



Environmental Scan

In Support of the Strategic Plan

Institutional Research and Planning

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2015

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EXECUTIVE SUMMARY

Camosun College is currently developing a new Strategic Plan. This *Environmental Scan* supports the process by providing a compilation of data and analysis in three general areas: demographic trends; economic trends; and trends in post-secondary education. This Executive Summary will provide a brief summary of each of the three sections. The body of the report contains the full analysis and corresponding data in graphs or tables.

DEMOGRAPHIC TRENDS

In the 2014/15 Academic Year, Camosun welcomed over 18,000 learners. For comparability to other institutions on Vancouver Island, data from the 2013/14 Academic Year indicated that Camosun College's student headcount was 18,400 students, the University of Victoria had a headcount of 23,502, Vancouver Island University served 16,958, Royal Roads University served 3,627 students and North Island College had a headcount of 8,829.

The population of the Camosun region is expected to grow at approximately the same pace as the province overall (1.1% per year and 1.2% per year respectively). The group aged 15-29 in the Camosun region is expected to decline by 0.3% per year, compared to a 0.4% average annual decline for this age group in the province as a whole.

We draw most of our students from the four local school districts, which make up the Camosun College region, a region used for statistical reporting purposes by BC Stats, including – Greater Victoria, Sooke, Saanich and Gulf Islands. The number of Grade 12 students in these districts is projected to drop until 2019, however from that year forward, the number of students is projected to increase.

Roughly half of Camosun students are female; however, there are significant differences in certain schools. The percentage of males is higher in Trades and Technologies (88%) while the percentage of females is higher in Health and Human Services (84%). Overall, the median age of students in regular programming is 22.5; the oldest students by median age were in Health and Human Services (24.2) and Business (24.1), while the youngest are in Arts and Science (20.8) and the Centre for Sport and Exercise (22.1).

Data from the 2011 National Household Survey by Statistics Canada indicated that 6.6% of the population in regions associated with Vancouver Island reported that they were Aboriginal. In 2013-14, 6.2% of Camosun College students were Aboriginal. The number of Aboriginal students at Camosun College increased from 690 in 2004/05 to 1,121 in 2013/14.

In 2014/15 Camosun welcomed over 1,500 International students from more than 70 countries, an increase of 139% in the past three years. The top five source countries for International Students in the 2014/15 Academic Year were: China, India, Saudi Arabia, Japan and Brazil.

ECONOMIC TRENDS

When the estimated costs of the construction projects associated with the Major Projects Inventory are examined by the development region and not treated on a year by year basis, but as cumulative function, it is apparent that the majority of activity will be in the North Coast region. The more populous areas trail behind the North Coast region led by the Vancouver Island/Coastal region and is followed by the Northeast region.

The unemployment rates of those working aged (25-54 years) individuals of the province, has dropped for four consecutive years. The unemployment rate reached its apex in 2010 at 6.8 percent—just one tenth of a percentage point below the national average.

When viewed over a seven year window (2008-2014) participation, employment and unemployment rates haven't made a large improvement relative to their post economic down turn rates of 2008.

As an export based economy, BC is largely reliant on the exportation of energy products, and forestry products as they accounted for more than 4.7 billion dollars in the second quarter of 2012—this made up 59 percent of total exports in that quarter (8.1 billion dollars).

The exchange rate between CDN and USD had been relatively stable up until the second quarter of 2014 (\$1.262CDN/USD), where it increased for three consecutive years before peaking at \$1.26CDN/USD.

TRENDS IN POST-SECONDARY EDUCATION

Recent federal government announcements support access to post-secondary education, including expanding the eligibility for Low- and Middle-Income Canada Student Grants to students in short-duration programs, improvements to the Canada Student Loans Program and supports for Learners with a Disability.

Recent activities by the provincial government noteworthy to Camosun include: a spring trade mission to showcase B.C.'s diverse export market in Asia; new student aid grants to support in-demand occupations; matching trades seats to in-demand jobs; financial assistance program to support Aboriginal students; investment in shipbuilding and ship repair programs; and investing in new trades' equipment for B.C.'s students.

Data from the provincial Central Data Warehouse and Student Transitions Project provide an informative look at the student body and program breakdown of their students. Many institutions, including those on Vancouver Island, are also experiencing significant increases in their number of international students. Camosun's program mix is diversified, which allows the college to nimbly consider a variety of programming opportunities. Using the Classification of Instructional Programs (CIP) code, five program clusters had close to 10% or more of student enrolments in 2013/14: Arts and Sciences; Business and Management; Trades; Developmental; and Health.

Results from the Student Outcomes surveys of former Camosun students are high, however there are areas for improvement. Over the past five years, Camosun College students in applied programs have had lower employment rates after leaving their program when compared to other B.C. Institutions and the level of unemployment among all students is approximately the same as other B.C. Institutions. Camosun had an overall satisfaction rate that was over 90% and approximately four out of five former Camosun students reported that their program is useful in performing their job.

PART I: DEMOGRAPHIC TRENDS

REGIONAL POPULATION

- The Statistics Canada publication, *Annual Demographic Estimates*¹, indicated that the median age in British Columbia in 2015 was 42.0, and this was the fifth-highest province in Canada. Newfoundland and Labrador was the highest at 45.0 with Alberta the lowest at 36.2. To quote the report “On July 1, 2015, there was a difference of 8.8 years between the provinces with the highest median age (45.0 years in Newfoundland and Labrador) and the lowest median age (36.2 years in Alberta). In 1995, the differences between the provinces were much smaller, with the gap at 2.8 years. The highest median age that year was 35.7 years in Quebec, and the lowest at 32.9 years in Alberta”.
- For the next 10 years, total population in the Camosun College region is expected to grow at 1.1% per year, similar to the projected 1.2% growth rate for British Columbia.

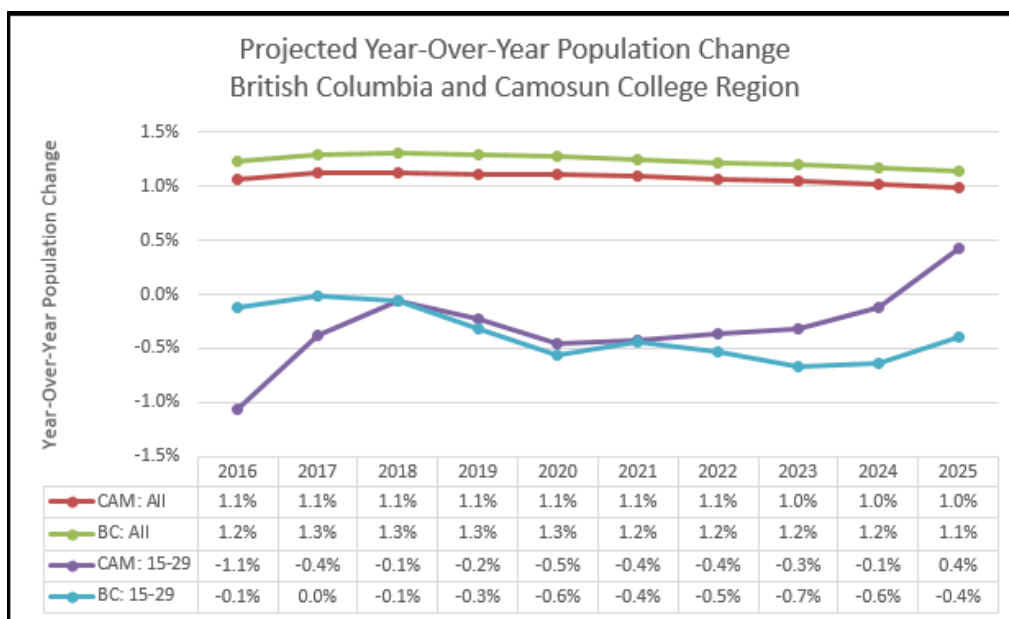
British Columbia (BC) and Camosun (CAM) Region Population, Total and Ages 15-29, 2009-2019²

| | Total | | Ages 15-29 | |
|-------------------------|-------------|-------------|--------------|--------------|
| Year | BC | CAM | BC | CAM |
| 2015 | 4,681,748 | 377,535 | 903,016 | 70,465 |
| 2016 | 4,739,443 | 381,547 | 901,899 | 69,720 |
| 2017 | 4,800,917 | 385,836 | 901,752 | 69,454 |
| 2018 | 4,863,391 | 390,180 | 901,163 | 69,409 |
| 2019 | 4,926,167 | 394,524 | 898,347 | 69,247 |
| 2020 | 4,988,918 | 398,882 | 893,358 | 68,928 |
| 2021 | 5,051,045 | 403,215 | 889,382 | 68,632 |
| 2022 | 5,112,506 | 407,507 | 884,598 | 68,381 |
| 2023 | 5,173,587 | 411,748 | 878,637 | 68,165 |
| 2024 | 5,234,115 | 415,918 | 873,015 | 68,082 |
| 2025 | 5,294,003 | 420,006 | 869,572 | 68,367 |
| 10-yr. avg. chg. | 1.2% | 1.1% | -0.4% | -0.3% |

Source: BC Stats, Population Projections

¹ <http://www.statcan.gc.ca/pub/91-215-x/91-215-x2015000-eng.pdf>

² <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationProjections.aspx>



- Growth in the key population cohort (15 to 29 years of age) within the Camosun region is expected to decline on average 0.3% per year, compared to an average annual decline of 0.4% for the same age group across all of British Columbia.

REGIONAL K-12 POPULATION

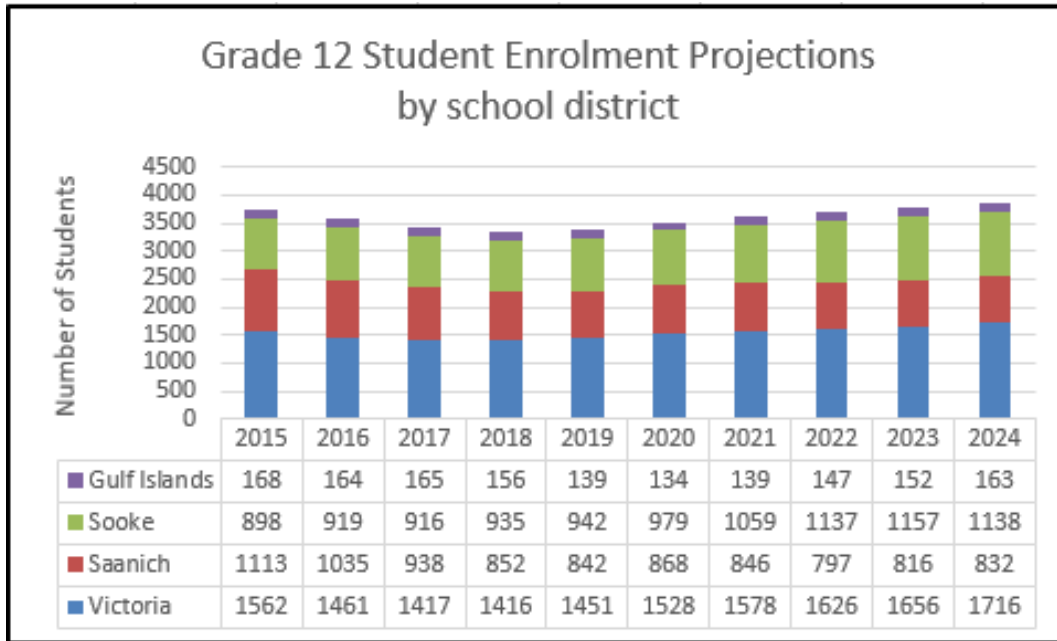
Although students from all over British Columbia and the world attend Camosun College, the Camosun College region officially comprises four public school districts from which we draw most of our students:

- 61 Greater Victoria
- 62 Sooke
- 63 Saanich and
- 64 Gulf Islands

GRADE 12 ENROLMENT PROJECTIONS³

- The number of Grade 12 students in the Camosun College region is projected to drop to 3,849 by 2024. The K-12 population as a whole is expected to behave markedly differently, as it is expected to grow by 1.2% annually to 43,466 in 2024.
- The number of Grade 12 enrolments is projected to decrease until 2019 as in that year the trend reverses and increases each year are projected.
- Grade 12 enrolment is projected to stay relatively the same in the Gulf Islands; to decrease in Saanich and increase in both Sooke and Victoria.

