



Ministry of Training, Colleges and Universities



Strategic Mandate Agreement (SMA) DRAFT Proposal

A submission to begin the SMA discussion process

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1 Algonquin College – Mandate, mission, vision and values

Education and training are the foundation of economic, social and environmental progress. As Eastern Ontario’s only English language publicly funded community college, Algonquin College delivers a comprehensive portfolio of high quality postsecondary programs to support the diverse learner choices and breadth of employer labour demands that spur the growth and prosperity of our region.

The organizational philosophy at Algonquin is defined by the mission, vision and core values. Stakeholders affirmed those values during the recent strategic planning process, believing they accurately reflect the principles and beliefs shared by the community. At the same time, stakeholders encouraged the College to revise its mission and vision statements to more accurately reflect its aspirations for the future. The following articulation of purpose is intended to serve as a point of inspiration, clearly differentiating Algonquin from other institutions.

Our mission

To transform hopes and dreams into skills and knowledge, leading to lifelong career success.

Our vision

To be a global leader in digitally connected applied education and training.

Our values

Caring: We have a sincere and compassionate interest in the wellbeing of the individual.

Learning: We believe in the pursuit of knowledge, personal growth and development.

Integrity: We believe in trust, honesty and fairness in all relationships and transactions.

Respect: We value the dignity and uniqueness of the individual, and equity and diversity in our community.

Algonquin’s strategic mandate mirrors the College vision to be a global leader in digitally connected applied education and training. The College mission aims to democratize education, transforming hopes and dreams into lifelong career success.

Algonquin College empowers the communities it serves by providing highly flexible, engaging and accessible applied education and training built on informed programming choices and smart investments in technology, pedagogy and professional development—delivering the best combination of face-to-face, online and mobile modalities.

This approach to learning is outcome-focused. It yields graduates who can transfer and apply knowledge and skills to new situations not previously encountered. It gives them the practical and theoretical abilities to make sense of complex environments and communicate their understanding to others. Connecting students to peers, professional contacts and the broader community, it is the foundation of lifelong learning.

2 Components of Differentiation

2.1 Component of differentiation: Jobs, Innovation, and Economic Development

Located in the heart of Eastern Ontario, Algonquin College serves the needs of postsecondary learners and employers from its primary Canadian campus locations in Ottawa, Perth, Pembroke and online. The College plays a key role in sparking the economic engine of the communities it serves. Algonquin is an integral partner in community development - from kick-starting ideas, commercializing products and services, monitoring programs to meet talent demands, to increasing the employability of regional talent.

Algonquin extends across the region through ten counties¹ and beyond. The College communities represent a broad range of population characteristics, dominant industry profiles and economic conditions. The heterogeneous profile of these markets impacts the local demand for skills and knowledge, and the Algonquin College programs that would best serve these talent requirements. The 2012-2013 KPI Report highlights Algonquin’s success. Algonquin had one of the highest rankings among Ontario colleges for student satisfaction at 81.5 per cent, and employer satisfaction with Algonquin graduates’ readiness for the workplace at 94 per cent.

Algonquin College fosters innovative partnerships to fuel leading practices in education toward employment

Its collaboration and close ties with industry ensure that its programs are relevant for students seeking employment and employers looking for skilled workers in the region and throughout Ontario. Working with industry, government and international organizations, Algonquin adopts practices from around the world to enrich its curriculum and to benefit Ontario communities and broader provincial needs.

Algonquin College will play a major role in mitigating regional pressures of economic decline

The Greater Ottawa Area is Canada's fifth largest Census Metropolitan Area (CMA), reaching a population of 1,414,631.² In 2012, the average personal income per capita in Ottawa-Gatineau was \$44,985, the third highest among the six major cities and almost 14% above the national average of \$38,563. Through 2012, the region's employed labour force grew 3.3% and unemployment remained low at 6.2%.³

Despite job losses continuing in the sector for the last few years, the high tech sector remains a significant employment sector in Ottawa (10.1% in 2012).⁴

As the Government of Canada is the largest single employer in the City of Ottawa, to date, the employment growth rate has been less impacted by global economic conditions than other regions in Canada. However in the last two years, the federal government's austerity measures resulted in job losses for public service employees in Ottawa-Gatineau.

Although much of the contraction was dealt with through attrition, reassignment, and reducing temporary work programs, the full impact of the cuts has yet to be seen.⁵ Other regions within Eastern Ontario have experienced job losses and economic decline, particularly in manufacturing where branch plants and businesses closed operations. Over the next ten years, economic growth is expected to gradually decline throughout the region. Algonquin College will play a major role in mitigating this decline.

