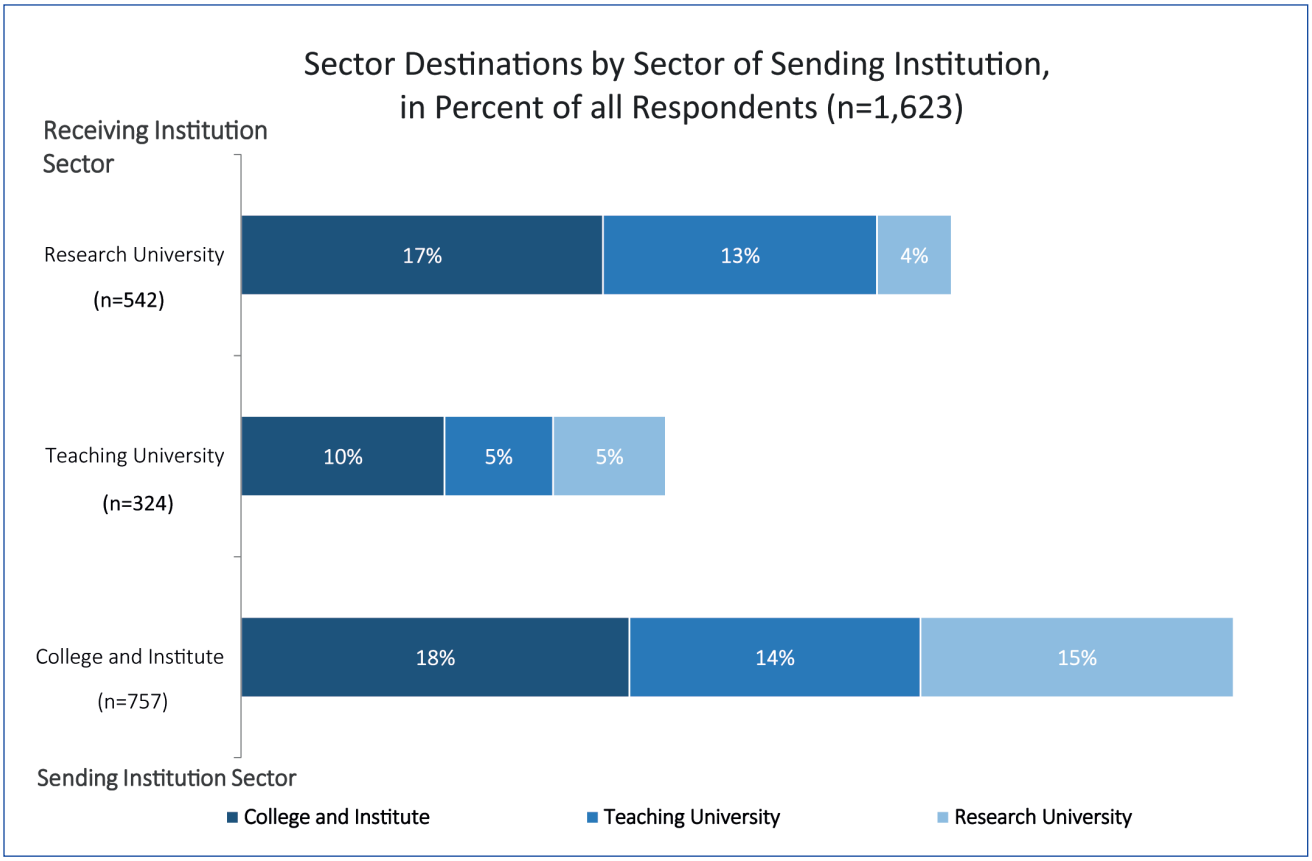
Of respondents at colleges or institutes in Fall 2011, roughly equal percentages came from the three sectors. The 17 percent of respondents who followed the traditional transfer pathway, moving from colleges and institutes to research universities are the second largest group. On the other hand, the smallest percentage of the respondents at a research university in Fall 2011 is from another research university: 4 percent of all respondents.[4]

[4] Since the largest research university did not participate in this survey, the number of respondents to research universities is lower than it would be in the overall BC public post-secondary system. See the the Student Transitions Project at http://www.aved.gov.bc.ca/student_transitions/ for accurate statistical representation of student mobility.

Only 27 percent of their receiving institutions were in the same sector as their sending institutions. Figure 2 below shows the largest proportion of respondents had one of the colleges or institutes as their receiving institution, regardless of sending institution type. Of all respondents, 47 percent were in a college or institute in Fall 2011, compared with 33 percent in a research university and 20 percent in a teaching university. Results for research universities would be considerably higher if data for the University of British Columbia were in this survey.

FIGURE 2: Sector Destinations by Sector of Sending Institution in 2012 Survey of Movers

NOTE: These results differ from STP mobility data (Heslop, 2012) due to differences in the scope (see Appendix A) and data availability.



Bahr (2012) has presented research with similar findings to those in British Columbia, demonstrating that the traditional linear post-secondary pathway through a community college to a four-year university degree is not the only pathway typical of student movement now. Using data from almost 90,000 community college students in California, he examines *lateral* transfer between community colleges, and also explores a finding of simultaneous enrolments in multiple community colleges, a topic for possible future consideration in the BC system.

4. STUDENT PATHWAYS: Linear, Lateral and Reverse Mobility

Kim, Saatcioglu and Neufeld (2012) examined a sample of 5,675 students at four-year colleges who had entered directly from high school. Their terminology is useful in the context of this paper to understand multiple mobility patterns of students. Using the label *lateral transfer* to refer to movement from one four-year institution to another (seven percent of their sample) and *reverse transfer* to refer to movement from a four-year institution to a two-year institution (nearly five percent), they demonstrate that conventional discussions of college leavers at the institution level miss these important dimensions of mobility. A similar study in BC conducted by Heslop (2011, p. 6) identified 6,143 students who moved in a "non-traditional" pattern from a research university to another institution between 2007/08 and 2008/09: 4,825 of them moved into another sector, representing 21 percent of all 22,573 movers between those years.

Hossler et al. (2012) analyzed data from the National Student Clearinghouse to demonstrate that one-third of first-time students of any age beginning at a four-year institution in the United States will transfer to or enroll at a different institution at least once during the five years after their first enrolment. More than half of those transfers involve a two-year institution, leading the researchers to analyze this group of reverse transfer students. A contribution of the study that may be relevant for further research in BC is that many reverse transfer experiences take place during summer sessions.

> The findings presented in this report show that within six years, 14.4 percent of the first-time students who started at a four-year institution in the fall of 2005 subsequently enrolled at a two-year institution outside of summer months or reverse transferred and an additional 5.4 percent enrolled at a two-year institution for summer courses only. (Hossler et al., 2012, p.12)

The study provides key evidence to demonstrate that transfer to a two-year institution after beginning at a four-year institution may not be a permanent reverse transfer[5]. Furthermore, they interpret the phenomenon as neither positive nor negative, stating that reverse mobility can be important to the successful trajectory of students. Furthermore, the study also found that student intention to return to the original institution was not necessarily realized since the majority of reverse transfer students did not return. In the BC setting, Heslop (2011) reported that about a third of reverse transfer students returned at some point to their original institution.

The circumstances impacting an individual's educational pathway are complex and dynamic. While reverse transfer may, in some circumstances, raise legitimate questions about how best to prepare students and support them in a four-year institution, transfer to a college to complete a credential, or to prepare for transfer elsewhere may be quite efficient – especially if credit loss can be minimized. A period of time at a four-year institution may support a student in making a better decision about their ultimate career path, and moving into a specific program at a college or institute may further that goal. In addition, the decision may require that a student take time to upgrade skills in mathematics, science, or English to attain their new academic goal. In any event, if the

[5] Marling (2012) highlights that recent U.S. studies often use the term "reverse transfer" to denote a specific credentialing practice whereby credit received at universities is retroactively applied at two-year institutions in order that transfer students may be awarded an Associate Degree. In this paper, the term is used in its original sense, describing students who move from a university to a college (Townsend, 2001).

alternative to reverse transfer is non-completion, both students and their communities are likely to benefit from effective credit transfer, even in non-traditional directions. This flexibility of movement across institutions and sectors is a strong feature of the BC Transfer System.

A note on the institutional sector assignment within BC is relevant to this discussion. The research universities provide higher-level professional programs such as medicine, and are primarily degree-oriented, including the doctorate. Five of the seven teaching universities were formerly community colleges, and provide developmental, certificate and transfer programs, awarding certificates and diplomas in addition to degrees. Further, since most post-secondary institutions in BC have now received authority to grant baccalaureate degrees, students at a college could be in four-year degree programs, or students at a teaching university could be in a one-year certificate program. As a result, while this analysis of mobility patterns by sector assigns the reverse transfer label to movement from a teaching university to a college or institute, and from a research university to a teaching university, there is room to improve these concepts in further research by using student program and credential level rather than institution type to measure linear, lateral, and reverse transfer in BC.

With three sectors, and starting with a wider cohort (not limited to first-time four-year students) results from the BC Survey of Movers are rather different from those found by Kim et al. (2012). In BC, 39 percent of the respondents represented a pathway of linear mobility: the traditional pattern from a college or institute to a research or teaching university or from a teaching university to a research university. Lateral mobility to an institution of the same sector represents 27 percent of the respondents. These mobility patterns are shown in Table 2 below. The largest category of lateral transfer is from one college or institute to another (18 percent of respondents).