³ <http://www2.gov.bc.ca/assets/gov/education/administration/resource-management/capital-planning/archive/1558a-2014.pdf>



SUMMARY OF PROJECTED K-12 ENROLMENT CHANGES

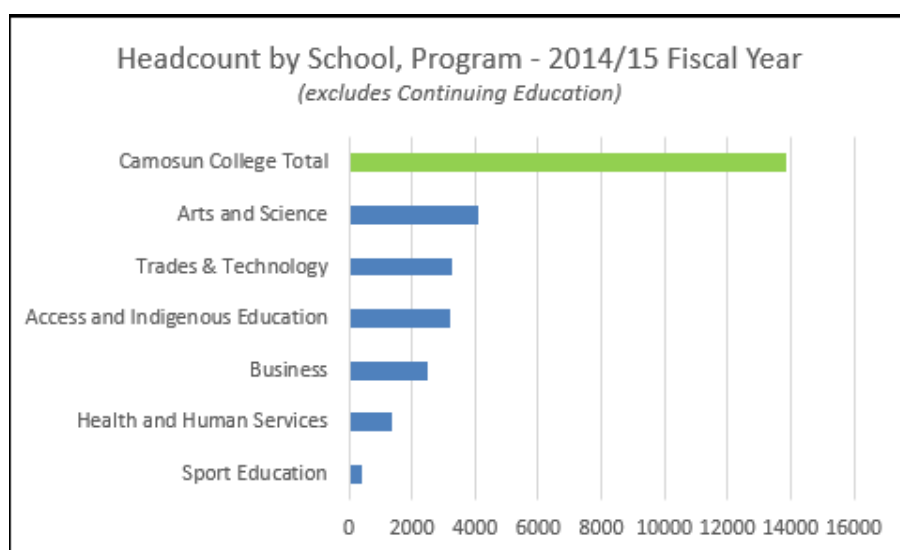
Year over Year Changes in Projected K-12 Enrolment, Camosun College Region

| Year | Grade 12 | K-12 Total |
|------|----------|------------|
| 2015 | -5.8% | 0.0% |
| 2016 | -4.3% | 0.8% |
| 2017 | -4.0% | 1.4% |
| 2018 | -2.2% | 1.4% |
| 2019 | 0.4% | 1.8% |
| 2020 | 4.0% | 1.7% |
| 2021 | 3.2% | 1.6% |
| 2022 | 2.3% | 1.4% |
| 2023 | 2.0% | 1.2% |
| 2024 | 1.8% | 1.0% |

CAMOSUN COLLEGE STUDENT DEMOGRAPHICS⁴

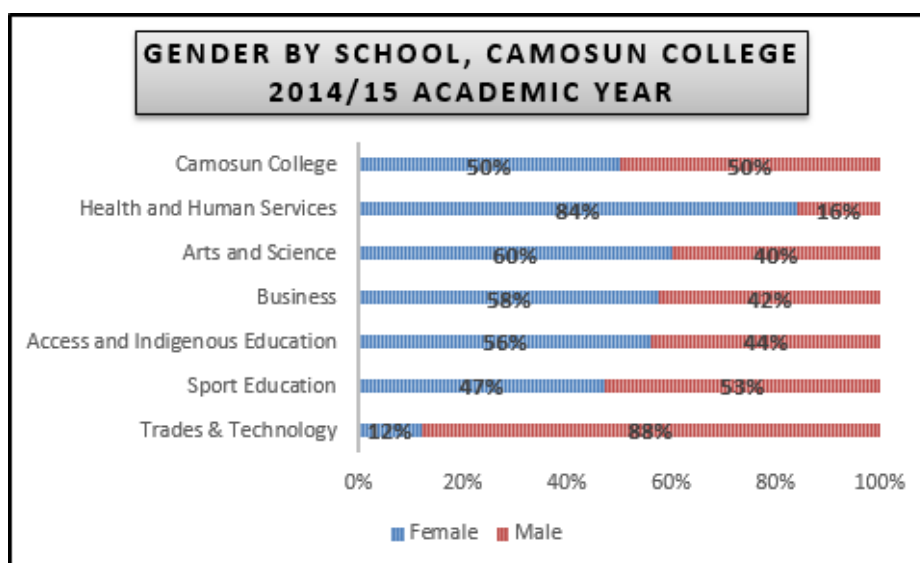
SCHOOL, AGE AND GENDER OVERVIEW

- In Fiscal Year 2014/15, Camosun College served almost 14,000 students in regular programs.
 - Based on each student's program selection, the largest number was in Arts and Science (4,109), followed by Trades and Technology (3,265), Access and Indigenous Education (3,222), Business (2,512), Health and Human Services (1,349), and the Centre for Sport and Exercise (397).



Note: Students can be enrolled in more than one School, so the total of each school is higher than the overall headcount for the college.

- The overall Camosun College gender split is balanced, however gender remains highly correlated by program as noted in the following graph:



⁴ <http://camosun.ca/about/institutional-research/reports/fte-headcount-enrolment.html>

In 2014/15 the overall median age of all students was 23.8 years.

- The median age of students in regular programming is 22.5; the oldest students by median age were in Health and Human Services (24.2) and Business (24.1), while the youngest are in Arts and Science (20.8) and the Centre for Sport and Exercise (22.1).
- The following two tables provide the median age and average age for students in regular programming (excluding continuing education):

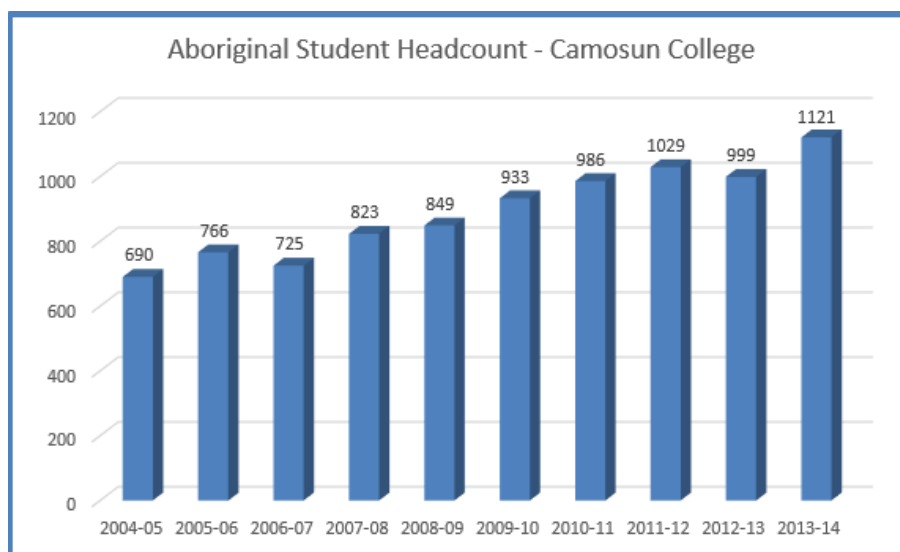
| Median Age (excludes continuing education) | | | | | |
|--|---------|---------|---------|---------|---------|
| School | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
| Access | 23.3 | 24.1 | 23.8 | 23.3 | 23.1 |
| Arts and Science | 21.4 | 21.4 | 21.2 | 21.0 | 20.8 |
| Business | 24.4 | 24.3 | 24.4 | 24.4 | 24.1 |
| Health and Human Services | 24.3 | 24.3 | 24.5 | 24.7 | 24.2 |
| Sport and Exercise | 21.7 | 22.0 | 21.9 | 21.8 | 22.1 |
| Trades and Technology | 24.6 | 24.3 | 23.7 | 23.6 | 23.5 |

| Average Age (excludes continuing education) | | | | | |
|---|---------|---------|---------|---------|---------|
| School | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
| Access | 27.0 | 27.9 | 27.9 | 27.1 | 27.4 |
| Arts and Science | 23.5 | 23.4 | 23.4 | 23.1 | 22.8 |
| Business | 27.4 | 27.0 | 27.1 | 27.1 | 26.7 |
| Health and Human Services | 27.9 | 27.6 | 27.6 | 27.8 | 27.4 |
| Sport and Exercise | 22.6 | 23.1 | 22.8 | 22.9 | 23.0 |
| Trades and Technology | 26.7 | 26.7 | 26.3 | 26.1 | 25.8 |

ABORIGINAL STUDENTS

- Data from the 2011 National Household Survey by Statistics Canada indicated that 6.6% of the population in regions associated with Vancouver Island reported that they were Aboriginal. In 2013-14, 6.2% of Camosun College students were Aboriginal.
- The number of Aboriginal students at Camosun College increased from 690 in 2004/05 to 1,121 in 2013/14.⁵

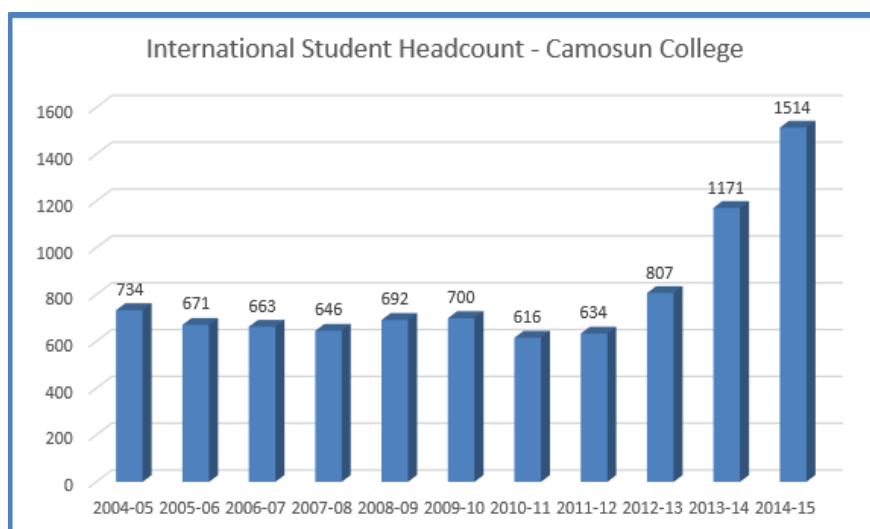
⁵ <http://camosun.ca/about/institutional-research/reports/accountability-report.html>



- The proportion of Aboriginal Students also increased between 2009/10 to 2013/14, moving from 4.9% to 6.2%.
- Aboriginal students at Camosun are generally younger than non-Aboriginal students. In 2013/14, nearly three-quarters (73%) of Aboriginal students were under 30, compared to less than two-thirds (65%) of non-Aboriginal students.

INTERNATIONAL STUDENTS

- In 2014/15 Camosun welcomed over 1,500 International students from more than 70 countries, an increase of 139% in the past three years.
- The top five source countries for International Students in the 2014/15 Academic Year were: China, India, Saudi Arabia, Japan and Brazil.



PART II: ECONOMIC TRENDS

ECONOMIC IMPACT STUDY⁶

A few years ago, Camosun contracted an independent company to conduct an economic impact study on the college's operations. This study uses a variety of economic analysis techniques to demonstrate the full range of economic and social impacts resulting from the educational investment and other services provided by Camosun College. These impacts are clearly delineated as economic and social impacts (as well as the impacts associated with the export of services) on individual students and local communities and the province as a whole.

- Through curriculum and applied research activities combined with employee, student and college spending, Camosun has a total economic impact each year of over: \$900 million regionally and \$1 billion provincially.
- For every government dollar invested, Camosun returns \$5 of taxpayer financial support.
- Camosun students enjoy a 15% annual rate of return on their educational investment – and recover all costs within 9 years.
- British Columbia saves \$4.2 million annually in avoided health care, unemployment, welfare and criminal justice costs because of Camosun-educated students.

MARKET OVERVIEW

An analysis of the provincial labour markets, exports and exchange rates, both historical and projections provided by the province of BC, provide some interesting insights:

- The province's participation rate has remained below the national average over the past seven years; indicating that fewer individuals, proportionally, are interested in acquiring employment in BC.
- The rate of employment in the province has also remained below the national average over the horizon of the analysis. This suggests that we have a lower rate of individuals out of the working age population actively acquiring employment.
- The unemployment rate of those working age individuals in BC was slightly below the provincial average from 2008-2014, inclusive.
- BC is primarily an exporter of forestry products and energy products and the level of these exports is still near the economic downturn of 2008 levels.
- The province has a large number of major projects planned in the upcoming years. This adds to the projected strength of the construction industry in the future and has implications on trades training today.
- Our currency has a depreciated relative to the currency of our major trading partners; this allows for a stronger export based economy in the near future, due to domestic goods becoming more desirable to our partners.

As a result of the analysis, it appears that the provincial markets are still building back from the downturn of 2008, but are relatively healthy. This suggests that the potential for catching a boom in the province is likely with continued efforts in education and training, yielding a workforce that can position BC as a national strength.