In a weak labour market, where there are many job-seekers, new graduates face tougher competition as employers will be seeking out experienced applicants. Algonquin College supports job seekers who wish to improve their employability, focus on work-integrated learning to improve their marketability, minimize their time outside the work force, and train for employment.⁶

Re-imagining experiential learning

Algonquin has set a goal to provide every full-time student exposure to authentic work experiences, distinguishing the College's graduates in their job search. To advance its plan to embed industry or community work experience in its programs, Algonquin inventoried all programs' current work experience activities in December 2012. By 2017, Algonquin seeks to imbed Work-Integrated Learning (WIL) experiences in 100% of its full-time Ontario College credential programs.

Since its inception, Algonquin College has integrated experiential learning into its programs by working with industry for field and clinical and field placements, apprenticeships, co-op, job-shadowing, applied research opportunities and other work-related experiences. To enrich its programs, Algonquin has reimagined experiential learning for the benefits of students and employers.

WIL provides opportunities to utilize newly learned concepts in non-textbook contexts; to problem-solve and conceptually make sense of complex, real-world situations; to express concepts meaningfully to others; and to innovate and be entrepreneurial. Such learning provides students the opportunity to improve their life skills: self-direction, collaboration and teamwork, information gathering, and clear communication.

Running student learning enterprises

At Algonquin, students have the opportunity to work on campus in a real-work setting. Learning enterprises offer experiences that mirror work life in their discipline upon graduation. These 'store fronts' are launched, managed and fully staffed by students under the guidance of faculty. These student learning enterprises operate like commercial enterprises, engaging with clients from our greater community. Student learning enterprises are operating across most academic areas of the College.

From health care in our dental clinic, massage clinic, esthetician and hair salon services, caring for young children in our licensed Campus Child Development Centre (CLC), managing a radio station, newspaper, design and public relations agencies, operating a top-notch restaurant or promoting gourmet food at our culinary department's retail store 'Savoir

Faire', Algonquin has created – and plans to expand - store front operations that engage students with from the local community to live the day-to-day operations of their career.

Incubating economic prosperity through research

Algonquin empowers local organizations, assisting them to commercialize products and expand markets, thus promoting the economic activity of our region. Assisting small, medium and large enterprises, the College is incubating economic prosperity through applied research. Working with close to 100 organizations annually, Applied Research and Innovation at Algonquin accelerates the growth and maturity of these firms with economic impact and job creation occurring in the short to medium term of months to two years.

Algonquin seeks out new opportunities to work with industry and to support the success of its students, to be job-ready. With applied research projects, students tackle real world challenges. Applied research projects encompass a wide variety of activities and include products, processes and services from marketing research, web application development, product design and manufacture to health care applications.

Chronicling co-curricular records online

The Algonquin College co-curricular portal supports learners by creating a formal record of their volunteer or leadership opportunities at the College. At Algonquin, students are able to work locally or abroad with community partners to address social issues and community needs as volunteers. With their services, students enhance their skills-at-work and their personal development. In this central location, employers are able to review and verify the extent of Algonquin learner experiences online.

Preparing students for the global market

Today's marketplace is global and domestic talent needs to understand how to operate effectively across different cultures and borders. To enhance the international marketability of Algonquin College graduates, international competencies are embedded across all College programs.

From 2008 to 2011, Algonquin College increased its enrolment of international students in Eastern Ontario by 82%, from 508 to 900 students. In 2012–2013, 976 international students from 114 different countries were enrolled across Algonquin campuses in Eastern Ontario representing 5.6% of the total student body enrolled full-time at Algonquin's Ontario campuses, and a 4.8% market share of Ontario's 20,371 international college students.⁷

Algonquin campuses are multi-cultural, reflecting our communities. The College's onshore international education programs and services include English as a second language program (ESL), recruiting international students to enrol in postsecondary education programs in Canada, and exchanges for students or employees going abroad. International student recruitment represents the greatest proportion of Algonquin's current international revenues (77%), followed by ESL programs (15%) and offshore activities (8%).

Showcasing Ontario on the global stage with international partnerships

Algonquin College's international partnerships advance Ontario industry and Ontario talent to compete on the global stage. Algonquin partnerships provide a conduit for Ontario industry seeking to expand globally into new markets. Learners abroad are introduced to the Ontario postsecondary system and high-quality applied learning, encouraging them to continue their studies in Ontario. Algonquin College curricula, which embed international outcomes, are informed by leading practices acquired from its international collaborations.

Increased international activity integrates the experiences of faculty, staff and students, internationalizing and sustaining the institution. The College expanded its partnerships overseas by opening Algonquin campuses in Saudi Arabia and Kuwait and fortified existing international partnerships with institutions based in China, India, and Montenegro in 2012-2013.

Harnessing industry with Algonquin Connects

At Algonquin, the definition of work-integrated learning (WIL) is defined by the learning outcome: to apply skills in a real-world setting to gain the knowledge for success on the job post-graduation. Beyond cooperative education and field placement, the College recognizes there are many ways to engage with industry.

Algonquin Connects promotes and coordinates the College's experiential learning activities, providing a central location—both physically and online—for linking community and business partners with the College. The use of leading-edge social networking approaches link students, industry, community, alumni, and employees, providing literally thousands of opportunities for meaningful connections.

