

BC's Colleges: Working To Close The Skills Gap & Power BC's Economy

BC Colleges is a consortium of British Columbia's 11 public, post-secondary colleges. BC Colleges facilitates collaboration between the 11 public colleges to effectively prepare and educate the highly skilled, job-ready workforce that is needed to strengthen British Columbia's competitive advantage and address the significant skills gap challenge in the province. This

presentation represents the collective contributions and requirements of the BC college system.

The mandate of BC's public colleges is to provide British Columbians with the education and advanced training needed to fill the skills gap and evolve with an ever-changing workplace.

BC's colleges play an important role in the economic, social and cultural life of British Columbia and offer British Columbians the most accessible and affordable pathway to post-secondary education. Our 11 public colleges enrol over 160,000 students annually in university studies, baccalaureate

degrees and career, technical and trades education in every region of the province. Through the provision of training and education, our colleges transform lives and make a significant impact in the regions and local communities they serve.

The Skills Gap

The BC Labour Market Outlook predicts that between 2016 and 2020 the demand for workers in BC will outpace supply. It also forecasts that 78 per cent of the predicted one million job openings will require some form of post-secondary education – currently only 60 per cent of BC's workforce has this level of education. And, it is important to note that the largest

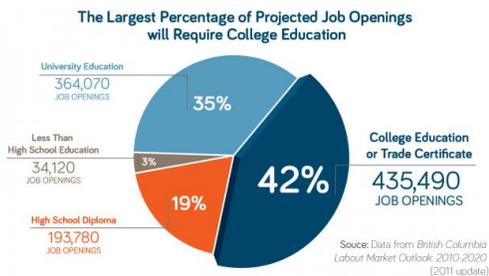
percentage of projected job openings will require a college education. This

difference between supply and demand is called the Skills Gap. Our aging population combined with the increasingly higher levels of knowledge and skills needed to be competitive in the global economy are driving the demand for more job-ready college graduates.

Already 1 in 3 employers say they cannot

find the skilled workers they need to fill jobs. We must plan and invest now to ensure that BC has graduates with the right skills and education to close the skills gap.

The skills gap is the gulf between the skills and credentials held by many job seekers and the qualifications sought by employers.



The Conference Board of Canada estimates that the Skills Gap has cost the Ontario economy up to \$24.3 billion in foregone GDP and \$3.7 billion in provincial tax revenue. BC's economy is one-third the size of Ontario's – potentially that's \$1.25 billion in lost tax revenue, more than BC's current deficit.

Opportunities for BC

Our colleges have a pivotal role to play in educating and training the workers needed to drive our economy. Investing now to educate British Columbians for in-demand jobs will ultimately increase provincial GDP, increase the tax base, reduce social costs, improve the standard of living for British Columbians and ensure BC can capitalize on the projects listed below and seize new opportunities as they arise:

- The latest issue of the BC Major Projects Inventory¹ lists 20 new proposed projects over \$15 million for the first quarter of 2013, with available capital cost estimates totaling approximately \$1.3 billion in potential new capital investment, if all the projects proceed. In fact, the total estimated capital costs of all major projects currently under construction in BC is estimated at \$85.7 billion, up from \$80.6 billion reported in the fourth quarter of 2013. These projects will require thousands of new college-educated and job-ready workers.
- BC Natural Gas Workforce Strategy Committee² estimates that over 64,000 skilled workers will be needed to operate and maintain five Liquid Natural Gas (LNG) plants and pipelines on an ongoing basis. Additionally, a further 63,000 jobs will be created during the construction phase with over 60 per cent requiring skilled workers.
- A recent Work BC Report on High Opportunity Occupations in British Columbia indicates a major need for college-educated and job-ready graduates in health care including nurses, medical laboratory technicians and health care aides.
- The Asia Pacific Gateway Skills Table, funded by the Government of Canada, highlights that college graduates in areas such as steam fitting, pipefitting, marine trades, construction management and transportation management will be critical to keep trade moving and to sustain our open economy.
- The Regional Workforce Tables in the Northwest, Northeast and Kootenay regions are emphasizing the important role colleges play in educating and training the future workforce that is essential to industry and economic development throughout the province.

These opportunities highlight the urgent need for British Columbia to plan and invest now in a education and training plan to ensure the province has the workforce with the advanced skills and knowledge to meet labour market demand, close the skills gap and drive economic growth.