⁶ http://camosun.ca/about/economic-impact-2013/FINAL_Camosun-Economic-Contribution-2013.pdf

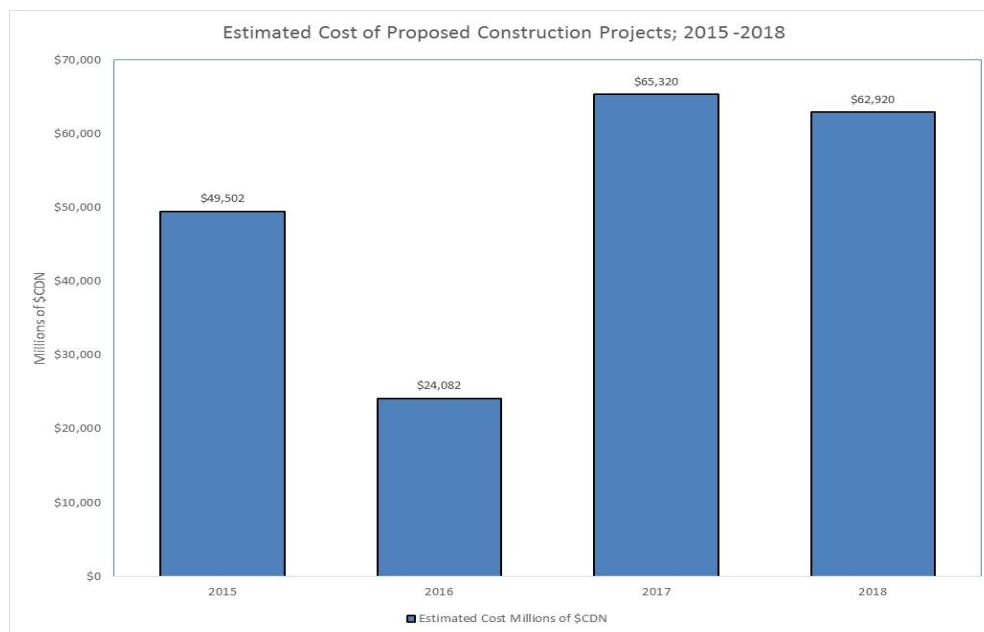
MAJOR PROJECTS INVENTORY

As demonstrated by figure 1, the construction industry is expected to continue growth. A large contributing factor to this is the major projects that are being proposed by the government. These are the largest construction projects that are expected or being considered in the province, while domestic construction is large but any one house pales in comparison to the value of any one of the major projects. The major projects inventory has consistent data highlighting potential projects and projects that are underway to 2018. In each of these years we find that there is a leading project with the greatest estimated cost:

- In 2015, the proposed liquid natural gas plant located on Lelu Island is estimated to cost 11 billion dollars.
- In 2016, the proposed liquid natural gas plant located on Ridley Island is estimated to cost 10 billion dollars.
- In 2017, the proposed oil refinery 25km North of Kitimat is estimated to cost 32 billion dollars.
- In 2018, the proposed liquid natural gas facility located in Sarita Bay, 70km Southwest of Port Alberni is estimated to cost 30 billion dollars.

The numbers suggest that a large proportion of the major projects are linked to the government's liquid natural gas (LNG) plans. Given this the actual boost to the construction industry in the future is largely a function of the actual completion of the LNG projects in the province.

Figure 1: Estimated construction costs of the proposed major projects in BC⁷⁸



⁷ BC Stats Major Projects Inventory: http://www2.gov.bc.ca/assets/gov/employment-business-and-economic-development/economic-development/industry/mpi/mpi-2015/searchfieldsmajorprojectsinventory_mar20152.xlsx

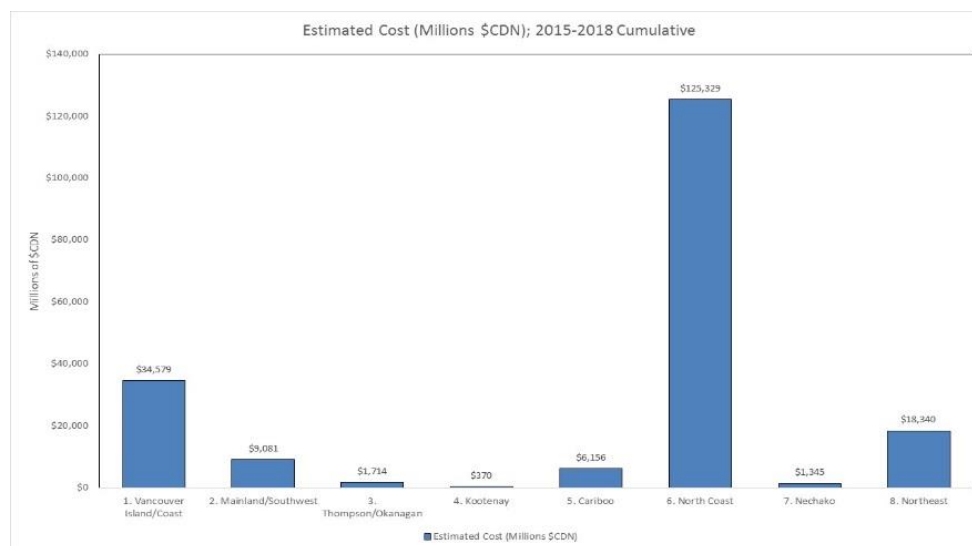
⁸ Note: The costs represent the cost over the life of the project, but attributed to the proposed start date.

When the estimated costs of the construction projects associated with the Major Projects Inventory are examined by the development region and not treated on a year by year basis, but as cumulative function, it is apparent that the majority of activity will be in the North Coast region. The more populous areas trail behind the North Coast region led by the Vancouver Island/Coastal region and is followed by the Northeast region. When exploring each region's list of projects a few highlights are noted:

- The largest project in the Vancouver Island/Coast region is the previously mentioned Sarita Bay LNG facility, valued at 30 billion dollars.
- In the Mainland/Southwest region has a proposal for Garibaldi at Squamish Ski Resort, the first non-LNG based project noted, is estimated at nearly 3 billion dollars.
- The Thompson/Okanagan region's largest proposed major project is a metal ore mining project in the Harper Creek area. The project is estimated to cost 840 million dollars.
- The largest proposed project in the Kootenay region is the Crown Mountain Coking Coal Project, in the East Kootenay region (Sparwood), valued at 370 million dollars.
- The Trans Mountain Pipeline Expansion project in the Cariboo region, leads the way, estimated at a construction cost of 5.4 billion dollars.
- The previously noted Kitimat Clean Oil Refinery and Pipeline is the North Coast region's largest proposed project. It is estimated to cost 32 billion dollars, over the life of the project, demonstrating the massive costs associated with the LNG development in the province.
- In the Nechako development region the largest proposed project is in the resource extraction industry. The Turnagain Nickel Project is projected to cost 1.3 billion dollars.
- Finally, in the Northeast region, the smallest of development regions, the largest cost-based project, is the Site C Clean Energy Project. This undertaking is valued at 8.4 billion dollars.

In the previous analysis, it appeared as if the only projects of interest are LNG based. However, when dissecting the numbers by region a few interesting things emerge. The first being that natural resource extraction, in the form of ore mining, are the largest projects in Kootenay and Thompson/Okanagan regions. The LNG projects continue to represent the largest portion of construction costs in the province, showing the dependence on natural resources, but Ski Resort project demonstrates the reliance on tourism to maintain BC's economy.

Figure 2: Estimated construction costs of the proposed and confirmed major projects in BC by Region⁹



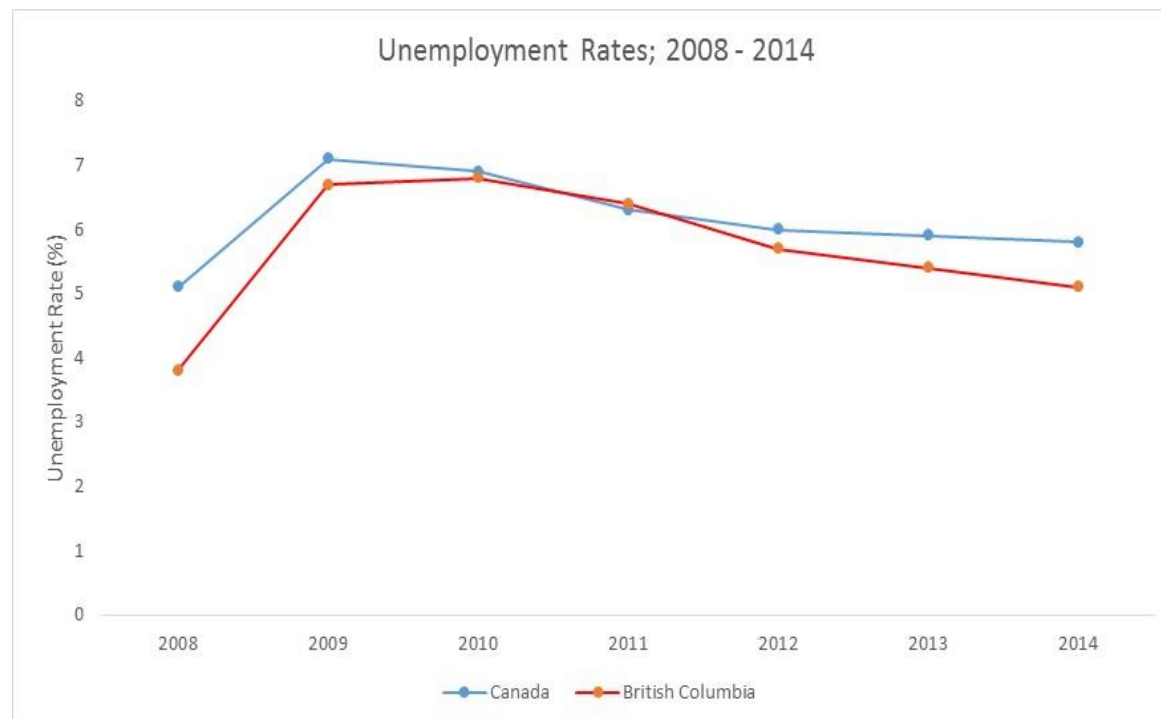
⁹ The Economic Development Regions:

<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Geography/ReferenceMaps/DRs.aspx>

BC's economy grew minimally in 2008 (0.2%), then declined by 1.8% in 2009. The current government forecast is for 3.1% growth in 2010 and 2.2% growth in 2011; this will be revised for the 2011 provincial budget.

LABOUR MARKET

Figure 3: Historical Unemployment Rates; 2008-2014¹⁰; 25-54 Years



The unemployment rates¹¹ of those working aged (25-54 years) individuals of the province, has dropped for four consecutive years. The unemployment rate reached its apex in 2010 at 6.8 percent—just one tenth of a percentage point below the national average. In the next year, although falling from the province's previous rate, the ratio of those unemployed to the labour force in BC was higher at 6.4 percent than the national average at 6.3 percent. For the remaining years of the horizon BC's unemployment rate fell below and remained below the national average. The gap between the two rates continued to widen until 2014 when provincial rate (5.1%) fell 0.6 percentage points below the national number (5.8%). From a market perspective the continued fall in the provincial unemployment rate should be generally be treated as a good sign, but must be weighed against more labour market indicators.

An analysis of the employment rate¹² trends of BC and the nation indicate that parts of the provincial labour market are improving as a whole and improving faster than the country as a whole. While the provincial rate of employment fell dramatically, from 82.1 percent in 2008, to 79.4 percent in 2009—a drop of 2.7 percentage points. Similarly, over the same horizon, the nation's employment rate fell too. However, the drop from 82.3 percent in 2008, to 80.3 percent in the next year—necessitating a change of 2.0 percentage point—demonstrated relative stability compared to BC. The provincial employment rate continued relatively unchanged for the next two years (2009-2011), while Canada's employment rate posted gains for the next four consecutive years (2009-2014). The latest data show that from in the most recent posted years the situations have reversed, with BC's employment rate increasing 0.2 percentage points to 80.3 percent employment 2014. While at the end of the

¹⁰ Cansim table 282-0002: <http://www5.statcan.gc.ca/cansim/a01?lang=eng>

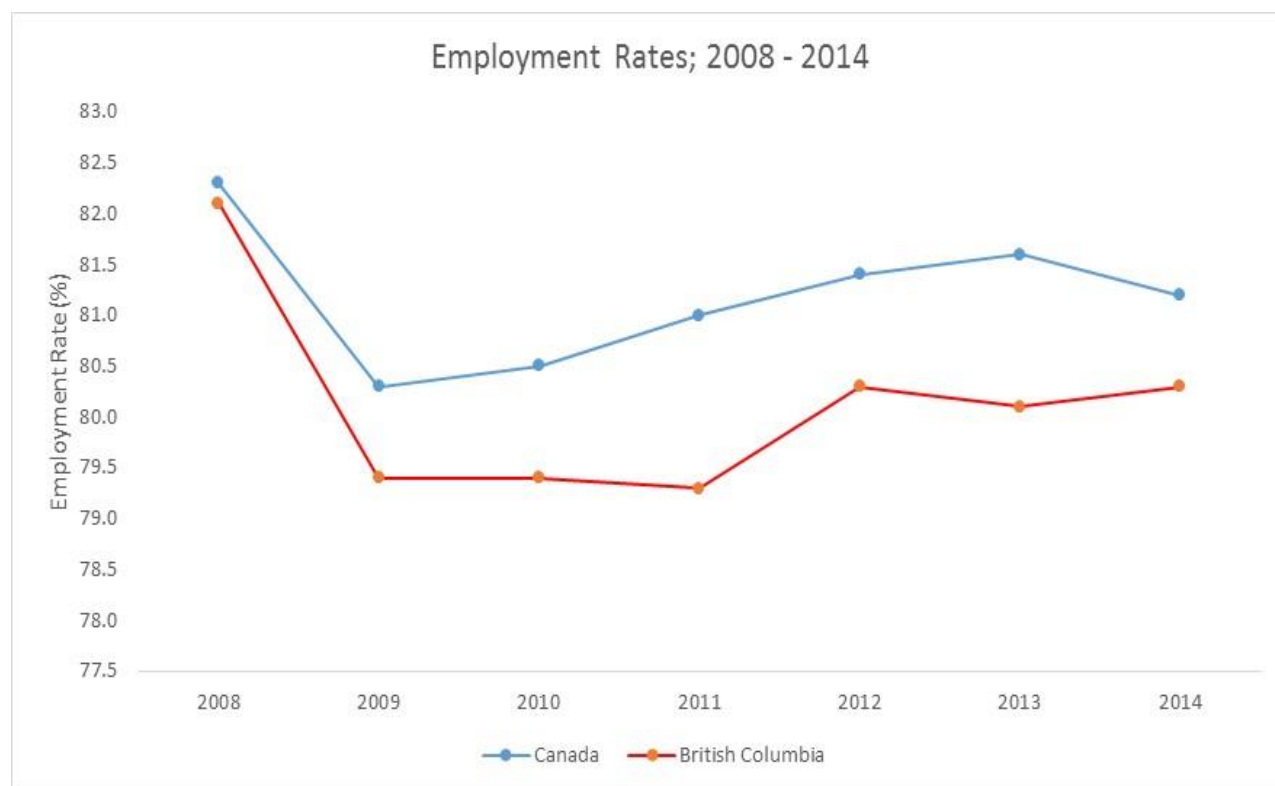
¹¹ The unemployment rate is the ratio of those unemployed individuals to the total labour force.