The almost 15 percent of respondents moving from a research university to a college or institute are comparable in this sector mobility pattern to the reverse transfers in the sense discussed by Kim et al. (2012). Movement from a teaching university to a college or institute is another 14 percent, and if mobility from a research university to a teaching university (5 percent) is included then the reverse transfer phenomenon represents almost 34 percent of the respondents (Table 2).[6]

Since most post-secondary institutions in BC have now received authority to grant baccalaureate degrees, students at a college could be in a four-year degree program, or students at a teaching university could be in a one-year certification program.

[6] Heslop (2011, p.6) provides a table from the STP that can be used to calculate that 32 percent of movers between 2007/08 and 2008/09 were in a reverse direction (7,242 movers of 22,573 total movers between those years).

TABLE 2: Mobility Patterns by Institution Type in Survey of Movers 2012

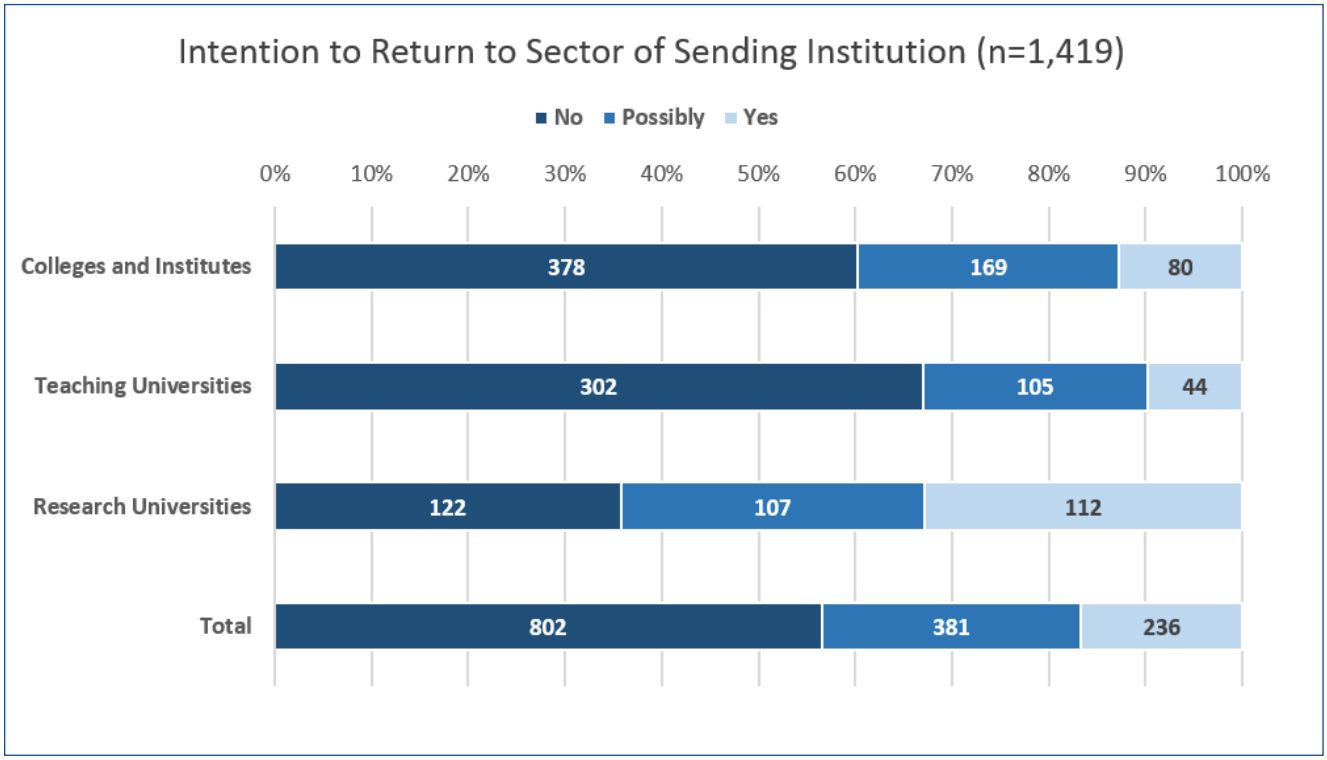
Mobility Pattern	Sending Institution	Receiving Institution	Respondents	Percent of Total
Linear	College/Institute	Teaching University	155	9.6%
	College/Institute	Research University	276	17.0%
	Teaching University	Research University	209	12.9%
	Linear Subtotal		***640***	***39.4%***
Lateral	College/Institute	College/Institute	296	18.2%
	Teaching University	Teaching University	83	5.1%
	Research University	Research University	57	3.5%
	Lateral Subtotal		***436***	***26.9%***
Reverse	Research University	College/Institute	239	14.7%
	Research University	Teaching University	86	5.3%
	Teaching University	College/Institute	222	13.7%
	Reverse Subtotal		***547***	***33.7%***
		Total	**1,623**	**100.0%**

5. INTENDING TO RETURN

As part of the intention to understand student pathways, respondents to the Survey of Movers 2013 were asked whether they expected to return to their 2010-11 sending institution in the future. Overall, 57 percent of respondents did not expect to return to their sending institution (Figure 3). Respondents sent by teaching universities showed the smallest expectation to return to their 2010-11 institution (67 percent did not expect to return), while those from the research universities were more equally split between planning to return (33 percent)[7], possibly returning (31 percent), and not expecting to return (36 percent). This may imply that one third of the reverse mobile students in Fall 2011 were involved in remedial actions to prepare themselves to return to a research university.

[7] This result is consistent with the findings based on STP mobility data: 36% of students moving from research universities to attend another institution returned to their 2002/03 research university within the following 7 years (Heslop, 2011, p. 16).

FIGURE 3: Number and Percent of Respondents Expecting to Return to Sending Institution by Sector of Sending Institution in 2012 Survey of Movers



6. MOTIVATION FOR MOVING: Success through Preparation

A series of questions on the Survey of Movers provide data to support exploration of why students are moving between institutions. These questions ask respondents to identify their goals at their sending and receiving institutions, their reasons for leaving their sending institution, and their reasons for choosing their receiving institution. The *2013 Survey of Movers* report provided bar graphs and frequencies for each of these four questions. For this paper, responses to these questions have been thematically grouped and are presented below with comment on their relevance from a policy perspective.

Regrouping of the responses to questions about student motivation allows this analysis to focus on key aspects or concepts that provide meaning to the student mobility experience. In this case, it is useful to review how students understood their educational mobility in terms of their goals: preparing to transfer; completing a credential at the current institution; accessing a particular program; developing specific skills rather than focusing on credential completion per se; or some other objective. Appendix B provides details of the coding and grouping of categories for each of these variables.

Preparation was the most frequently cited goal identified by students at their sending institution (Table 3). Almost all respondents provided at least one response in this category (e.g. *prepare to transfer*, *prepare for graduate school*, *prepare for professional career*, *prepare for career change*, *to enroll in courses you needed*).

Preparation, in all these forms, seems to be one of the most important concepts for understanding the motivations of mobile students in BC. The Survey of Movers report shows the one response of *prepare for a professional career* was cited as one of the main goals by 34 percent of respondents, and the most important goal by 16 percent overall (BCCAT, 2013a, p. 9).

Student mobility between institutions can be understood to involve a series of decisions: preparation along a planned pathway emerges as the dominant theme in this regard. While the pathways may well be complex and diverse, almost half the students identify some kind of preparation as their most important objective at their sending institution.

The survey results provide evidence that preparation for further education is one of the foundations of the BC Transfer System. At any one time, the proportion of mobile respondents who were enrolled with a purpose to complete a program at a particular institution appears to be approximately one in five, while over twice that many indicate that they are preparing themselves for further study.

While the respondents had an array of goals at their sending institutions, the results indicate that the goals had a similar pattern across the different age groups. The youngest students, aged 20 and under, and those aged 26 to 30 years more frequently were preparing at their sending institution (51 percent and 53 percent respectively). Even those over 30 years had the goal to prepare as the largest category of answers (42 percent). The oldest group, however, more often had a goal related to developing skills than the other age groups.