BC's Most Accessible & Affordable Pathway to Post-Secondary Education



British Columbia's public colleges offer lower tuition, more flexible admission policies and the opportunity to study close to home, making colleges the most accessible and affordable post-secondary option in the province. Also, our colleges have worked hard to ensure students have the utmost flexibility when it comes to education pathways. Collaborations within the college system, with other post-secondary institutions and with secondary schools provide students with unprecedented access to

A 2011 a TD Economics report states that a college degree has significantly lower upfront costs than any other post-secondary degree.

post-secondary options.

In fact, over 90 per cent of college graduates are employed within 6 months of graduation and on average college tuition is 40 per cent less

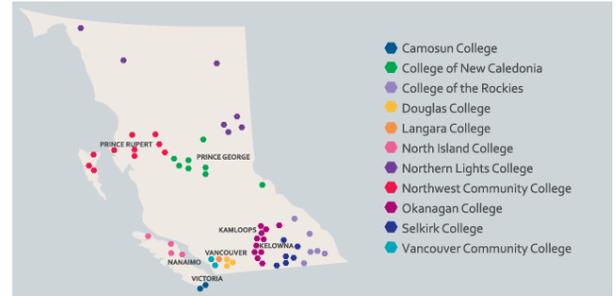
British Columbia's 11 public colleges welcome students from all walks of life – immigrants, Aboriginals, displaced workers, adults requiring retraining, life long learners and high

¹ BC Major Projects Inventory updated March 2013.

² BC Natural Gas Workforce Strategy and Action Plan, July 2013.

than university tuition. This means BC students can complete their studies and transition to the workforce more quickly and affordably.

The BC college system has campuses and learning centres in over 60 locations throughout the province. This is a significant benefit as studies show that graduates are more likely to work in the region where they receive their education. An educated workforce in all regions helps to build a solid social, economic and cultural foundation and is an excellent return on investment.



A highly skilled workforce also helps to create a competitive advantage. By providing our citizens with the opportunity for education and training, British Columbia will be more competitive globally and able to seize opportunities for trade through our Asia Pacific and Northern Gateway projects.

How BC's Colleges Can Help Government Close the Skills Gap

There are significant economic opportunities ahead for BC; ensuring we have a highly skilled and educated workforce is paramount to our future economic prosperity. With a multi-year investment in three key areas, BC's colleges will be able to deliver the skilled workforce required to close the skills gap and help government achieve its priorities.

Skilled & Educated Workforce: BC's colleges are well equipped to help government match education and training with labour market demand and ensure government's proposed 10-year skills plan results in a seamless transition of skilled graduates into the workforce.

Strong & Vibrant Communities: With campuses and learning centres in every region of BC, our colleges are well positioned to help government align economic and social priorities related to closing the skills gap and meeting the challenges of a growing economy in all regions of BC.

BC's Competitive Advantage: Our colleges provide transformational learning to British Columbians from all walks of life. A more educated population will help meet government priorities of engaging and employing more British Columbians and ultimately building a strong and prosperous economy.

#1: Ensure A Skilled & Educated Workforce For British Columbia By Producing 2,000 Additional Graduates Annually

- BC's labour market forecasts suggest that by 2020 the need for workers with advanced education will exceed the capacity of the BC system by over 11,000 college and university graduates annually³.

³ This estimate is derived from BC Labour Market Forecasts compared to current number of graduates produced annually in BC. The predicted shortfall of 11,000 post-secondary graduates is based on an estimate of demand less the graduates produced by BC's public colleges and universities. However not all 11,000 spots will be filled by graduates from BC's public institutions. Some of these jobs will be filled by people who graduate from private institutions and some by people who move or return to BC having already completed their post-secondary education. This estimate assumes that public institutions (colleges and universities) will be responsible for meeting approximately 50 per cent of the shortfall.