¹² The employment rate is the ratio of those employed to the working aged population (15+ years).

horizon, the national employment rate fell 0.4 percentage points to 81.2 percent employment to the population. It should be noted that the province's employment has remained under the national average for entire horizon of the data series.

If the data on the province's employment rate and unemployment rate and contrast it with the proceeding chart (figure 4) outlining the participation rate¹³ of nation and the province for those core working aged (25-54 years) individuals, one can begin to draw conclusions about the state of the provincial labour market. The province's participation rate has historically remained below the participation rate of the nation as a whole at 85.4 percent vs 86.7 percent in 2008, and 84.6 percent vs 86.2 percent in 2014. In addition to the low levels of participation relative to the Canadian average, BC's participation rate had also fallen in 2014, when compared to 2008. In 2008, BC had a participation rate of 85.4 percent and it slowly continued to trend down over the horizon to arrive at 84.6 percent—a drop of 0.8 percentage points. As the participation rate indicates the number of individuals trying to find employment of the working aged population, a declining rate suggests that fewer and fewer individuals are seeking employment in BC's labour market.

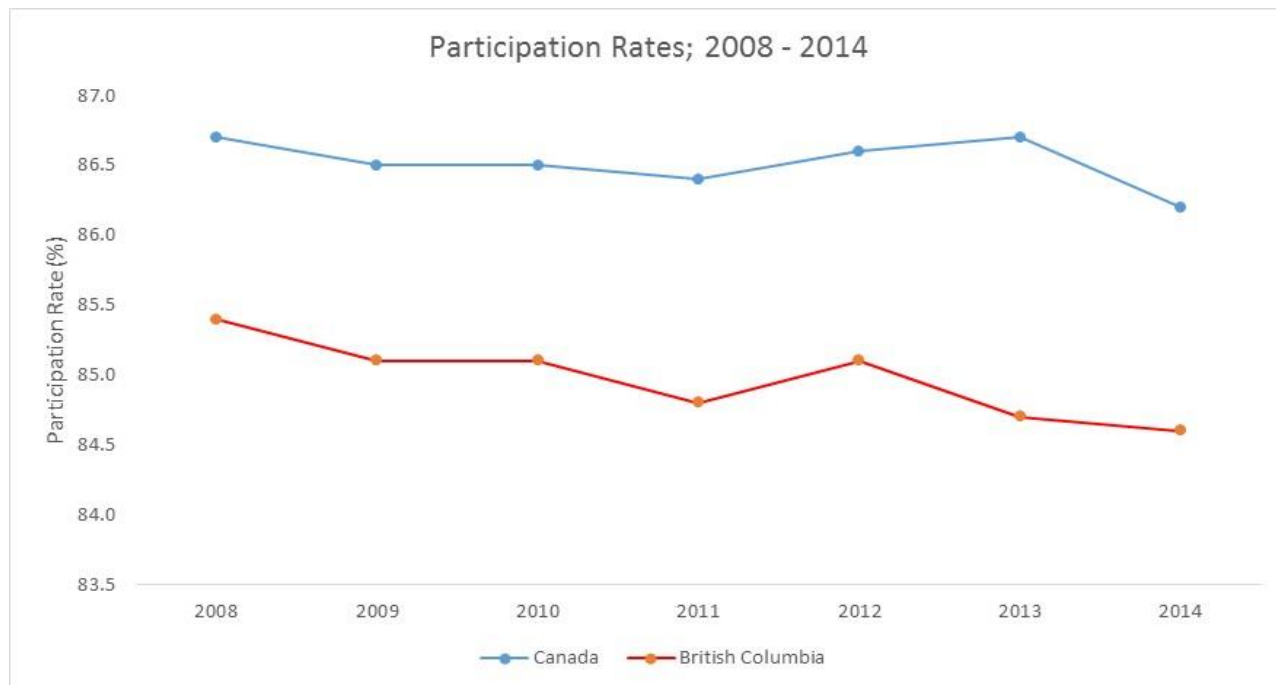
Figure 4: Historical Employment Rates; 2008-2014¹⁴; 25-54 Years



¹³ The participation rate is the ration of those in labour force to the working age population (15+ years).

¹⁴ Cansim table 282-0002: <http://www5.statcan.gc.ca/cansim/a01?lang=eng>

Figure 5: Historical Participation Rates; 2008-2014¹⁵; 25-54 Years



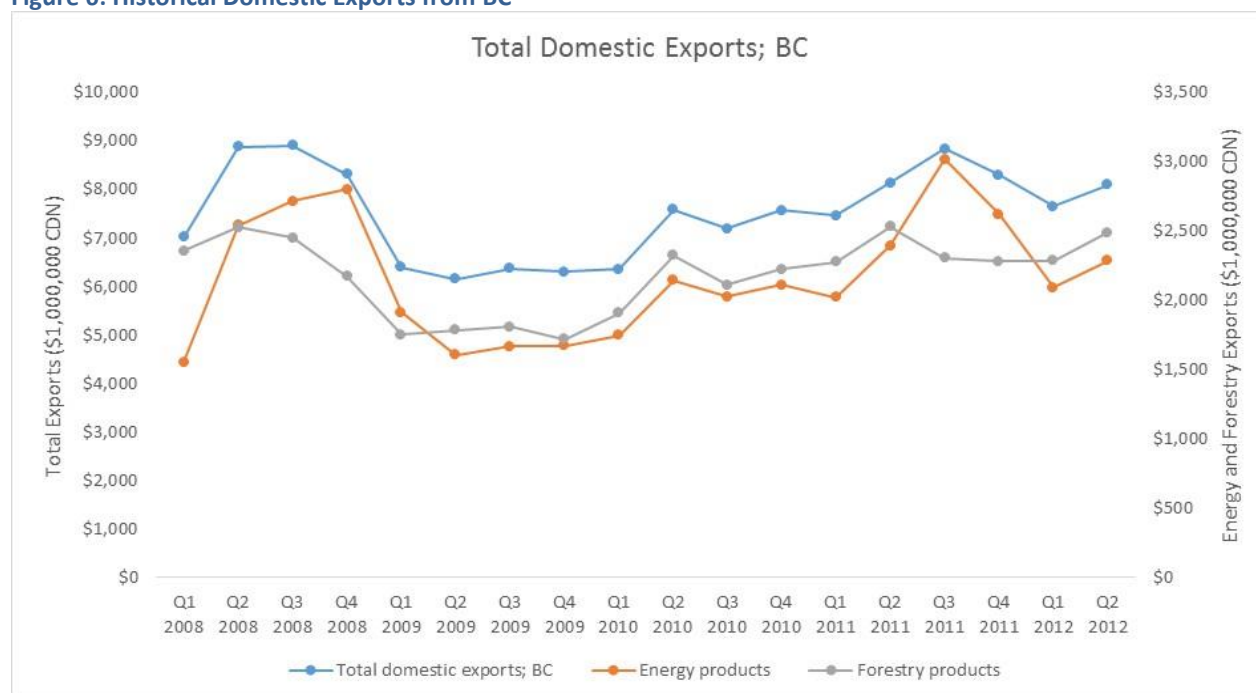
When taking into account the trends in the employment, unemployment and participation rates in the province individually, and relative to the national average a few conclusions can be provisionally drawn:

- Relative to the national average, BC's rates for employment and labour market participation were weak—indicating potential mismatches between employees and employers that appear to be more structurally pronounced.
- When viewed over a seven year window (2008-2014) participation, employment and unemployment rates haven't made large improvements relative to their post economic downturn rates (2008). This is suggestive of an economy that hasn't quite hit its stride yet after experiencing a large setback.
- The previous point indicates that there may be pockets of efficiency to be gained via proper training/education, wage matching and other devices that allow more efficient signalling between employers and employees.

¹⁵ Cansim table 282-0002: <http://www5.statcan.gc.ca/cansim/a01?lang=eng>

EXPORTS AND CURRENCY EXCHANGE

Figure 6: Historical Domestic Exports from BC¹⁶



As an export based economy, with international (21%)¹⁷ and inter-provincial (17%) trade totaling nearly 40 percent of the province's GDP in 2011, BC is largely reliant on the exportation of energy products, and forestry products as they accounted for more than 4.7 billion dollars in the second quarter of 2012—this made up 59 percent of total exports in that quarter (8.1 billion dollars). The trend illustrates a few points of interest:

- The trends of exporting the overall composite good, forestry products, and energy products have largely followed the same path in the same years.
- All of the levels of exports have returned to greater levels than posted in 2008.
- All the exports fell from their current levels moving into the first quarter of 2009, after the pressure of economic downturn started to be corrected.

As the forestry industry and energy industry are closely tied to the trades-oriented careers (forestry, heavy equipment operators, natural resource extraction technicians), the continued strength in these industries alludes to a continued need for educated and trained tradespeople.

When looking at exports it's useful to evaluate contributing factors such as the exchange rate. A lower exchange rate with a trading partner will make domestic exports look like the more attractive option, boosting domestic exports to that country. These effects act in a vacuum of sorts, as there are always competing exchanges rate any one economy based on trade. For simplicity sake the Euro, USD, and the Honk Kong dollar are examined as they

¹⁶ Cansim table 381-0015: <http://www5.statcan.gc.ca/cansim/a01?lang=eng>

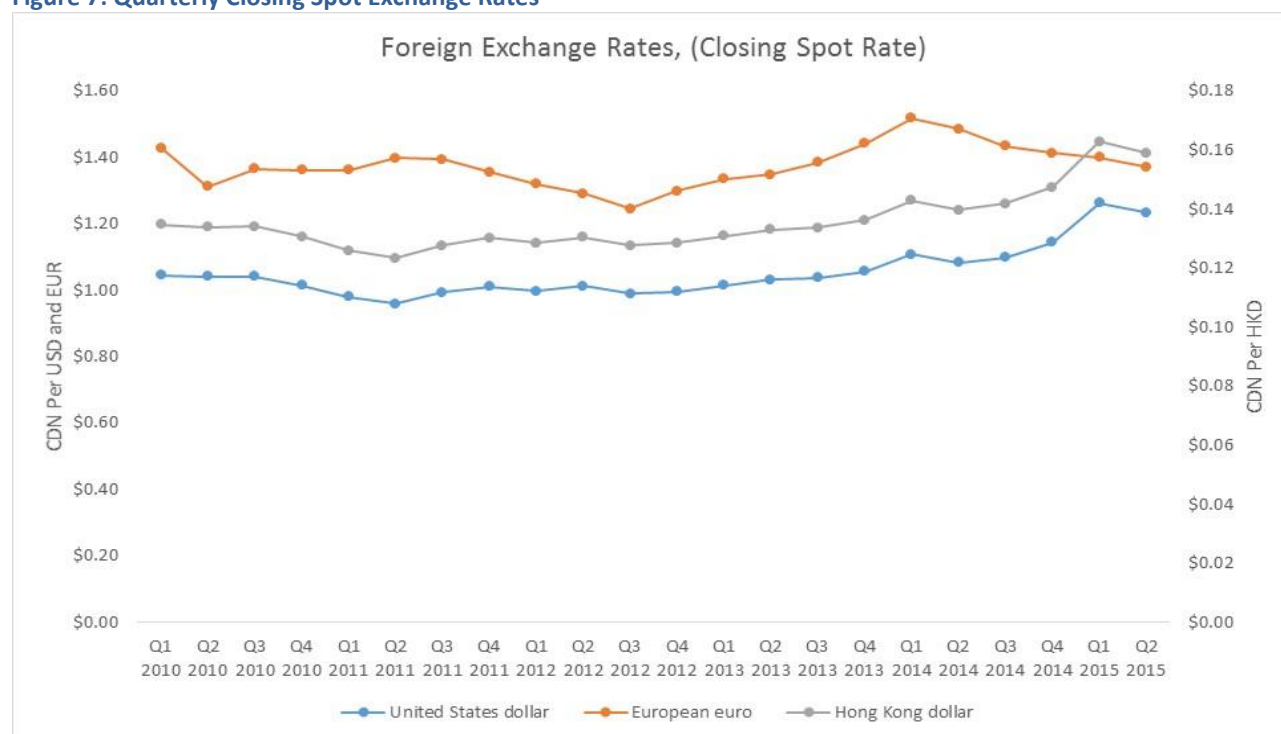
¹⁷ Cansim table 381-0029: <http://www5.statcan.gc.ca/cansim/a01?lang=eng>

constitute the majority of Canada's trading activity. The closing quarterly spot exchange rate¹⁸ will be used as a metric. A brief analysis offers up a few points of interest:

- The exchange rate between the CDN and USD had been relatively stable up until the second quarter of 2014 (\$1.082CDN/USD), where it increased for three consecutive years where it peaked at \$1.262CDN/USD—the highest it'd been in the past five years.
- The trend between the USD and HKD exchange rates relative to the CDN move in an almost identical fashion, illustrating the efficiency of the linked exchange rate regime implemented by the Hong Kong Monetary Authority.
- The exchange rate of the Euro relative to the CDN is more volatile than the CDN/USD, posting much larger shifts in the rate (quarter/quarter frequency).
- Interestingly, the CDN/EUR exchange rate often moved in the opposite direction of the trend in the CDN/USD. This potentially highlights the competitive nature of the European market and the American market, relative to Canada's position in the global economy.