TABLE 3: Most Important Goal at Sending Institution by Percent by Age Group in 2012 Survey of Movers

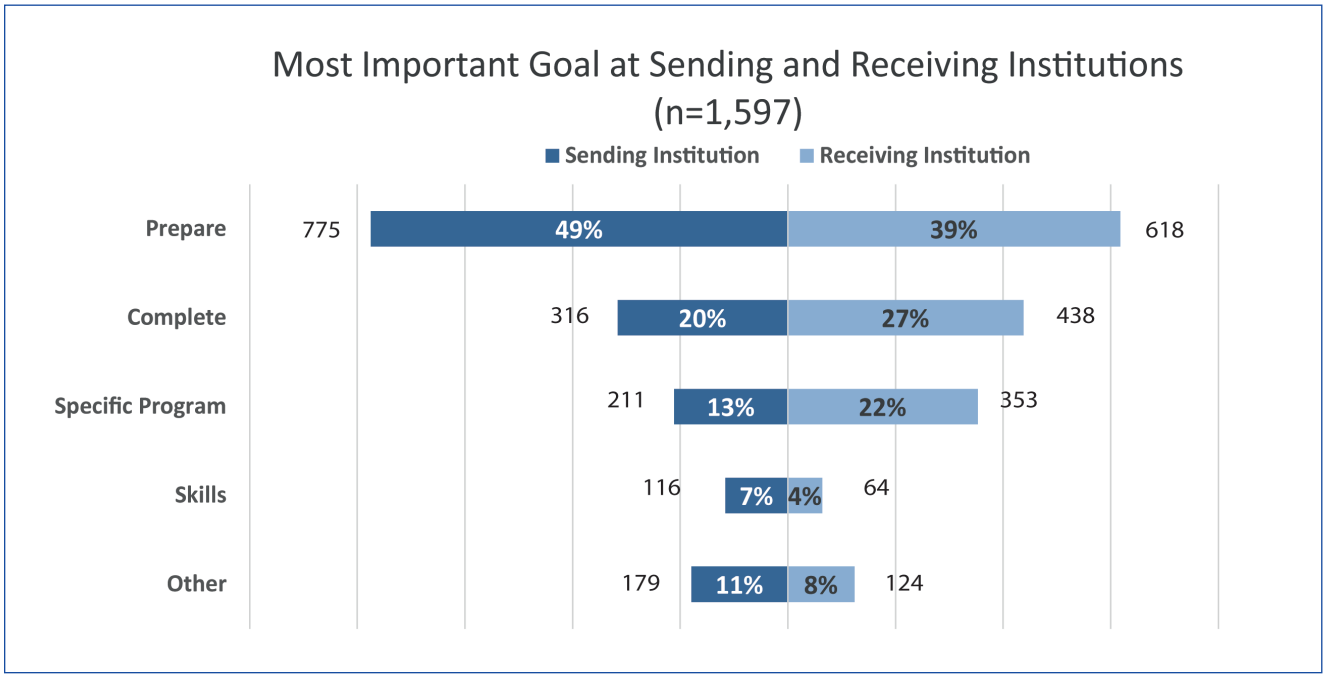
Age of Respondent	Prepare	Complete	Specific Program	Skills	Other	Total
20 and under	146	51	30	17	41	**285**
	51.2%	**17.9%**	**10.5%**	**6.0%**	**14.4%**	**100.0%**
21-25 years	397	181	121	35	84	**818**
	48.5%	**22.1%**	**14.8%**	**4.3%**	**10.3%**	**100.0%**
26-30 years	118	40	27	18	19	**222**
	53.2%	**18.0%**	**12.2%**	**8.1%**	**8.6%**	**100.1%**
Over 30	114	44	33	46	35	**272**
	41.9%	**16.2%**	**12.1%**	**16.9%**	**12.9%**	**100.0%**
Total	**775**	**316**	**211**	**116**	**179**	**1,597**
	48.5%	**19.8%**	**13.2%**	**7.3%**	**11.2%**	**100.0%**

NOTE: * Percentages change slightly from 2013 report due to use of age variable, which is not available for all respondents.

The goals of students at their receiving institution were analyzed using the same method and definition of groups as used above. As might be expected, goals for the receiving institution are somewhat different from goals at the sending institution. Although proportionally fewer students identified this goal at the receiving institution, *preparing* remained however the single most important goal. Figure 4 below shows a difference from 49 percent at the sending institution to 39 percent at the receiving institution.

Intending to complete a credential was one of the three main goals at the receiving institution for 45 percent of respondents, and selected as the most important goal by 27 percent of respondents. While the program goal *pursue a specific program you wanted*, was the most important goal for only 22 percent of respondents, almost 50 percent mentioned it as one of their top three main goals. Percentages identifying these two goals are higher at the receiving institution than at the sending institution.

FIGURE 4: Number and Percent of Respondents by Most Important Goal at Sending and Receiving Institutions in 2012 Survey of Movers



It appears that some respondents indicated their goal is to prepare while at the sending institution and then changed their main goal when they arrived at the receiving institution to *completion of a specific program*. Such a shift to great specificity as part of the mobility experience indicates a developmental progression through mobility for these respondents. From a policy perspective, this progression is part of the expectations for mobility that form the basis of the BC public post-secondary system, and understanding such changes validates efforts expended collaboratively across that system to ensure successful student mobility.

7. MOTIVATION FOR LEAVING: Readiness for Success

Reasons for leaving the sending institution represent another aspect of mobility that requires survey data such as that made available by the Survey of Movers. The respondent data provides insights linking the pathways taken by students with a basic understanding of why they are moving. Respondents could choose up to three reasons for this question, with an average of two responses provided per student.[8] The 2013 Survey of Movers Report identified *Changed your mind about your program* as the most frequently given reason for respondents leaving research universities with 38 percent; *Got admitted to a better institution'* as the most frequently given reason for those leaving a teaching university with 27 percent; and, *Intended to leave all along* in addition to *Completed all the credits you needed* as the most frequently cited reasons for those leaving colleges and institutes with 29 percent each (BCCAT, 2013a, p. 11).

For the purpose of this paper, the answers to this section of the survey have been reanalyzed, beginning with regrouping responses into four categories labelled: *ready, discordant, changed,* and *other*. The answers categorized as *ready* represented reasons for leaving related to a planned pathway – completing credits, having transfer intention, and moving to a better institution. Together, this category represents 32 percent of the reasons for leaving (Table 4). Reasons for leaving were categorized as *discordant* if they reflected a mismatch between the student and the sending institution, including answers related to academic challenges and dissatisfaction with aspects of that institution. Answers in this category indicate that the sending institution was not meeting their needs or they were not successful there. This category represents 25 percent of the answers overall.

Changing their minds about their program of study represents 13 percent of the responses on reason for leaving. A significant number of *other* reasons were provided (31 percent of all reasons) indicating the complexity of motivations regarding mobility and the timing of movement between institutions. The youngest students indicated more often reasons for leaving that are reported as *discordant*: 43 percent of those aged 25 and under, compared with 22 percent of those over age 25. On the other hand, the percentage selecting a readiness reason is evenly distributed across the age continuum.

TABLE 4: Number and Percent of Respondents by Reason for Leaving in 2012 Survey of Movers

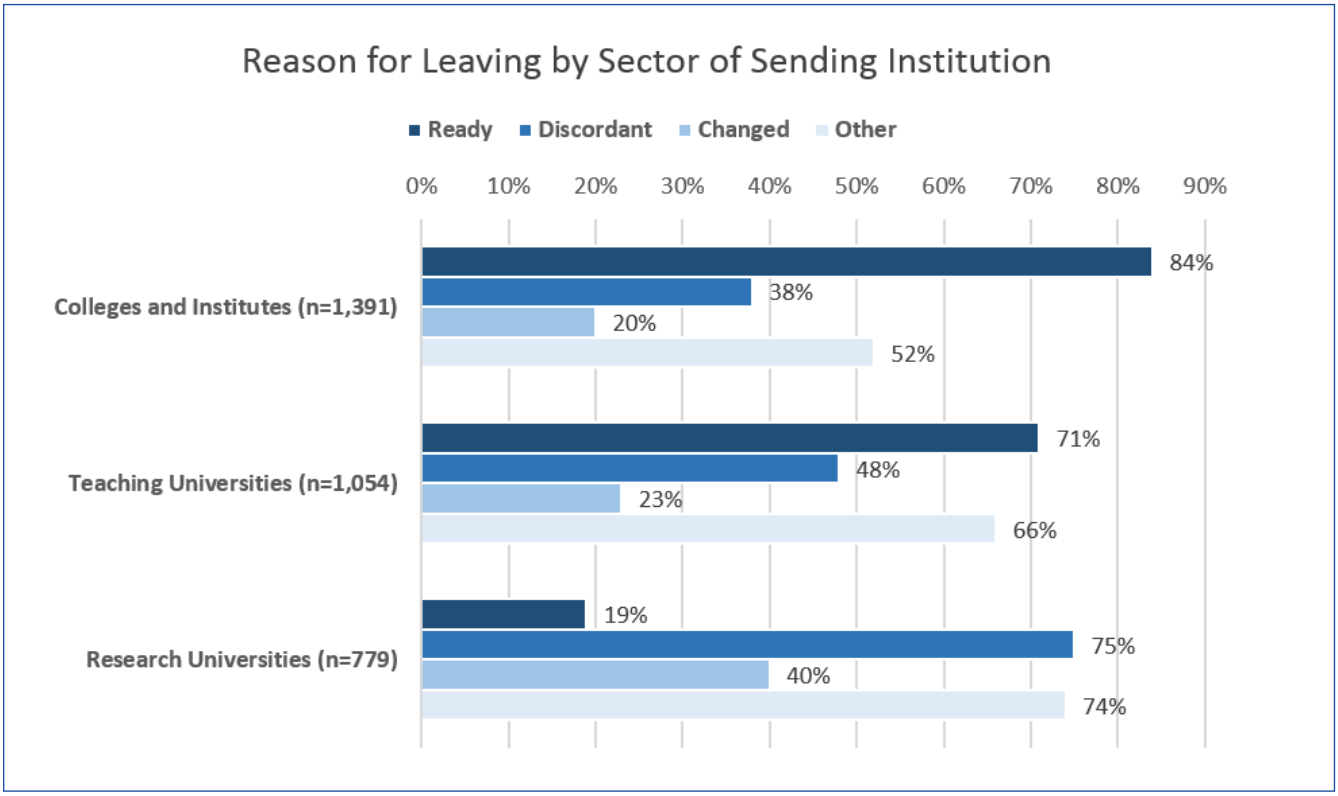
	# of Responses	Percent
Ready	1,032	32%
Discordant	790	25%
Changed	409	13%
Other	983	31%
Total	**3,214**	**100%**

NOTE: * 1,597 respondents provided 3,214 answers, for an average of 2 answers per respondent. Percentages do not total to 100% due to rounding

[8] See Appendix B. Opportunities for students to provide multiple responses to this question slightly complicates interpretation of data from this question.