- So, where will these additional skilled and educated workers come from? While the BC Jobs Plan is clear that British Columbians should be first in line, some workers will come from other parts of Canada and others will be new immigrants. However, in order to meet industry demand, British Columbia must increase the participation of all British Columbians in post-secondary education, including our Aboriginal citizens. This is where BC's colleges excel.
- Currently, BC's colleges produce over 14,000 graduates annually with credentials awarded in baccalaureate degrees, diplomas and certificates.
- BC's college graduates – nurses, business managers, tradespeople, paraprofessionals, healthcare technicians, and other highly trained and educated students – are job-ready, career-oriented and equipped with the essential skills to take on the challenges of the new economy.
- BC's colleges will produce an additional 2,000 graduates annually by 2020, an increase of 14%. These additional graduates will ensure a supply of critically needed skilled and educated workers to help solve skills shortages in key employment areas including: business and management, health, engineering, applied sciences, social services, technology and skilled trades.

Base (13/14)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
(M)	(M)	(M)	(M)	(M)	(M)	(M)
\$383.00						
New Funds over 2013/14 Base	\$6.50	\$15.40	\$24.40	\$33.30	\$40.40	\$47.50
Total Budget	\$389.50	\$398.40	\$407.40	\$416.30	\$423.40	\$430.50
% Increase over base	1.7%	4.0%	6.4%	8.7%	10.5%	12.4%
14,140						
Additional Grads over 2011/12	275	650	1,025	1,400	1,700	2,000
Total	14,415	14,790	15,165	15,540	15,840	16,140
% Increase over base	1.9%	4.6%	7.2%	9.9%	12.0%	14.1%
Additional FTE's Produced ⁴	907.5	2,145	3,382.5	4,620	5,610	6,600

- This investment is based on a realistic and scalable strategy reflective of the government's current financial position and mandate to achieve a balanced budget. This investment is strategically targeted to generate the skilled and educated workforce required for BC's economic prosperity. A more aggressive investment would allow for more capacity in the college system and more graduates over a faster timeline.

⁴ Colleges in BC are funded by Full Time Equivalent (FTE) students and on average there are 3.3 FTE students per graduate. The additional investment for the new graduates multiplied by 3.3 for FTE funding and the average FTE funding rate of \$7,200 per FTE. Funding values may need to be adjusted by program area if growth is predominately in higher cost programs.

- In order to ensure the right graduates, our colleges will collaborate with each other, other post-secondary partners and the K-12 system to ensure effective programs for our students and efficient transition to graduation and workforce entry. In fact, many of the students who earned a Certificate of Qualification via the ITA (8,750 Certificates awarded in 2011/12) studied at one of BC's colleges to complete their program.
- Plus, our colleges will work with communities and employers, provincially and regionally to deliver relevant and innovative programs to supply the right graduates needed for the jobs and careers in demand.
- While this plan reflects current labour needs, we recognize that labour market forecasts are fluid. Our system will work to ensure that collectively our strategic plans reflect the needs of BC's evolving labour market.

#2: Help Build Strong & Vibrant Communities In BC By Enhancing Capacity And Improving Retention

- Through better access initiatives our colleges can serve more students closer to where they live and provide education and training that is most relevant to regional needs.
- BC's colleges require investment to improve rural infrastructure and access, increase Internet connectivity, deliver online and technology assisted courses and drive innovation.
- The BC Jobs Plan recognizes the specific challenges and unique labour market demands of BC's vastly differing geographic regions and smaller rural centres.
- Increasing online learning and technology-assisted opportunities will provide more options for learners, better leverages the college system's resources and increases access especially for learners in remote areas of BC.
- The extensive network of BC's colleges and training centres provides an essential link to emerging and regional industry and means our colleges have first-hand knowledge of regional business challenges that can lead to applied research opportunities and innovation.
- Funding to improve access to regional campuses will enhance pathways for Aboriginal learners, immigrants and other under-represented groups. This investment, scaled to \$6 million by 2020, will enhance capacity, improve retention and align with the education and training priorities identified in the BC Jobs Plan.
- The Ministry currently promotes competition rather than collaboration among colleges through accountability measures that focus on individual institutions. If the Ministry measured FTE students by region (northern, southern, lower mainland, island) rather than by institution, it would enhance collaboration, improve student recruitment and retention and increase the number of graduates at no additional cost to the taxpayers.
- The investment outlined below will not only help business and industry throughout BC but it will also result in a significant positive impact on the fiscal and social well-being of communities in all regions of the province.