Given that the foreign currencies are appreciating relative to the CDN, Canada is in a position to potentially increase trade and specifically net exports to other markets. As Canada primarily exports energy and forestry products, the gains to trade should generally be acquired in those industries. With energy the components will be guided by other market forces as well. For example, although it is cheaper for foreign markets to purchase energy from Canada, oil is at a low right now, making it less desirable for Canada to sell oil, but may substitute towards coal.

Figure 7: Quarterly Closing Spot Exchange Rates¹⁹



¹⁸ The spot exchange rate here is defined as what you would get that moment exchanging currency. The quarterly frequency is an average.

¹⁹ Cansim table 176-0064: <http://www5.statcan.gc.ca/cansim/a01?lang=eng>

PROVINCIAL OCCUPATIONAL OUTLOOK

The province has commissioned an occupation forecasting model to estimate the future labour market pressures from an occupational lens. One of the results of the model was the projected top 20 occupations requiring some level of post-secondary training, meaning the 20 occupations anticipated to have the highest unmet demand over the forecast horizon (2012-2022). The results are illustrated in the following table (1).

Table 1: Top 20 Occupations That Require Post-Secondary Training²⁰

| Top 20 occupations | How Camosun responds with direct or transferrable programs |
|--|---|
| Administrative assistants | Certificate in Office Administration |
| Administrative officers | Bachelor's Degree in Business Administration (BBA) |
| Carpenters | Apprenticeship Carpentry, Carpentry Foundations |
| Financial auditors and accountants | BBA - includes Accounting major |
| Accounting technicians and bookkeepers | BBA - includes Accounting major |
| Social and community service workers | Diploma in Community, Family & Child Studies |
| Early childhood educators and assistants | Diploma in Early Learning and Care |
| Construction managers | School of Business and School of Trades and Technology programs |
| Electricians | Apprenticeship Electrician, Electrical Foundations |
| Restaurant and food service managers | Diploma in Hospitality Management |
| College and other vocational instructors | M. Ed. in conjunction with SFU; instructional skills training |
| Welders and related machine operators | Apprenticeship Welding, Welding Foundations |
| Property administrators | Post-degree diploma in Business Administration |
| Lawyers | University Transfer for year 1 and 2 of a degree; Business Administration degree |
| Steamfitters, pipefitters and sprinkler system installers | Apprenticeship Steam / Pipefitter, Plumbing and Pipe Trades Foundation |
| Construction millwrights and industrial mechanics | Heavy Mechanical Trades Foundation |
| University professors and lecturers | M. Ed. in conjunction with SFU; instructional skills training |
| Senior managers – construction, transportation, production and utilities | School of Business and School of Trades certificate, diploma, bachelor's degree, post-degree diplomas and project management; Technology programs and engineering bridge programs |
| Professional occupations in business management consulting | Bachelor's Degree in Business Administration (BBA) |
| Heavy-duty equipment mechanics | Heavy Mechanical Trades Foundation |

The list demonstrates that the future demands are expected to be varied from industry to industry, with a good mix of trades, administrative, professional and service-oriented occupations being represented. Although, many of the occupations require at the minimum a Bachelor's degree, Camosun is still uniquely positioned to provide a required step of the education, whether it be a transfer course in a program, or the completion of a year or more of degree training for the program (i.e., two years of nursing at Camosun towards the four year degree). From the trades' occupations perspective, Camosun is perfectly positioned to provide the education and training required to support and emerging demand for skills in the province, and abroad.

²⁰ WorkBC 2022 Labour Market Outlook: <https://www.workbc.ca/WorkBC/media/WorkBC/Documents/Docs/BC-LM-Outlook-2012-2022.pdf>

Due to demographic pressures, longer expected life-spans and other societal successes, healthcare occupations are expected to grow in demand over the horizon of the forecast. As a result of this, the province of BC has released a list of priority healthcare professions found in the proceeding table 2.

Table 2: Provincial Priority Health Professions²¹

PROVINCIAL PRIORITY HEALTH PROFESSIONS

- ▶ Audiologist
- ▶ Medical Laboratory Technologist
- ▶ Medical Radiation Technologist
- ▶ Occupational Therapist
- ▶ Physical Therapist
- ▶ Physician-General/Specialist
- ▶ Registered Nurse
- ▶ Registered Nurse – Specialty
- ▶ Speech Language Pathologist
- ▶ Ultrasonographer

With Camosun's investment in healthcare training and education, the institution is strategically positioned to be flexible and responsive to emerging market demands.

²¹ Ibid

PART III: TRENDS IN POST-SECONDARY EDUCATION

POST-SECONDARY CONTEXT

RECENT FEDERAL GOVERNMENT ANNOUNCEMENTS

- The 2015 federal budget including an initiative to enhance access to post-secondary education by expanding the eligibility for Low- and Middle-Income Canada Student Grants to students in short-duration programs.
- The federal government also improved the Canada Student Loans Program for families by reducing the expected parental contribution under the needs assessment process.
- In July 2015, The Government of Canada will provide over \$35 million over three years for 10 projects as part of its goal to help Canadians with disabilities gain the skills and experience they need to find jobs.
- The \$35 million will help more than 4,250 people with disabilities across Canada learn to obtain and maintain employment through one-on-one and group workshops, job coaching and on-the-job training.

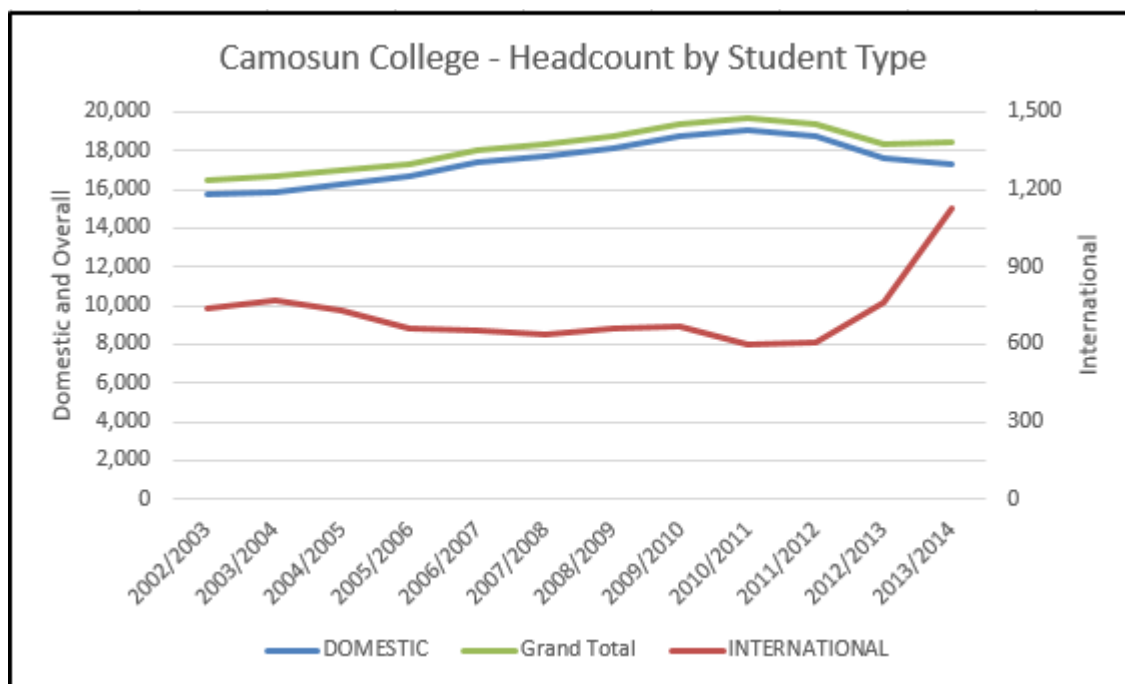
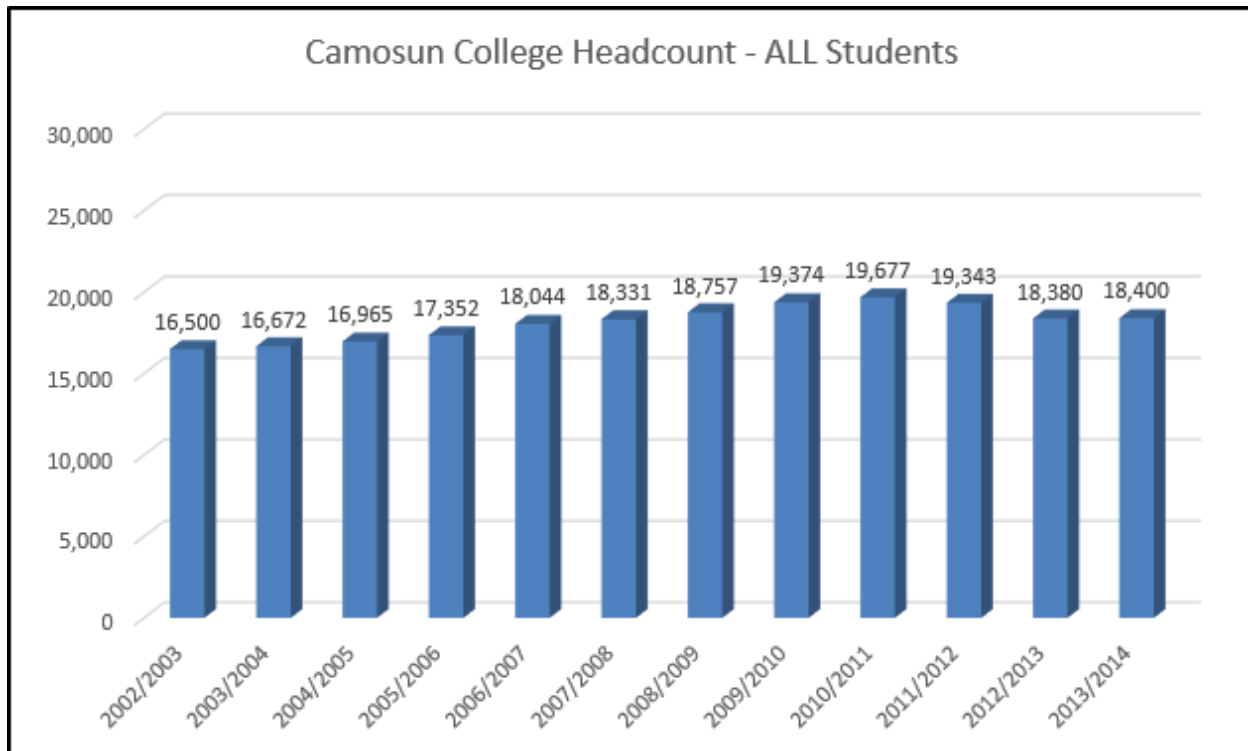
RECENT PROVINCIAL GOVERNMENT ANNOUNCEMENTS

- Spring trade missions showcase B.C.'s diverse export market in Asia – promoting exports in B.C.'s priority sectors such as digital media, education, clean technology and life sciences was the focus of upcoming spring trade missions to Asia by Minister of International Trade Teresa Wat and Minister of Advanced Education Andrew Wilkinson.
- New student aid grants support in-demand occupations – the expanded BC Loan Forgiveness Program along with the new BC Completion Grant for Graduates will help students get out of debt faster and support a strong, growing and diverse economy.
- Matching trades seats to in-demand jobs – \$6.1 million for 1,429 additional critical-trades seats in 14 public post-secondary institutions throughout the province to reduce waitlists by an average of 44% for students entering trades that are in demand by a range of industries.
- Financial assistance program supports Aboriginal students – renewed government funding of \$1.96 million enables Aboriginal students, who experience a short-term financial crisis, to access emergency assistance while attending post-secondary education and training.
- Premier Christy Clark announces investment in shipbuilding and ship repair programs – as part of B.C.'s Skills for Jobs Blueprint, the provincial government provided \$305,000 in funding for shipbuilding and ship repair training programs for students at Camosun College and the British Columbia Institute of Technology.
- Putting new trades equipment in the skilled hands of B.C. students – government invested \$12 million in 2015-16 for new trades equipment at 14 public post-secondary institutions so students planning to enter in-demand occupations learn their trade using industry-standard technology.