FIGURE 5: Percent of Responses by Reason for Leaving by Sector of Sending Institution in 2012 Survey of Movers

NOTE: * Due to multiple responses, totals exceed 100%.



Although the largest numbers of respondents (almost one-third) were demonstrating readiness, there are some differences by institution sector (Figure 5). Over 80% of the reasons for leaving given by those who left a college or institute were consistent with the idea of being *ready*. In contrast, 75% of those from research universities as a sending institution gave a reason consistent with *discordant* and roughly the same percentage gave a reason considered *other*. Of those moving to a research university, almost all respondents gave at least one answer consistent with readiness.

The data reviewed so far seem to offer explanation for the two most dominant patterns to the movers' data: one of preparation and readiness for a linear pathway, and the second a reverse pathway that results from academic challenges or other difficulties, considered discordant. This was recognized in the Survey of Movers 2013 report:

> In many cases, respondents from research universities were confronting challenges — whether in their academic performance or their personal circumstances, and subsequently changed institutions and, perhaps, programs. The findings suggest that students originating in research universities "changed their minds about their program" in this context, and at a rate much higher than did students moving from other institution-types. (BCCAT, 2013a, p.11)

There are some regional differences to these motivations. Almost 80% of the reasons given by those moving to a Vancouver Island institution involved readiness while only 47% of the reasons given by those moving to an

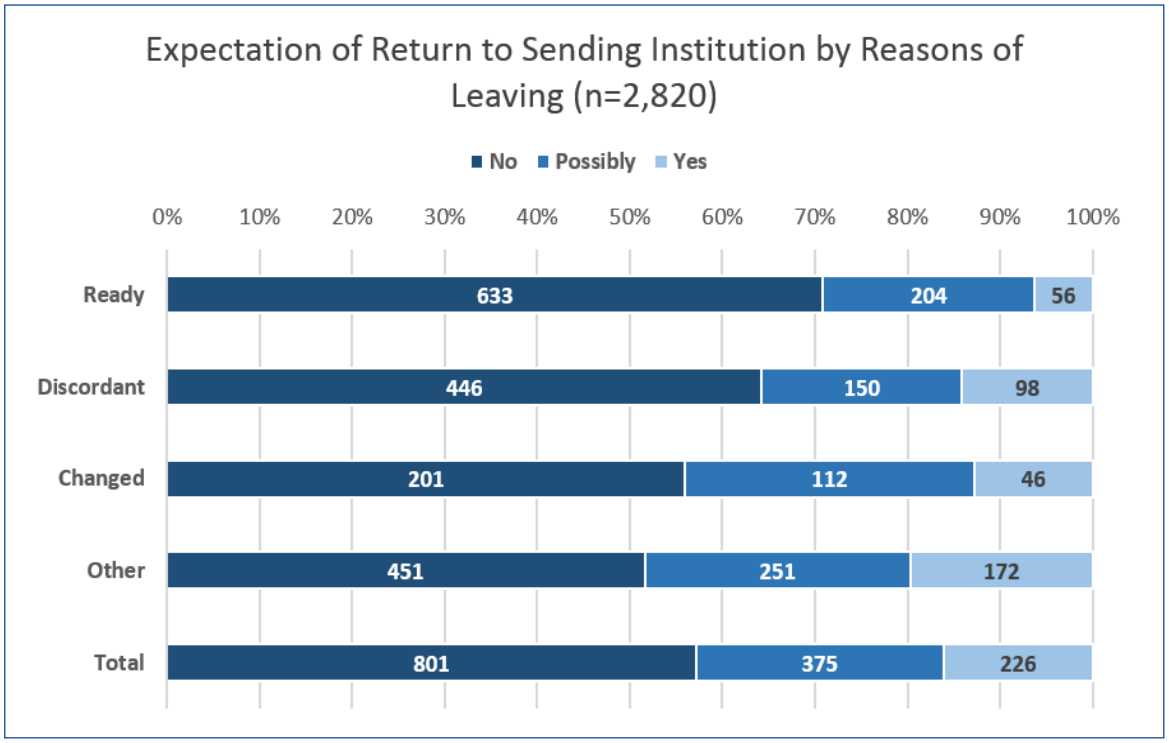
Interior and Kootenay institution were in this category; the other two regions were between these two. This result may simply reflect regional differences in institutional mandates: proportionately more research universities in the Lower Mainland and Vancouver Island. Alternately, this may indicate that additional student support strategies at institutions would assist students in preparing for transfer, such as institutional site visits of counselors and advisors.

While only 13 percent of the reasons given include *changed your mind about your program* (Table 4), about one quarter of the students across the province (413 of 1,623 respondents) reported this as one of the reasons for leaving their sending institution. Are these students swirling between programs, uncertain of their next steps? In spite of having changed their minds, 47 percent expected to transfer credits to their receiving institution. More research may be helpful to understand transfer experiences of mobile students who have changed their minds, especially in terms of satisfaction with transfer, intention to return, and whether their goals are met at their receiving institution. As a policy question, it is worth asking whether support services to assist with the decision-making process regarding selection of program could shorten time to completion by reducing swirling, reduce overall student indebtedness, or expedite labour force entry.

Leaving when ready is characteristic of an important subset of respondents. We have seen previously that the majority of respondents did not expect to return to their sending institution: this finding is further explained in relation to the reasons for leaving and shown in Figure 6.

FIGURE 6: Number and Percent of Responses by Expectation of Return to Sending Institution by Reasons for Leaving* in 2012 Survey of Movers

NOTE: * Respondents could provide multiple responses. Overall, 1,402 respondents provided 2,820 answers, for an average of 2 answers per respondent. Percentages do not total to 100% due to rounding.



Only 6 percent of those who were *ready* are expecting to return to their sending institution, compared to 14 percent of those with *discordant* reasons and 20 percent of those with *other* reasons. Answers categorized as either *ready* or *discordant* do not expect to return to their sending institution: 71 percent of those identifying a *readiness* reason and 64 percent of those identifying a *discordant* reason for leaving do not intend to return. This implies that the respondents providing *readiness* or *discordant* reasons, in spite of fundamental differences in motivation, are not intending to return to their sending institution.

Of additional note about those respondents reporting *readiness* for leaving is that 70% also reported that their most important goal was completely met at their sending institution with no plans to return. Clearly, the respondents who were ready for their transfer between institutions are on a planned pathway and are meeting their goals. Students whose reason for leaving included *discordant* and *other* are more likely to report their goals at their sending institution as not really met or not met at all.

8. CHOOSING THE RECEIVING INSTITUTION: Establishing Connections

Why students choose their subsequent institutions has been another identified interest in student mobility in BC. Based on the respondents' main reasons for choosing their Fall 2011 institution over other institutions, categories were created to embody aspects of institutional attraction that shaped student decisions around destination. Are students choosing their receiving institution on the basis of a specific program, the reputation of the institution, the offerings of support, or the social environment provided? With this final piece of motivational information, the concepts examined in this paper come together – student goals, reasons for leaving, and reasons for choosing - deepen our understanding of student post-secondary mobility in BC.

Responses from a Survey of Movers question on the reasons for choosing a particular institution were regrouped to embody aspects about the receiving institution that influenced student choice. This contributes to our understanding of choice as a component of student mobility. The regrouped categories were created to reflect aspects (e.g. smaller classes, campus life) that help students become engaged (*connect*) at the institution; *reputation* of the program and courses; *program* availability; financial and family *support*, and *other* reasons. The concepts of *support* and *connect* build on earlier work on student retention strategies (Beatty-Guenter, 1994) with *supporting* representing financial and personal circumstances and *connecting* representing engagement through social integration as discussed throughout the student retention literature that demonstrates students who successfully integrate socially into the campus are more likely to be retained (e.g., Tinto, 2007).

Figure 7 is based on multiple responses to the questions of leaving and choosing particular post-secondary institutions in BC. While the responses are a bit challenging to interpret, they reveal patterns of behaviour about student mobility that are worthy of comment. Figure 7 presents the number of answers given to *reason for choosing* in each category of *reasons for leaving*. As each respondent is likely to have multiple reasons for leaving and choosing, the Figure represents the relationship between these two attributes.

FIGURE 7: Percent Respondents by Reasons for Choosing Receiving Institution by Reasons for Leaving Sending Institution in 2012 Survey of Movers

NOTE: * Respondents could provide multple answers (up to 3) for each of the questions. As a result, 1,570 respondents provided 7,619 answers. Percentages are based on the number of respondents in each Reason for Leaving, and always exceed 100% of responses gave multiple answers.