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Infrastructure and internet connectivity plus online and technology assisted courses	\$3.0M	\$3.0M	\$3.0M	\$3.0M	\$3.0M	\$3.0M
Matching Program for Innovation	\$3.0M	\$3.0M	\$3.0M	\$3.0M	\$3.0M	\$3.0M
Sub Total ⁵	\$6.0M	\$6.0M	\$6.0M	\$6.0M	\$6.0M	\$6.0M

⁵ Investment in these 2 areas could be provided through one-time allocations into appropriate funds that would sustain the respective programs (for example: the Leading Edge Endowment Fund).

Access to regional campuses	\$1.0M	\$3.0M	\$3.0M	\$6.0M	\$6.0M	\$6.0M
Total	\$7.0M	\$9.0M	\$9.0M	\$12.0M	\$12.0M	\$12.0M

#3: Enhance BC’s Competitive Advantage in Knowledge & Skills By Investing In Equipment Renewal & Essential Skills

- BC’s colleges provide transformational learning and help students develop the skills they need to get on the right career path, find a job or acquire knowledge to enhance their life and career. Approximately 90% of college graduates successfully transition to the labour force within 6 months of graduation.
- British Columbia’s colleges are responsive to the ever-changing workforce landscape. College students obtain specific skills and knowledge as well as the ability to think critically, act socially and adapt to new challenges.
- Students have access to high quality programs and expertise that might not be available if not for our system’s collaborative culture that ensures our institutions are making the most efficient use of public funds.
- Additionally, British Columbia’s colleges teach literacy and essential skills to help people evolve with their jobs, be more productive and adapt to workplace change.
- The following shows an investment of \$10. 0 million annually in equipment renewal and essential skills that will help drive BC’s competitive advantage.

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Equipment Renewal for Teaching & Training	\$10.0M	\$10.0M	\$10.0M	\$10.0M	\$10.0M	\$10.0M
Essential Skills	\$3.0 M					
Total	\$13.0M	\$10.0M	\$10.0M	\$10.0M	\$10.0M	\$10.0M

- To be competitive in today’s economy British Columbia must invest in equipment renewal for teaching and training programs so that graduates are job-ready and leave with the most up-to-date knowledge and skills.
- A high priority should be given to expanding the delivery of essential skills for career technical and trades students to ensure our labour market has a broad pool of skilled and productive workers.
- Additionally, according to Stats Canada and BC government estimates⁶, there are approximately 500,000 British Columbian adults (over the age of 18) without a high school diploma, certificate or degree. This large pool of unskilled workers can be more effectively transitioned to the skilled labour market with the development and delivery of a new model of Adult Education that is intended to achieve higher success and transition rates.
- BC’s colleges are committed to working with Government to achieve better results for adult learners that will in turn lead to better and more stable employment for many British Columbians.

⁶ Statistics Canada 2006 Census states that there are 675,345 British Columbians over the age of 15 without a high school diploma, certificate or degree minus 176,727 BC students in Grade 10, 11, 12 (according to BC Education Statistics 2012/13) results in approximately 500,000 adult British Columbians without a high school diploma, certificate or degree.

INVESTMENT IN BC'S COLLEGES PROVIDES AN EXCELLENT RETURN

- BC's colleges offer the most accessible and affordable post-secondary education pathway for all British Columbians.
- There is a \$3.80 return for every \$1 of taxpayer financial support.
- British Columbia's colleges and their graduates contribute \$7.7 billion of income annually to the provincial economy.
- British Columbia's college graduates will go a long way to closing the skills gap and providing an educated and skilled workforce for BC employers.
- The result will be a better standard of living for all British Columbians and vibrant and sustainable communities throughout BC.

BC's Colleges – Multi-Year Investment Plan Summary

The following multi-year investment summary is based on a realistic and scalable growth strategy that would generate an additional 2,000 graduates and provide the necessary services to support the education and training necessary to increase BC's economic prosperity.

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Skilled and Educated Workforce	\$6.5M	\$15.4M	\$24.4M	\$33.3M	\$40.4M	\$47.5M
Strong and Vibrant Communities	\$7.0M	\$9.0M	\$9.0M	\$12.0M	\$12.0M	\$12.0M
Competitive Advantage	\$13.0M	\$10.0M	\$10.0M	\$10.0M	\$10.0M	\$10.0M
Total	\$26.5M	\$34.4M	\$43.4M	\$55.3M	\$62.4M	\$69.5M