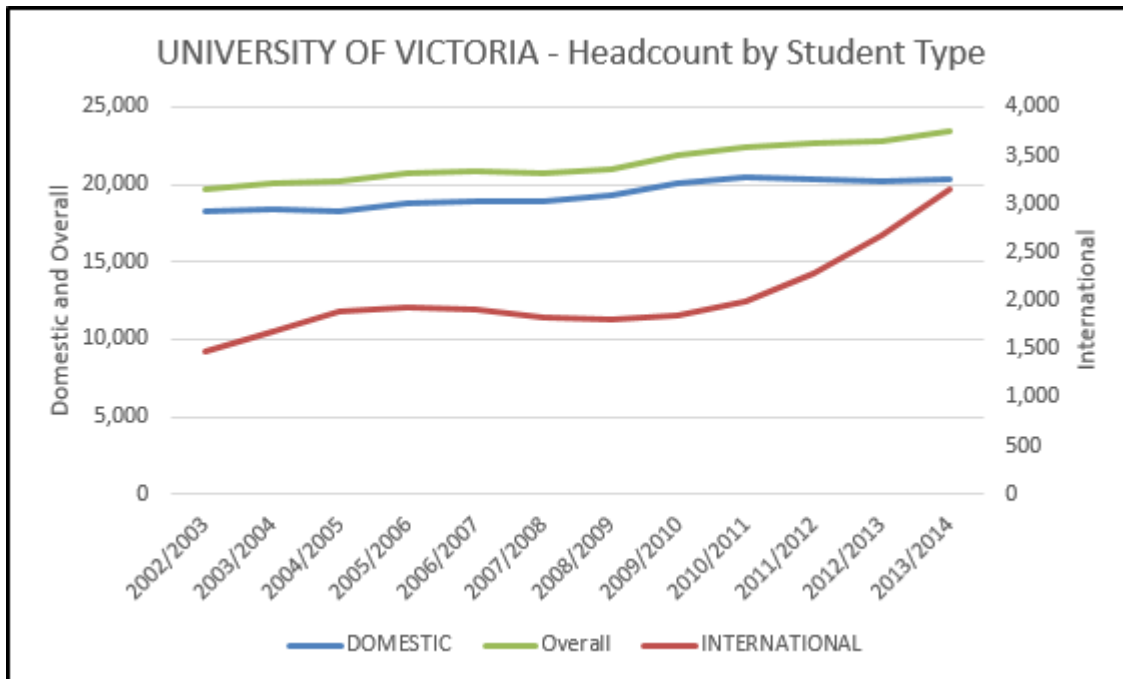
PROGRAM MIX AT BC POST-SECONDARY INSTITUTIONS

- Opportunities for educational partnerships exist and especially so with the post-secondary institutions on Vancouver Island, such as the University of Victoria.
- The following section examines the student enrolment trends and program mix for Vancouver Island post-secondary institutions plus two other comparable institutions, Douglas College and Okanagan College.
- *Note – The data in this section was obtained from the Central Data Warehouse and Student Transition Project files. Comparable data for 2014/15 for other post-secondary institutions was not available at the time of the creation of this report so the 2013/14 figures were used.*

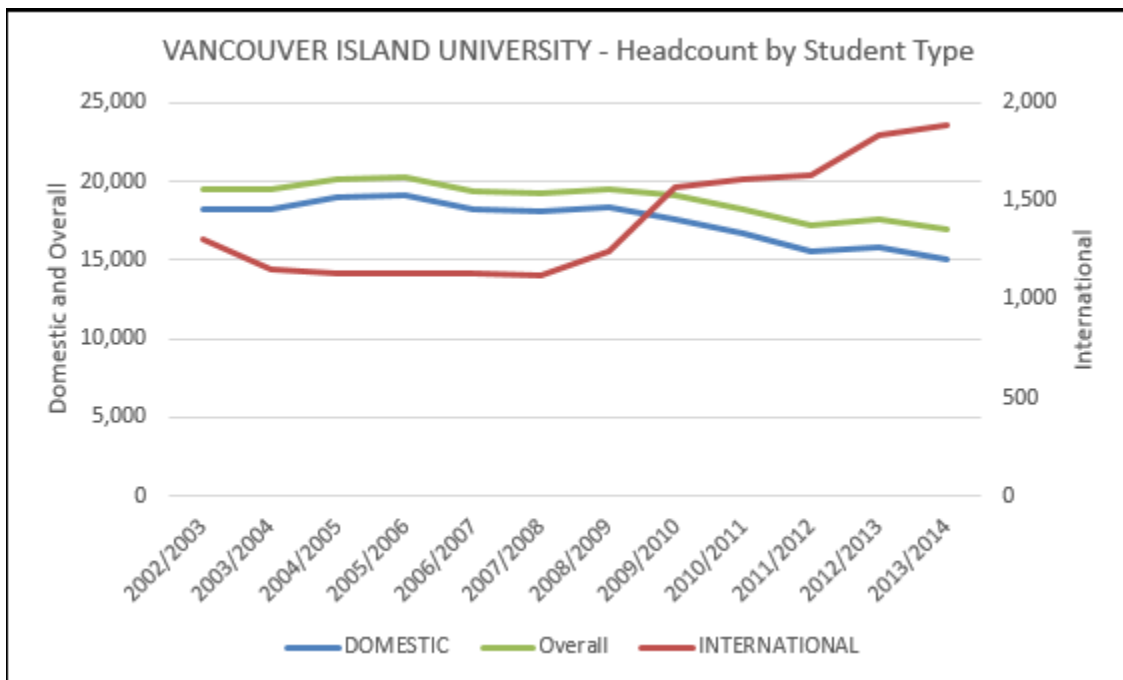
- In 2013/14, Camosun College served 18,400 students, including over 1,100 International students.



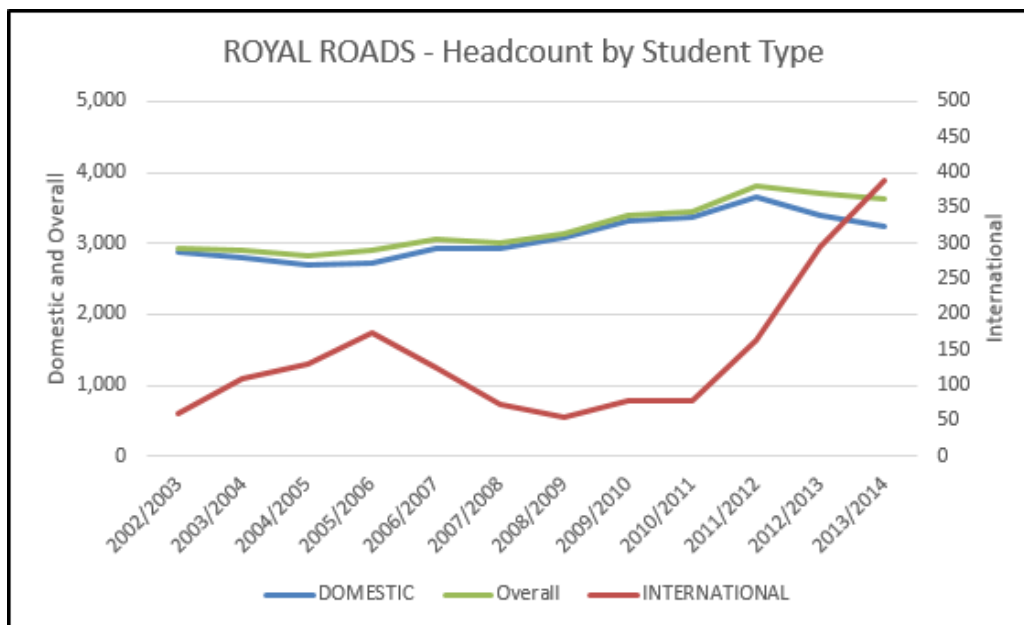
- The University of Victoria served 23,502 students in 2013/14. It has also experienced substantial increases in international students, moving from 1,992 in 2010/11 to 3,152 in 2013/14.



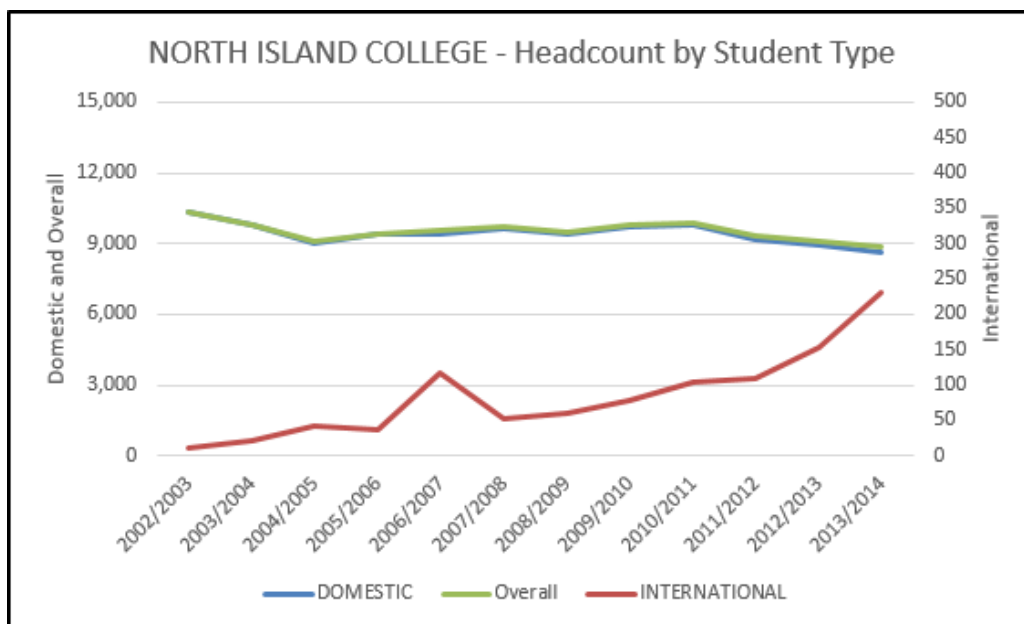
- Vancouver Island University served almost 17,000 students, including almost 1,900 international students in 2013/14.



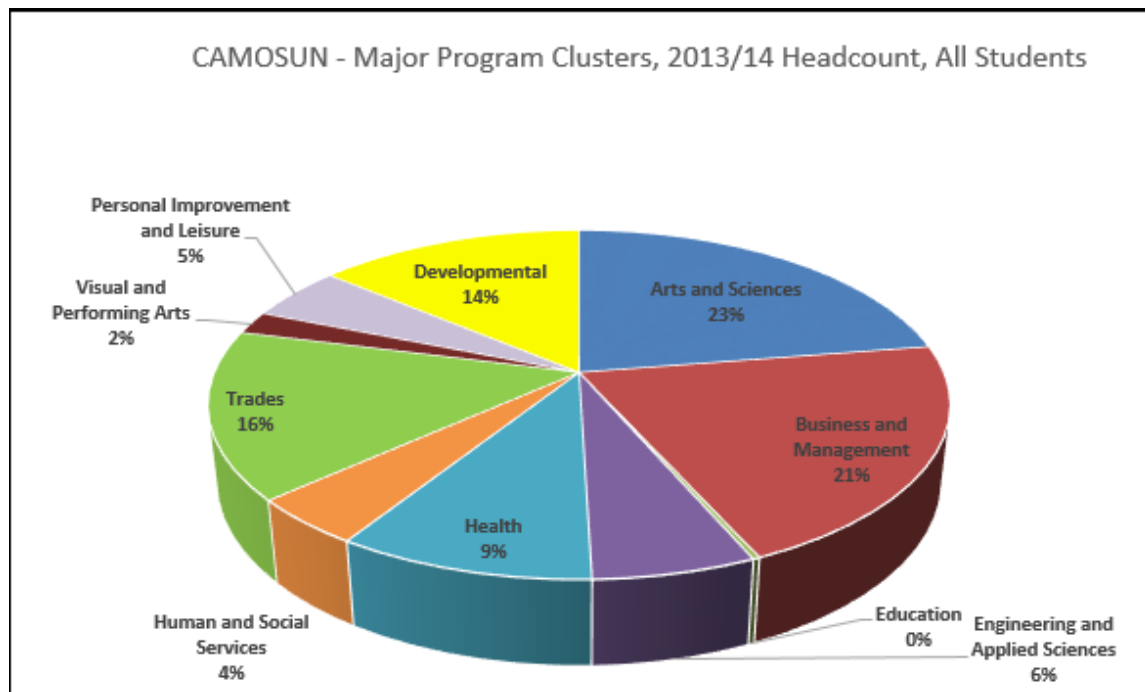
- Royal Roads University served 3,627 students in fiscal year 2009/10 (including 388 international students).