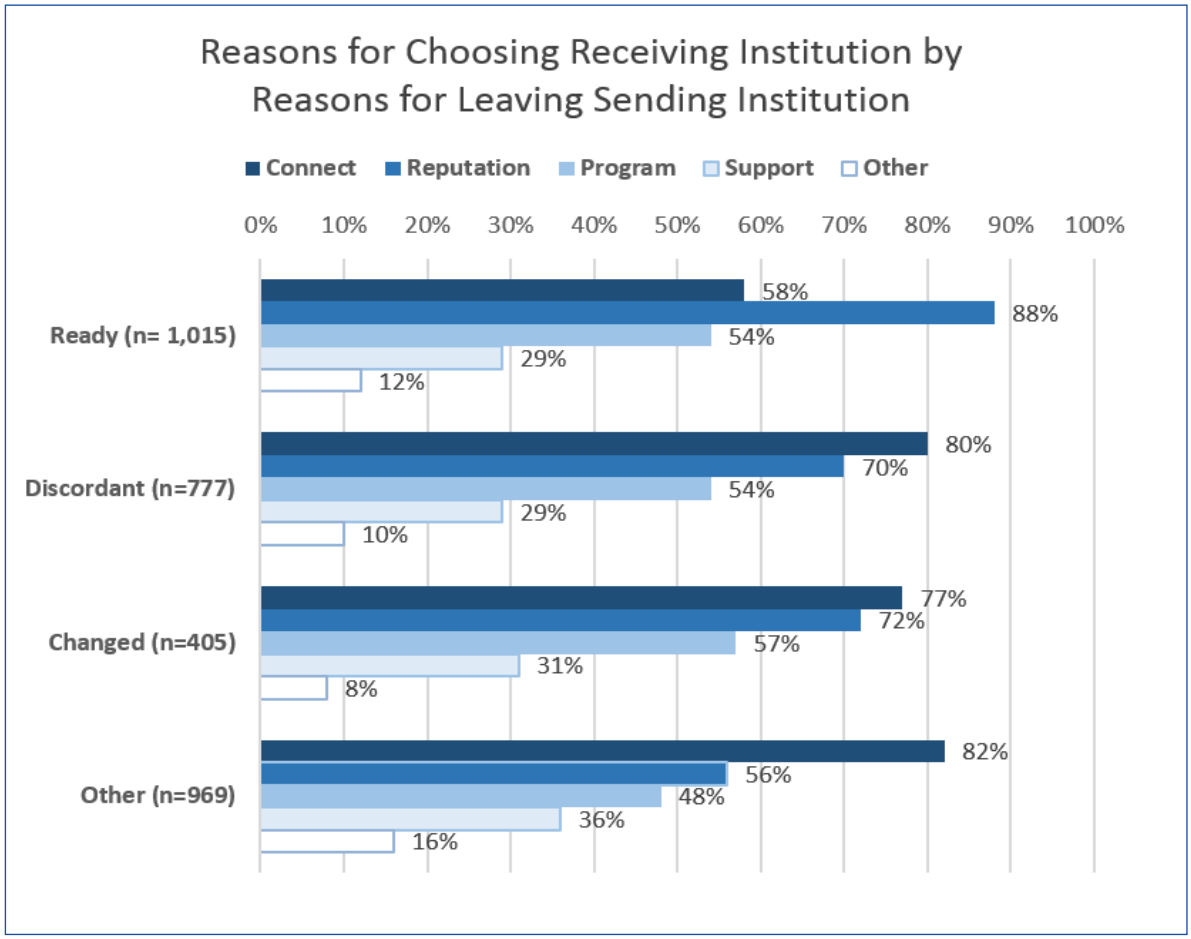


TABLE 5: Number and Percent of Responses by Reason of Choosing in 2012 Survey of Movers

	Responses	Percent
Connect	2,316	31%
Reputation	2,277	30%
Program	1,662	22%
Support	990	13%
Other	374	5%
Total	**7,619**	**100%**

NOTE: Percentages do not total to 100% due to rounding.

Connecting is the attribute of the receiving institution that received the highest number of answers as reasons for choosing (Table 5), with 2,316 responses (31 percent of the 7,619 responses), followed closely by *reputation* (30 percent of all responses). On the surface, these reasons appear equally important. However, a comparison of these two dominant attractors in relation to reasons for leaving reveals the essential contribution of this reanalysis. That is, when reason for leaving includes *readiness*, *reputation* is the more common reason for choosing (88 percent of ready respondents gave *reputation* as one of their reasons). On the other hand, of the respondents providing a *discordant* reason for leaving, institutional *connecting* is the most common reason, selected by 80 percent of respondents, for choosing the institution. *Reputation* was still important (70 percent of respondents provided such answers) for these respondents but not the primary reason.

Mobile students from Northern BC and the Lower Mainland more often chose their next institution based on aspects of *connecting* (e.g., smaller classes, campus life opportunities, convenient location) than those from other regions: 88 percent of respondents who moved from a Northern BC institution gave at least one reason from the connect category. In contrast, those from a Lower Mainland institution were more likely to refer to *reputation*: 73 percent gave at least one reason from the *reputation* category.

Regardless of the reason for leaving, *program* remains an important component in the responses given for choosing the receiving institution. Although *program* made up only 22 percent of all answers, roughly half the respondents in each leaving category had at least one answer related to program/course availability. *Support* (as defined in Appendix B) is offered as a reason by approximately one third of the respondents across all reasons for leaving – an interesting finding that could also be related to the proportion of students requiring government student loans and other financial support, including co-op programs. A fully representative sample might demonstrate that policy initiatives could be based on an assumption that a third of students will need access to funding support: we do know that 35 percent of the 2013 respondents to the Baccalaureate Graduate Survey reported that they incurred government sponsored student loan debt (BC Stats, 2013, p. 6).

Patterns of mobility, which appear diverse and complex on the surface, can be understood as rational decisions made by students in an environment of sufficient information to match their needs with institutional qualities. Key for decision makers is to ensure that students have sufficient knowledge to make these decisions.

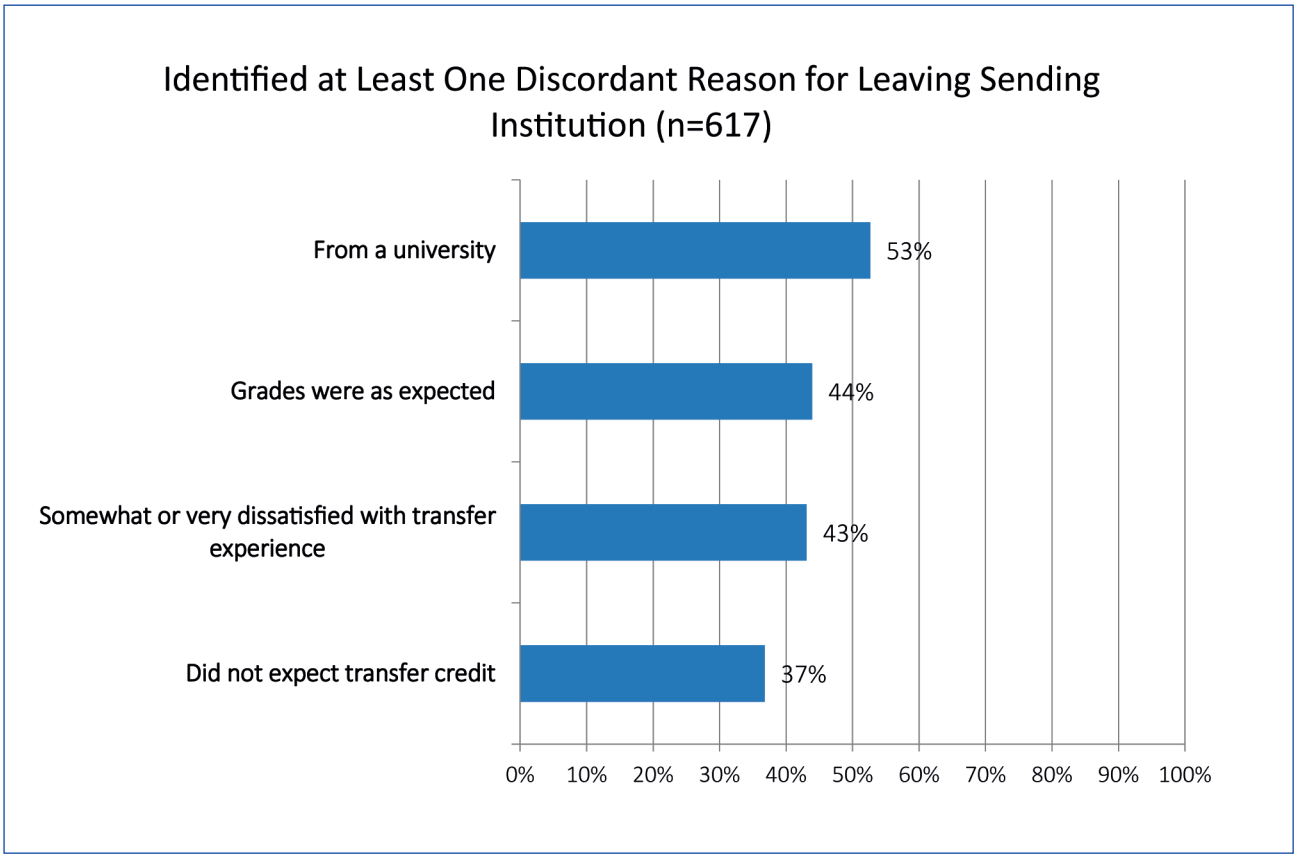
The 2013 Survey of Movers report suggests the direction of the work done for this analysis. Specifically, it states:

> Respondents who originated at colleges, institutes and teaching universities were more likely to have intended to move, and to have identified their subsequent institution earlier in their post-secondary career. Respondents who originated at research universities, where a significant proportion intended to complete a credential, were more likely to move to another institution in response to academic and/or personal challenges. The ability to move predictably allowed the first group to plan effectively. The second group benefited through having options to continue their studies when circumstances intervened. In both cases, student mobility allows students to make effective use of the wide range of institutions and programs that make up BC's post-secondary system (BCCAT, 2013a, p. 24).