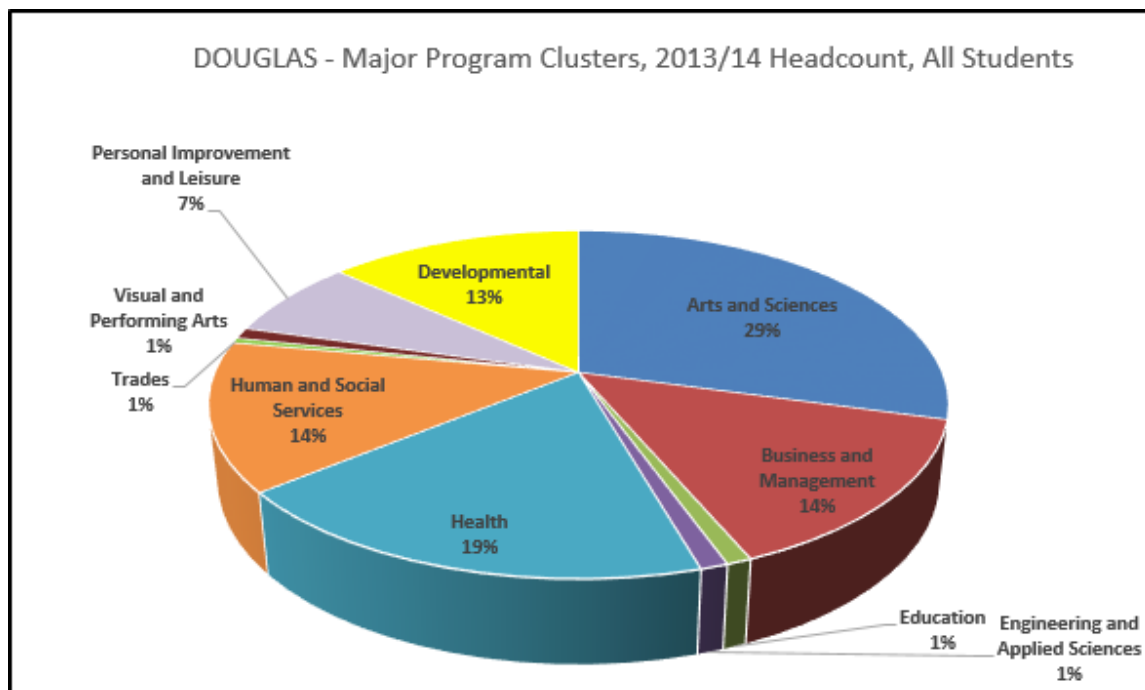
- In 2013/14, North Island College served 8,829 students and 230 were international students.

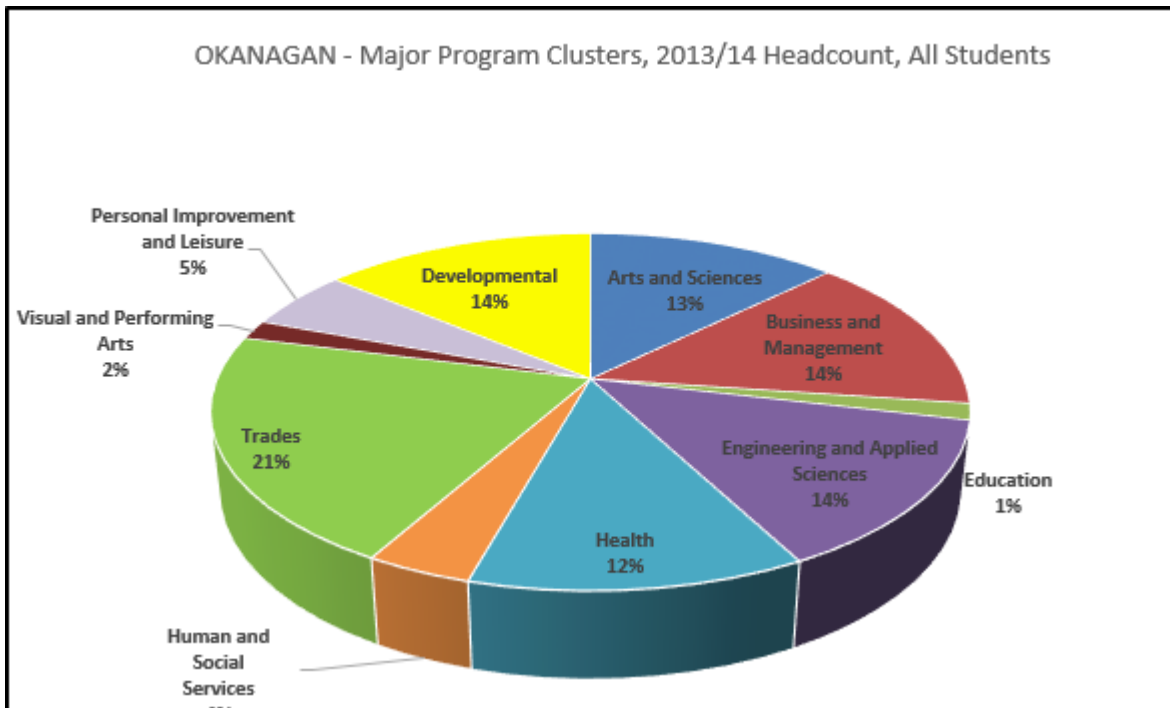


- Over the next few pages, the breakdown of students by major program will be presented for select post-secondary institutions in British Columbia.
- Camosun has a diversified mix of programs as seen in the following chart. Student enrolments were classified based on the major relevant Classification of Instructional Programs (CIP) code. Five program clusters had close to 10% or more of student enrolments in 2013/14: Arts and Sciences; Business and Management; Trades; Developmental; and Health.

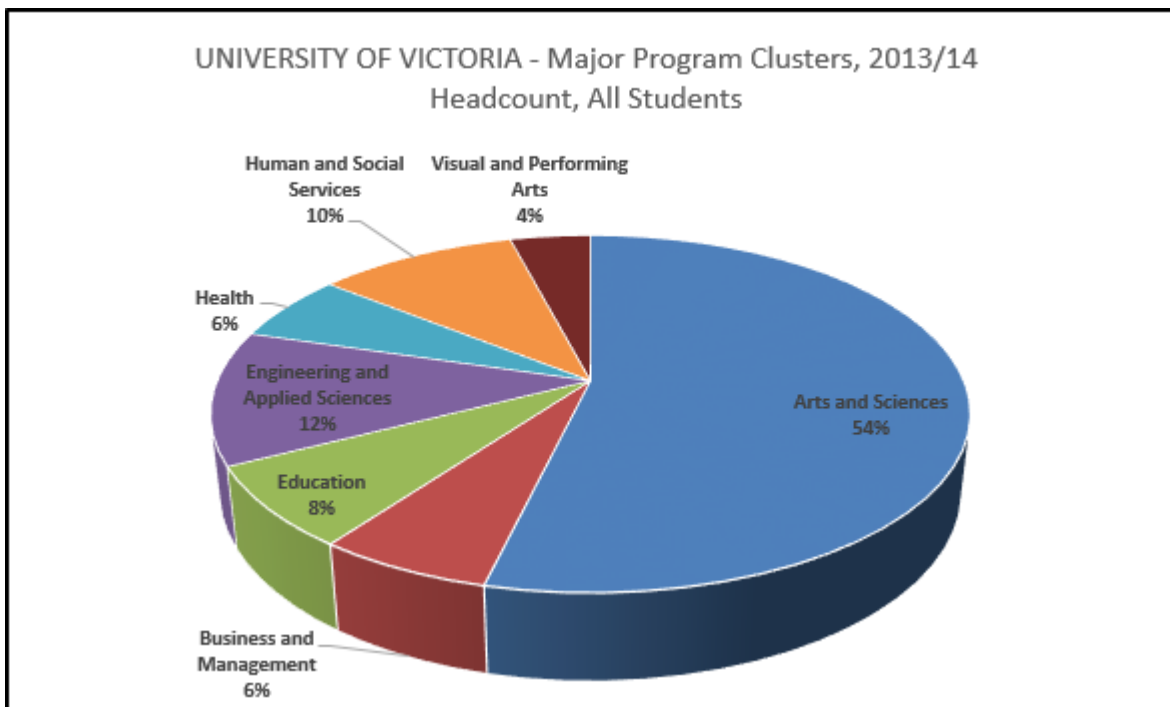


- Two institutions outside of Vancouver Island provide similar programming and are of a similar size, Douglas College in the Lower Mainland and Okanagan College in the Interior.
- Their program mix breakdown by major program cluster is presented here in two separate pie charts:

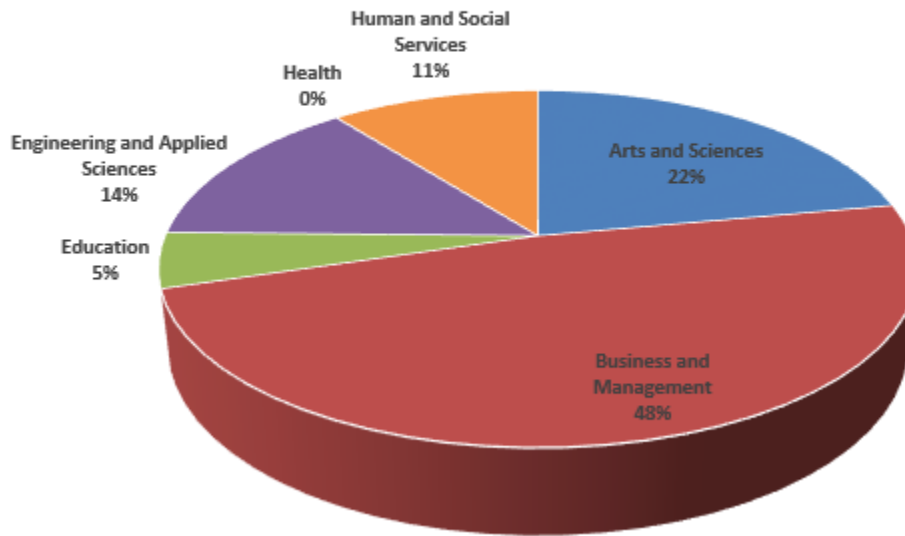




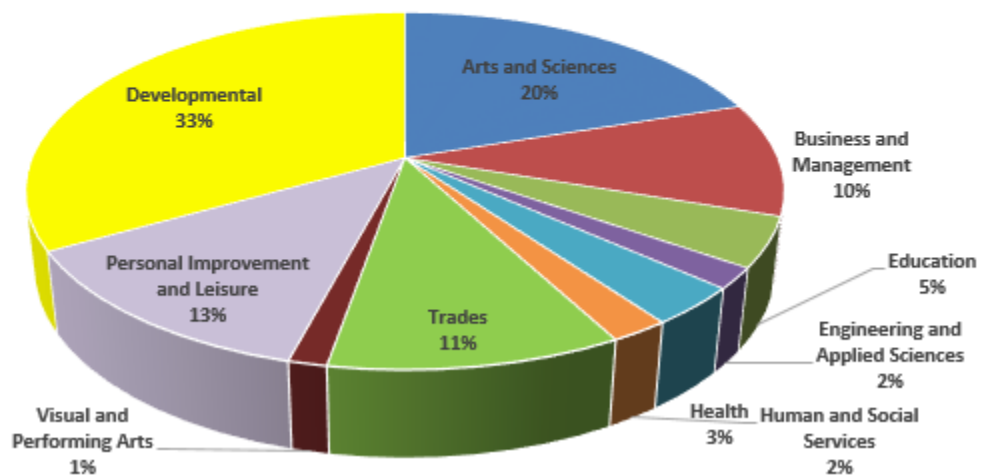
- The program mix breakdowns for the other major public post-secondary institutions on Vancouver Island are presented below in four pie charts:

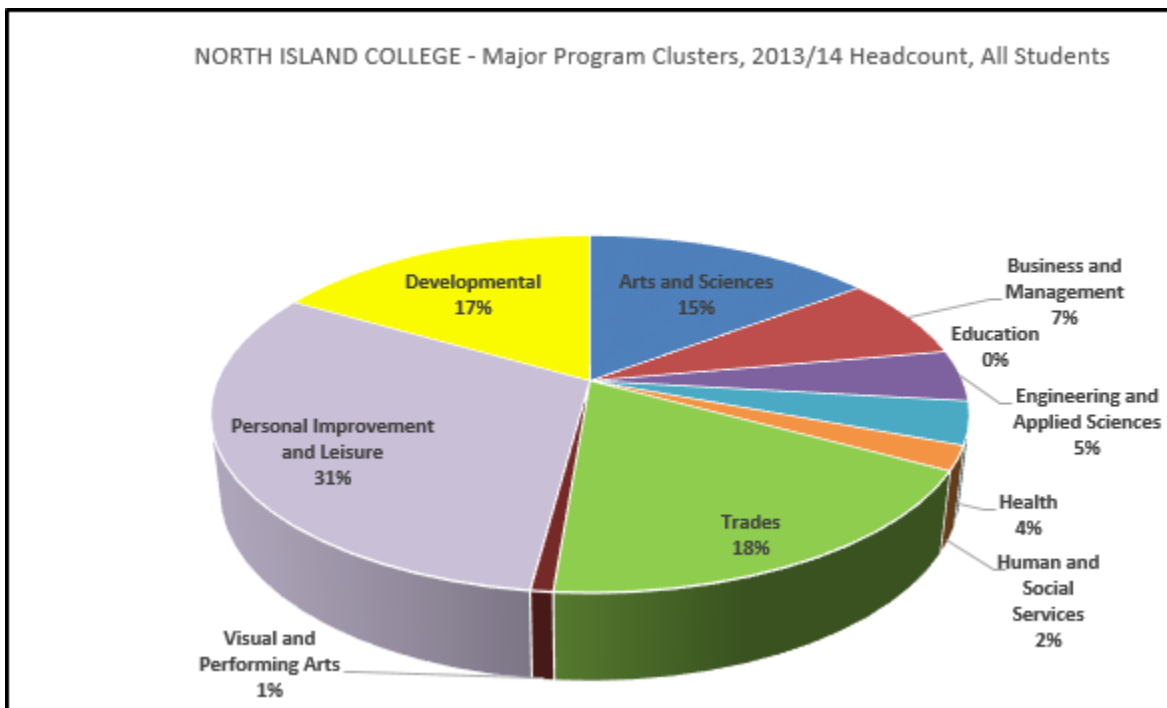


ROYAL ROADS - Major Program Clusters, 2013/14 Headcount, All Students



VANCOUVER ISLAND UNIVERSITY - Major Program Clusters, 2013/14 Headcount, All Students





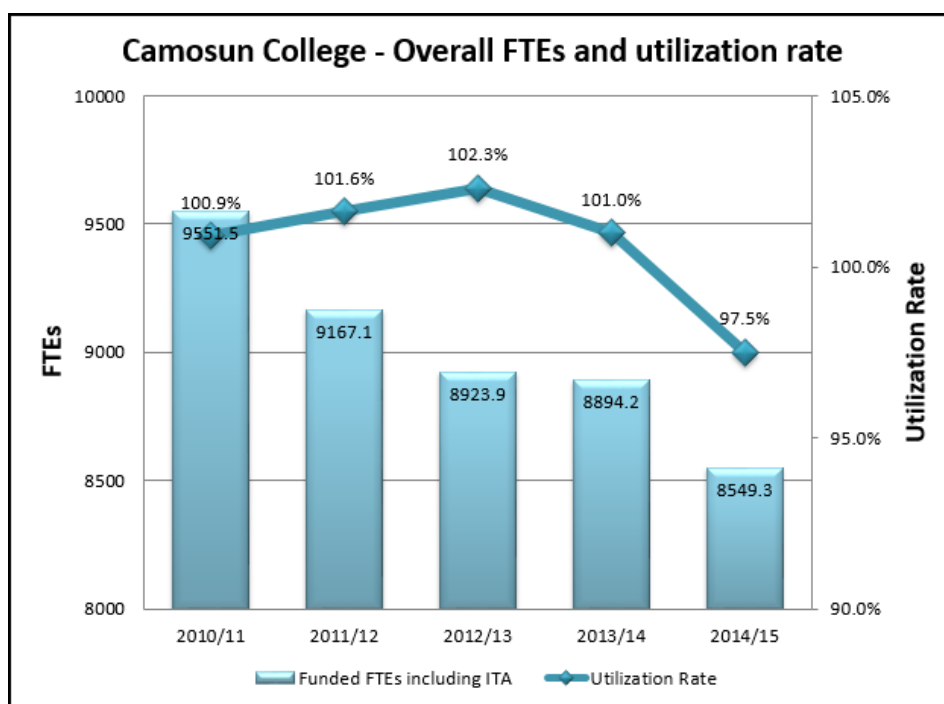
PRIVATE INSTITUTIONS

- Private and out-of-province public institutions must be authorized to deliver degree programs under the Degree Authorization Act. There are currently 20 private and out-of-province public institutions offering degree programs in B.C.
- Out of these, one was listed for Vancouver Island – Pacific Coast University for Workplace Health Sciences.
- Private career training institutions are regulated under the Private Career Training Institutions Act. There are more than 300 private career training institutions registered with the Private Career Training Institutions Agency (PCTIA) – a crown agency established by government. Private language training institutions can voluntarily register with PCTIA.
- In searching their online database, 67 private career training institutions came up for Vancouver Island, with prominent names including – Academy of Learning College, CDI College of Business, Pacific Rim College, Sprott Shaw College, plus many other small private institutions that specialize on specific niche areas.
- The Academy of Learning College – Victoria has campus locations in downtown Victoria, Nanaimo plus others across British Columbia and Canada. The PCTIA website states that they offer 51 programs, primarily focused on Technology, Business and Health Care.
- The CDI College of Business has campus locations in downtown Victoria, Oak Bay plus other locations across British Columbia and Canada. The PCTIA website states that they offer 60 programs, primarily focused on Health Care, Technology and Business.

- The Pacific Rim College has campus locations in downtown Victoria. The PCTIA website states that they offer 24 programs that explore modern research opportunities and clinical services in a variety of medical modalities.
- Sprott Shaw College has campus locations in downtown Victoria, Nanaimo and Salt Spring Island. The PCTIA website states that they offer 104 programs, primarily focused on Business, Health Care, Trades, Tourism and Hospitality.

FTE FUNDING AND UTILIZATION RATE

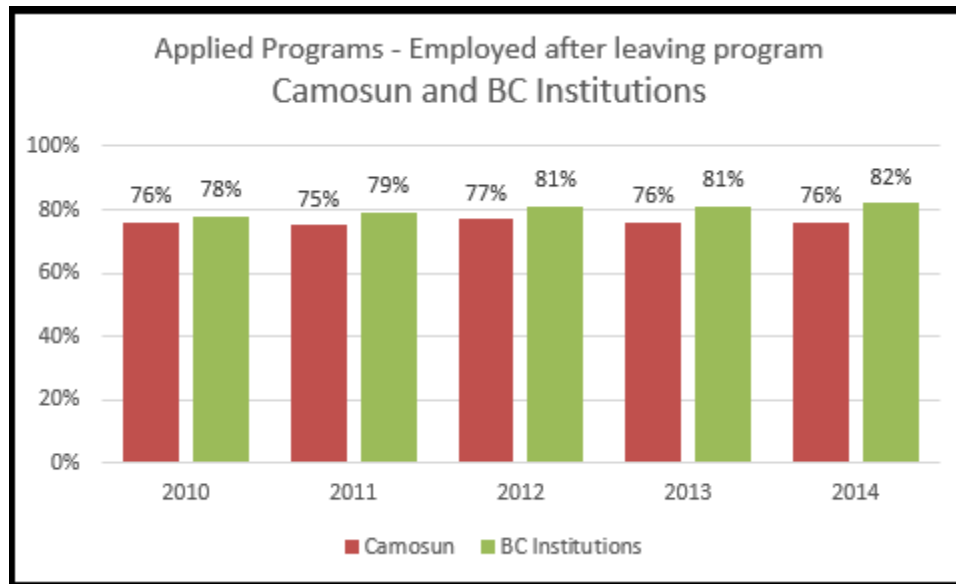
- In recent years, the provincial government has reduced funding to post-secondary institutions. The corresponding trend in FTEs at Camosun tied to provincial funding is clear. As seen in the following graph, Camosun's FTEs for domestic students decreased from the 2010/11 fiscal year to the 2014/15 fiscal year.
- The college's FTE utilization rate has seen an interesting change across the five year period. Between the fiscal years of 2010/11 to 2012/13, the FTE utilization rate increased to a high of 102.3%. However, from that point until the 2014/15 fiscal year, the FTE utilization rate decreased to a five-year low of 97.5%.²²



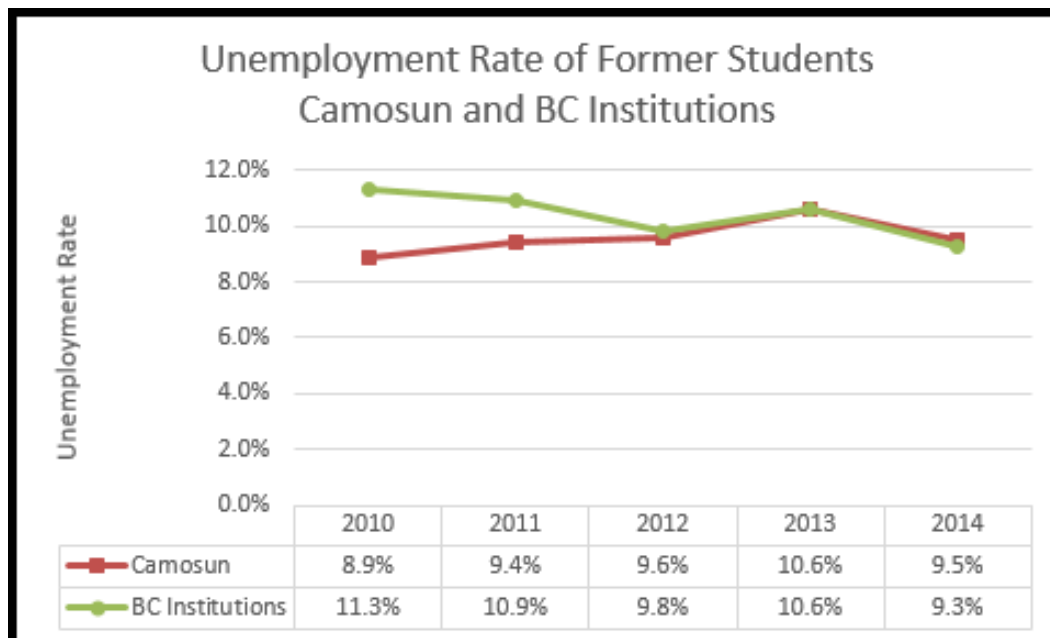
²² Source: Central Data Warehouse and Ministry of Advanced Education

STUDENT OUTCOMES

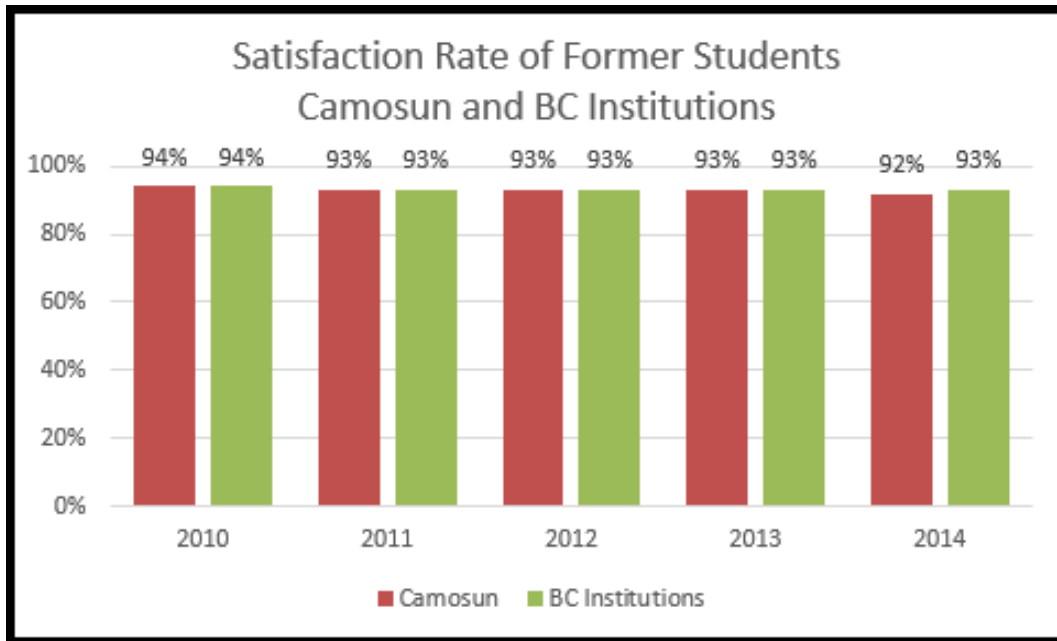
- Each year, former Camosun College students are surveyed about their experience at the college, as well as further education and employment.
- Over the past five years, Camosun College students in Applied programs have had lower employment rates after leaving their program when compared to other BC Institutions.



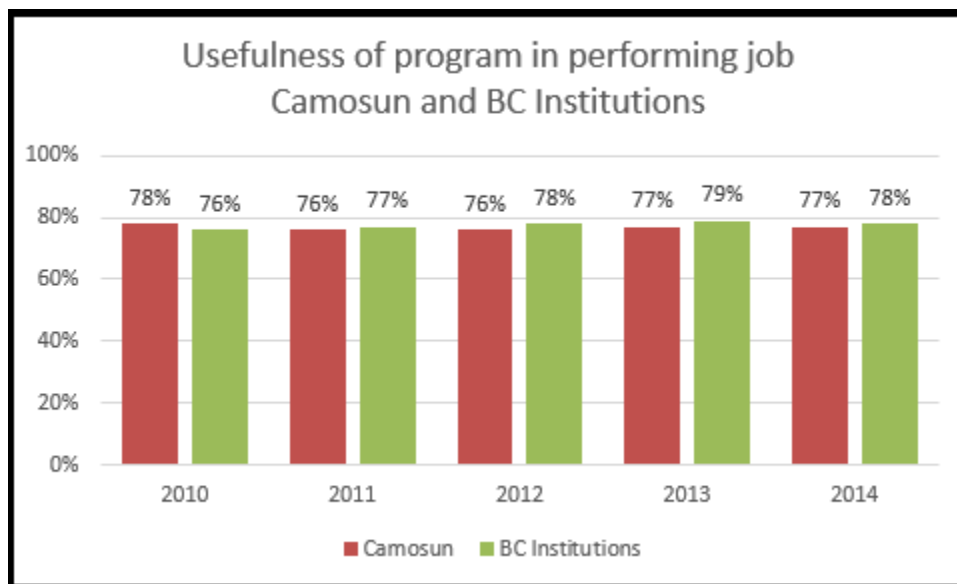
- Former Camosun College students have a similar level of unemployment rate when compared with other provincial college and institute graduates.



- Over the past five years, Camosun College students have had a satisfaction rate over 90%.



- Close to 80% of former Camosun College student respondents reported that their program was useful in performing their job.



Source: British Columbia Student Outcomes surveys
<http://outcomes.bcstats.gov.bc.ca/Default/Home.aspx>
<http://www2.bcstats.gov.bc.ca/Dashboard/>