A “fall-back” or redemptive component to the BC Transfer System for those who were *discordant* from their original institution appears to be worthy of further research. Such analysis may demonstrate additional value provided by the BC multi-directional mobility system and may also reveal strategies needed by certain students to increase success at their receiving institution. A study specifically about reverse transfer might reveal important aspects about the needs for this group, particularly with regard to the transfer of course credits.

Student mobility as a result of *discordant* educational experiences is profiled below in Figure 8. Of the 617 respondents with at least one *discordant* reason for leaving their sending institution, just over half are from a university (research or teaching), and fewer than half achieved the grades they expected at their sending institution. They were more likely to report their dissatisfaction with the transfer experience than most respondents, and over one third (37 percent) did not expect to receive transfer credit, a subject to be explored in more detail in the section that follows.

FIGURE 8: Percent of Respondents’ Characteristics who Identified at Least One *Discordant* Reason for Leaving Sending Institution, 2012 Survey of Movers



9. THE TRANSFER CREDIT EXPERIENCE

It was noted earlier in this paper, not all mobility involves transfer of course credits. Students can move between institutions and not expect to receive any transfer credit. For example, a student studying English at a university would not normally expect transfer credit if her next enrolment was in a trades program at a college or institute.

As reported in the Survey of Movers report, almost two-thirds of respondents (62 percent) expected to receive transfer credit at their receiving institution and 42 percent of those received all the credit they expected from their receiving institution, with another 32 percent receiving most of the credit they expected (BCCAT, 2013a, p.15). The 26 percent who received partial credit or none of the credit expected were more likely to have moved to a college or institute as a receiving institution from all other institutions, or from a research university as a sending institution to all other institutions. That is, the respondents moving in a reverse direction were more likely to have not received expected transfer credit. Transfer agreements have historically been directed to research universities as receiving institutions and colleges as sending institutions. An implication of these results is that there may be some issues with transfer credit awards when the sending and receiving institutions are not aligned in a linear mobility pattern. In 2013, the BCCAT embarked upon an initiative to expand the BC Transfer Guide, enabling all member institutions to "initiate and accept articulation requests" (BCCAT, 2013b, p. 14): this increased the transfer database and the number of guaranteed credit equivalencies.

In terms of region, respondents from Northern BC sending institutions were the most often to have received *all of the credit* or *most of the credit* they requested upon transfer (79 percent), followed by those from the Vancouver Island (77 percent). At 71 percent, respondents from the Lower Mainland were slightly less likely to have received all or most of their transfer credit: this may be primarily a factor of the variety of program choices in this large region.

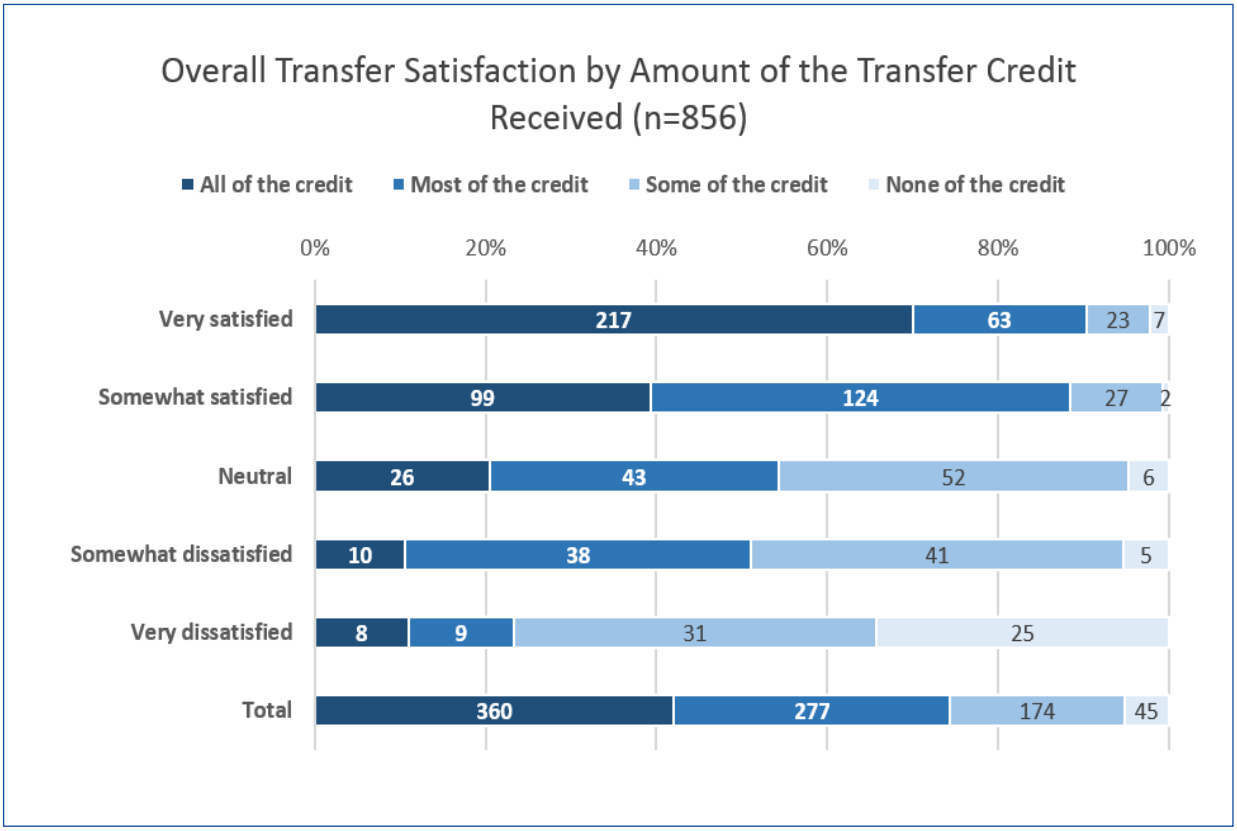
Which respondents were the most dissatisfied with transfer? As shown in Figure 9, the respondents who received *some of the credit* or *none of the credit* for their previous studies were much more likely to be dissatisfied with transfer.

Respondents who did not receive the course credit that they expected voiced their dissatisfaction with the transfer credit process. While this may appear self-evident, it may be worthwhile to understand pathways that do not facilitate transfer credit, so that students can understand the conditions under which credit cannot be awarded. Alternately, there may be some other aspects that require resolution at the institutional level. For example, it may be that some career oriented diploma programs have not yet established credit equivalencies for their required courses.

In terms of receiving institutions, those moving to an institution in the Interior or the Kootenays, or to a Lower Mainland institution, were least likely to receive all or most of their transfer credit: 60 percent and 68 percent respectively. For both Vancouver Island and Northern BC, 82 percent of respondents received all or most of their transfer credit. This high percentage of movers receiving the transfer credit they requested indicates strong alignment of institutional educational policies within those regions, demonstrating the success of efforts to align regional connections amongst the institutions within the province.

FIGURE 9: Number and Percent of Respondents by the Overall Transfer Satisfaction by Amount of the Transfer Credit Received in 2012 Survey of Movers

NOTE: * As these questions were only asked of those who expected transfer credit, this table represents only about half of all respondents to the survey.



Interpreting the Survey of Movers data on transfer satisfaction and dissatisfaction is somewhat problematic, and conclusions about rates of dissatisfaction cannot be inferred due to the cohort definition process. Many of those who might be expected to be the most satisfied transfer students were likely removed from the cohort. That is, 2,519 students likely to be surveyed in another key survey that year (the Student Outcomes Surveys or the New to UBC survey) were removed from the cohort to reduce overburdening those students with multiple surveys. Indeed, a 2011 report from BC Stats provides results from the Diploma, Associate Degree and Certificate Student Outcomes (DACSO) survey with regard to transfer between institutions. That study of almost 5,500 respondents found "*that 79% of the respondents who had continued their studies at a different institution expected to transfer credits*" (Cowin, 2013, p. 26) and 86 percent said they received all their expected transfer credit.

Only 8 percent of the DACSO students report being dissatisfied with their overall transfer experience and 14 percent did not get all the transfer credit they had expected. In contrast, almost 20 percent of the Survey of Movers respondents report being dissatisfied and 58 percent did not get all the transfer credit they expected.

This might be an important difference arising from the more broadly inclusive Movers Survey respondents, or it might be that the more satisfied movers having been more likely to opt out of the online Movers Survey. Clearly, differences between respondents to different surveys in their answers to key survey questions related to the transfer experience suggest a need for further examination of these topics. Within the same time period, similar but not identical groups of students taking part in linear transfer (UBC survey and DACSO) and multidirectional transfer (Survey of Movers) have widely different levels of satisfaction. While the students targeted and the questions asked were also slightly different, these differences in satisfaction reveal the complexity of transfer satisfaction research at this point in time. As a result, we really do not know whether dissatisfaction with the overall transfer experience is a very small problem, or a more significant challenge.

FIGURE 10: Characteristics of Dissatisfied Respondents as Percent of Respondents in 2012 Survey of Movers

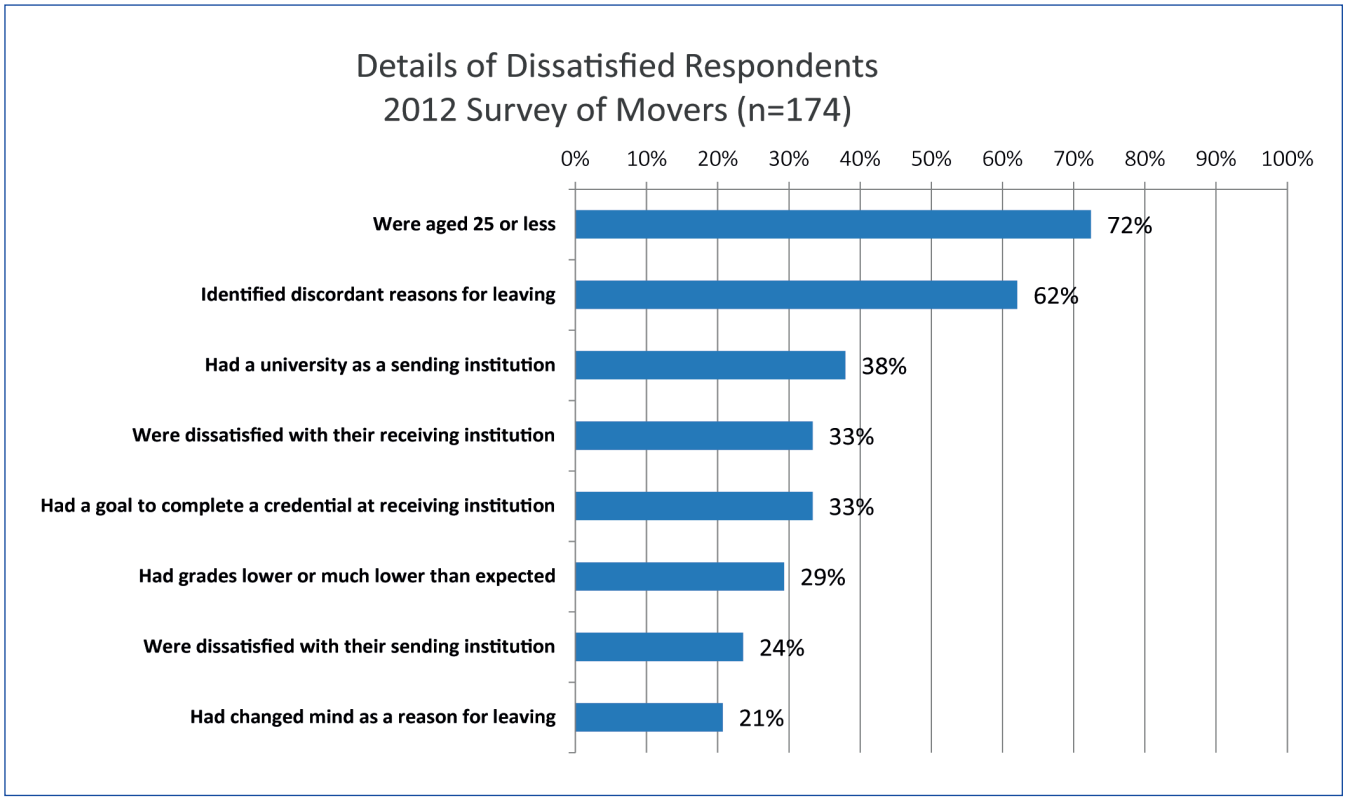


Figure 10 provides more details about those respondents who were dissatisfied: they were young students identifying discordant reasons for leaving their sending institution. The other qualities shown here are characteristic of fewer than half of these dissatisfied students, an interesting finding and somewhat contrary to expectation. Dissatisfaction certainly appears to be partly a function of the demographic characteristics of the student, but satisfaction or dissatisfaction with the transfer process is almost as much about discordant reasons for leaving the sending institution.

10. CONCEPTS FOR STUDYING STUDENT MOBILITY

This paper has attempted to elaborate and interpret findings of the 2013 Survey of Movers to highlight findings of particular relevance to educational policy. By exploring conceptual ideas of readiness, reverse transfer, and discordant motivations, the mobility of students and the nature of the complex pathways pursued by contemporary post-secondary students have been re-examined. Key findings include suggestions for measurement of concepts related to readiness for transfer, factors related to reverse transfer, and exploration of the idea of educational discordance with regard to the sending institution. The results reveal that attention to the longitudinal transfer experience of students journeying on a reverse transfer pathway would be worthwhile.

Those who had a goal to prepare, moved to their receiving institution as planned, expected and received credit, and were satisfied with the overall transfer experience. This group of respondents tends to be those successfully leaving colleges, institutes, and teaching universities for research universities. Thus, findings from the Survey of Movers support the conclusion that those following the linear, traditional transfer pathway are more satisfied than those navigating other post-secondary mobility pathways.

11. RECOMMENDATIONS AND DIRECTIONS FOR FURTHER RESEARCH

The Student Transitions Project (STP) and previous specific studies referred to in this paper demonstrate the highly integrated nature of BC public post-secondary education, and the available data systems that allow tracking of individual students under highly anonymized conditions provide a platform for understanding this complex system. This paper has brought a focus on concepts of readiness and reverse transfer to the discussion, and has derived understanding of mobility amongst BC public post-secondary students in terms of the information they provide through surveys.

The analysis below identifies some lines of inquiry not pursued at this time primarily because the data are not available. These subjects represent possible directions for further research.

11.1 Simultaneous Transfer

Simultaneous enrolment was not analyzed by the Survey of Movers, nor captured in any BC study to this point. This pathway includes students who take advantage of transfer opportunities afforded by summer session at a variety of institutions. The students removed from the Survey of Movers because they were enrolled in two institutions during Fall 2011 constitute a large and important group of students making use of the BC Transfer System: perhaps as many as 13,000 students were enrolled in more than one institution in either academic year, either sequentially across terms or concurrently. A modified approach to STP data analysis regarding institutional attribution may be helpful to demonstrate how large this group is, and whether direction of transfer is a permanent or

temporary aspect of the educational pathway for these students. As they are simultaneously registered at two or more institutions, it is expected that such students are basing course selection decisions on the available information about transfer, perhaps more than sequentially mobile students. Simultaneous transfer students may have particularly significant insights about the effectiveness of the BC Transfer System and thoughts about ways to maximize their decision-making.

11.2 Reverse Transfer

The ability for students to move in a reverse transfer pathway appears to demonstrate that there is a powerful redemptive quality of the BC Transfer System that has not yet been fully understood. There may be policy implications for this finding and the subject would benefit from further research into the phenomenon. It is expected that the concept of reverse transfer will be multi-dimensional, fulfilling diverse goals from skill upgrading to career specific education. The STP has the potential to identify patterns of enrolment that could be characterized as reverse transfer: inclusion of additional variables such as credential type and program area would add considerably to this knowledge.

11.3 Program Areas

The Survey of Movers did not collect information about program of study, beyond asking how related the program was at the Fall 2011 institution to the program at the original institution. It may be that transfer works better in university transfer programs or even in Health and Engineering than in programs in Business, Fine and Performing Arts, and Trades. Cowin (2013) also pointed out that the research so far has examined what is occurring at the institutional level, and not so much at the program level. Although some program information on the intended major is available from BC College Transfer Student Profile Reports (e.g., Lambert-Maberly, 2010), and although the STP has data on program of enrolment, this level of analysis remains an area for further research. Survey research using the BC Student Outcomes CIP Clusters (BC Stats, 2009) and credential levels would provide further insight on mobility pathways and transfer effectiveness in British Columbia. To complete this work, it may be helpful to have the STP develop analytics about program area mobility between institutional sectors and the role of summer session enrolments as components of student mobility.

11.4 Credential Recipients

Students were removed from the Survey of Movers cohort if they had received a credential from their original institution. For example, students receiving an Associate Degree, or a diploma in fields such as business or engineering were excluded. However, we know from DACSO that many of these students may have gone on into another program at another institution, and their experience with transfer may present a unique perspective (e.g., block transfer, having to repeat core courses like statistics or business, etc.). A special analysis of DACSO data over time with a focus on the transfer experience of those who changed institutions with a credential from their sending institution may be useful to enrich the understanding of this phenomenon. Time to completion would be an essential component of such a study, and block transfer would be an element worthy of inclusion.

12. CONCLUSION

This paper provides some further analysis of data collected for the Survey of Movers 2013, exploring the results in terms of region and sector, followed by analysis of motivational aspects revealed by the survey respondents. How goals and reasons for moving between institutions are related to one another contributes a conceptual model based on success through readiness.

The concepts of readiness and reverse transfer have been explored as central to the success of the student mobility experience in BC. Through their answers to the survey questions, some students reveal themselves to be ready for their transfer experience, following a linear, planned pathway. Those students had prepared themselves for transfer and were ready to do so: as a result they are successful and satisfied. The students moving in what is seen as the reverse direction, especially if they had not intended to do so, were less likely to be successful and were less satisfied with the transfer experience.

The paper contributes to our understanding of the "web of student pathways" (Cowin, 2013, p.19) that characterizes BC post-secondary education. The Survey of Movers provides a wealth of information about the mobility of its respondents. While inferential analysis is hindered by concerns about representativeness, the survey provides valuable new information about student mobility and thereby adds considerably to our knowledge base, contributing insights not previously available.

The findings of this review support the position of BCCAT to continue research about the experiences of mobility and transfer among the post-secondary institutions in BC. Such research has the potential to influence policy discussions and decisions that have an impact on student success.

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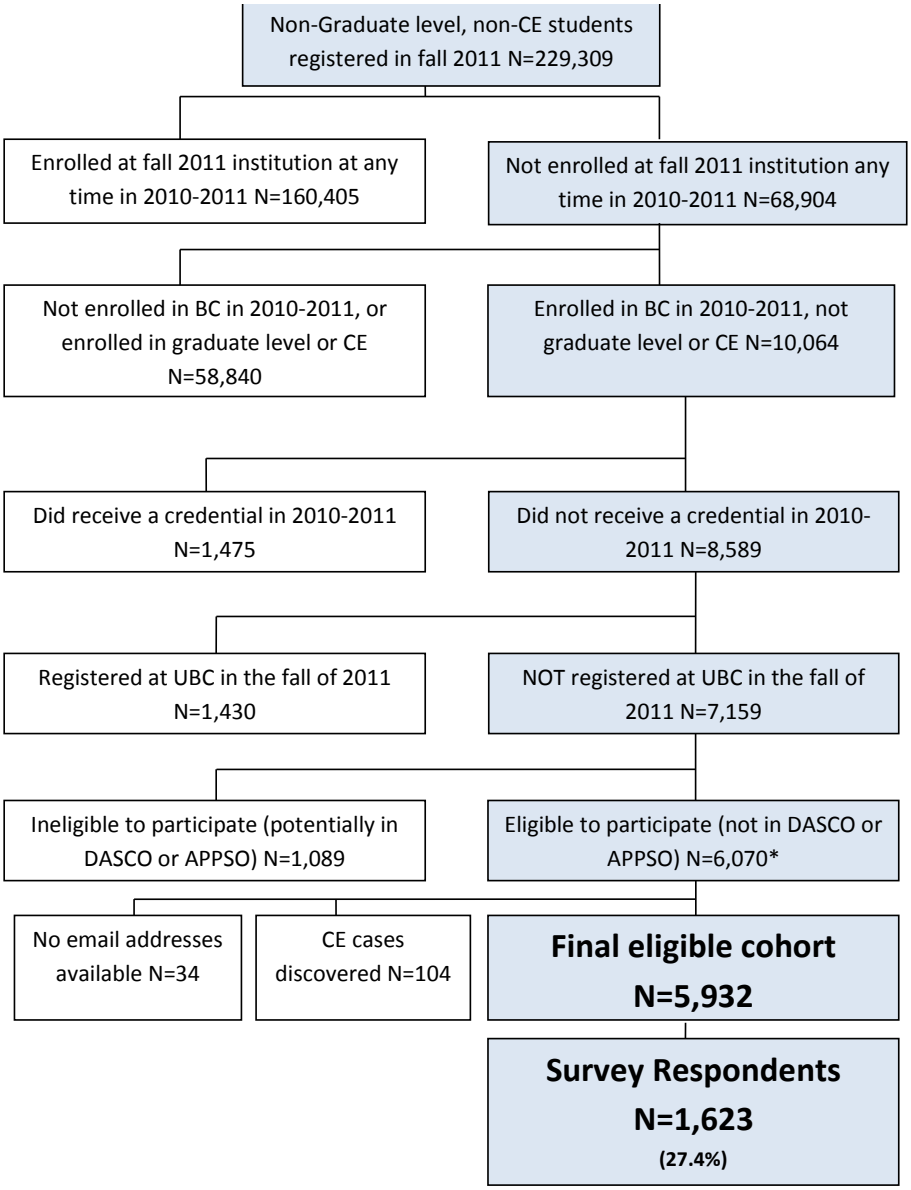
APPENDIX A:

Identifying the Eligible Cohort



NOTE: Potential "Movers" respondents who overlapped with respondents to the 2012 Diploma, Associate Degree and Certificate Student Outcomes (DACSO) and Apprenticeship Student Outcomes (APPSO) surveys were removed from the cohort to avoid survey fatigue.

APPENDIX B:

New Variables for Movers Survey Further Analysis

1. **Region** – assigned for each of the sending institution and the receiving institution:

    - **Lower Mainland**: British Columbia Institute of Technology, Capilano University, Douglas College, Emily Carr University of Art and Design, Justice Institute of BC, Kwantlen Polytechnic University, Langara College, Simon Fraser University, University of British Columbia (sending institution only), University of the Fraser Valley, Vancouver Community College

    - **Vancouver Island**: Camosun College, North Island College, Royal Roads University, University of Victoria, Vancouver Island University

    - **Interior and Kootenays**: College of the Rockies, Nicola Valley Institute of Technology, Okanagan College, Selkirk College, Thompson Rivers University, University of British Columbia Okanagan (sending institution only).

    - **Northern BC**: College of New Caledonia, Northern Lights College, Northwest Community College, University of Northern British Columbia

2. **Sector** – assigned for each of the sending institution and the receiving institution:

    - **Colleges and Institutes**: British Columbia Institute of Technology, Camosun College, College of New Caledonia, College of the Rockies, Douglas College, Nicola Valley Institute of Technology, Northern Lights College, Northwest Community College, Justice Institute of BC, Okanagan College, Selkirk College, Langara College, North Island College, Vancouver Community College

    - **Teaching-Intensive Universities**: Capilano University, Emily Carr University of Art and Design, Kwantlen Polytechnic University, Royal Roads University, Thompson Rivers University, University of the Fraser Valley, Vancouver Island University

    - **Research-Intensive Universities**: Simon Fraser University, University of British Columbia (sending institution only), University of Northern British Columbia, University of Victoria

3. **Original Goal** – a composite variable constructed from responses to two questions from the Survey of Movers:

    - *"Thinking back to when you first started your studies at [Original Institution], what were your main goals for enrolling?";*
    - *"Of your top three goals for enrolling at [Original Institution] what was your MOST IMPORTANT goal?"*

The former question allowed for up to three responses. The 11 substantive response categories, common across both questions, were regrouped into five categories described as follows:

- **Complete**: 'Complete a credential at this institution'
- **Prepare**: 'Prepare to transfer to another institution', 'Prepare for graduate school', 'Prepare for a professional career', 'Prepare for a career change' and 'To enroll in courses you needed'.
- **Skills**: 'Improve existing job skills', 'Learn new job skills' and 'Improve basic skills'
- **Program**: 'Pursue a specific program you wanted'
- **Other Reason**: 'Personal interest in selected courses' and 'Other'

4. Destination Goal – a composite variable constructed from responses to two questions from the Survey of Movers:

- "*What were your main goals for moving to [Fall 2011 institution]?*";
- "*Of your top three goals for moving to [Fall 2011 institution] what was your MOST IMPORTANT goal*?"

The former question allowed for up to three responses. The 11 substantive response categories, common across both questions, were regrouped into five categories described as follows:

- **Complete**: 'Complete a credential at this institution'
- **Prepare**: 'Prepare to transfer to another institution', 'Prepare for graduate school', 'Prepare for a professional career', 'Prepare for a career change' and 'To enroll in courses you needed'.
- **Skills**: 'Improve existing job skills', 'Learn new job skills' and 'Improve basic skills'
- **Program**: 'Pursue a specific program you wanted'
- **Other Reason**: 'Personal interest in selected courses' and 'Other'

5. Reasons for Leaving - a composite variable constructed from responses to the following question from the Survey of Movers:

"*What were your main reasons for leaving [Original institution]?"*

Respondents were encouraged to select up to three reasons. The 15 substantive responses were regrouped into four categories described as follows:

- **Ready**: 'Intended to leave all along'; 'Completed all the credits you needed'; and 'Got admitted to a better institution'.
- **Discordant**: 'Not enough course variety offered'; 'Poor quality instruction'; 'Could not cope with academic requirements', 'Poor student support services'; 'Poor financial incentives to stay; and, 'Parents wanted you to leave'.
- **Changed:** 'Changed your mind about your program'

6. **Choosing** the Receiving Institution – a composite variable constructed from responses to the following question from the Survey of Movers:

"What were your main reasons for choosing [Fall 2011 institution] over other institutions?"

Respondents were encouraged to select up to three reasons. The original 9 substantive response categories have been regrouped into five categories, as follows:

- **Program**: 'Availability of programs or courses you wanted'
- **Reputation**: 'Reputation of the institution' and 'Reputation of the program'
- **Supporting:** 'Availability of a scholarship, bursary, or award'; 'Strong co-op program'; and 'Personal circumstances (e.g. health, family)'.
- **Connecting**: 'Smaller classes'; 'Campus life opportunities'; and, 'Convenient location (close to home or short commute')
- **Other**: 'Other'

7. **Dissatisfaction with Transfer -** If respondents answered a question about satisfaction with the over all experience of transferring credits with either 'Somewhat dissatisfied' or 'Very dissatisfied, they were asked a follow-up question:

"*What were the reasons you were dissatisfied with your overall experience of transferring credits?"*

Dissatisfaction with Transfer has been regrouped into three categories from the original 7 responses as follows:

- **Admissions**: 'You didn't get into the program you wanted' and 'You didn't get into the courses you wanted'.
- **Transfer**: 'You didn't get the transfer credit you expected'; 'The way the grades for your transfer courses were calculated at [Fall 2011 institution]'; 'You sought transfer information but didn't get the information you needed'; 'The transfer process was difficult to understand'; and 'The courses you took at [Original Institution] were not in the BC Transfer Guide'.
- Other: Other

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