In times of economic restraint, it is challenging for industry stakeholders to commit resources to student work placements. Consequently, creative and innovative solutions to engage community and industry are required to sustain and augment experiential learning opportunities. In response, Algonquin aims to create a new educational framework that places entrepreneurial thinking and community engagement at the centre. Algonquin Connects will assist the campus community in expanding varied WIL opportunities for students.

Algonquin College, serves as a catalyst for research and innovation, sharpening the relevant skills of Algonquin students and increasing the competitiveness of employers and industry. The benefit of experiential education extends to the community, giving businesses access to capable talent eager to help industry grow.

2.2 Component of differentiation: Teaching and Learning

Algonquin offers unprecedented learning options and high-quality teaching methods to improve student outcomes, improving the learning experience and career readiness of students to ensure their success.

Algonquin College leads the field by introducing and adopting alternative program delivery methods that provide greater choice and flexibility, more effectively meeting the needs of today's learners. By offering three delivery modalities – face-to-face, hybrid (blended), and online - across its Perth, Pembroke, Ottawa and online campuses, Algonquin provides greater choice and flexibility, more effectively meeting the needs of the 21st century learner.

Competency-based learning recognizes students' progress, rewards their achievements and enhances value

Algonquin College strives to identify pathways best-suited to each learner's pursuit of postsecondary education. As more learners are pursuing a college education with postsecondary or work experience, Algonquin understands that current processes to recognize past experience can be cumbersome and costly for both the student and the institution.

Algonquin proposes to introduce competency-based learning units to the Ontario postsecondary system and has a pilot project under development. Learning units offer postsecondary learners the option to achieve discrete competencies. Packaged together, learning units may form an entire course or program. Learners seeking to achieve a unit are evaluated on their mastery of an outcome. Once achieved, students move on to another learning unit to expand their competencies within a larger learning goal.

Competency-based learning units increase access and affordability for qualified students, personalizing the students' pursuit of postsecondary education. At Algonquin, the pilot of unfacilitated, independent learning units will be available as-needed by learners online, on a continuous intake basis: anytime, anywhere, anyway. The College will introduce the learning units as a pilot in 2014 and upon evaluation, will consider adopting the model more broadly.

Technology-enabled learning is powerful — it improves access, facilitates retention and supports success

Algonquin is uniquely positioned to support the broad adoption of technology-enabled learning. Algonquin College's commitment to—and passion for—digital education has been supported over the past 15 years by investments in applied research, pedagogy, professional development, software development, technology infrastructure, corporate governance and institutional culture. This commitment has transformed both the Algonquin online and on-campus experience.

It is Algonquin College's investment in hybrid (or blended) learning that has had the most significant impact on the online and campus learning experience. Today, full-time students at Algonquin College receive on average 20% of their program hours online and the number of hybrid or blended-learning courses offered will exceed 2,200 course sections, with over 80,000 course registration in 2013-2014. In Fall 2013, over 13,200 full-time students were enrolled in 148 mobile learning programs that involve the mandatory use of a laptop or other mobile device. By 2015, all full-time Algonquin students will be enrolled in mobile learning programs.

In 2012–2013, 148 of Algonquin programs were offered as mobile learning programs and to date, 140 classrooms have converted into mobile learning classrooms, giving students the flexibility to learn using the kinds of mobile devices they depend on in their daily lives.

As the undisputed leader in the provision of online courses and programs in the Ontario college system, Algonquin has the expertise to deliver on the province's commitment to provide more choices to students. This year, Algonquin had over 30,000 course registrations across 773 online courses. The College now offers 61 fully online programs with a 100% increase in enrollments year over year. In 2012, Algonquin's Centre for Continuing and Online Learning (CCOL)

launched five full-time online programs expanding its enrolment 44 percent, with rural enrolment learner representation increasing by 68 percent.

Energizing inter-professional talent with living labs and simulations

In Algonquin living labs and simulation centres, students pursuing different but related fields of study learn within the same environment. The Algonquin Centre for Construction Excellence is a showcase for sustainable construction practices and superior craftsmanship; the Centre is a one-of-a-kind living laboratory that demonstrates what is possible through innovative design, construction, maintenance and operations. In police and public safety, Algonquin prepares students in a living lab to experience life on the job among peers. The Simulation Health Centre at Algonquin College and the University of Ottawa provides integrated curriculum, simulated environment and real medical settings to prepare students diverse nursing experiences and knowledge that will help prepare them for immediate employment.

Bringing textbooks to life

With eTextbooks, the quality of the educational experience is enriched; faculty have new opportunity to ‘bring the text to life’. The adoption of eTextbooks — text books in a downloadable, electronic format — offers Algonquin students world-class teaching resources and techniques.

Digital textbooks enrich the quality of the educational experience: they are available to all students immediately upon course registration even if fees remain owing; they are portable and easy for students to take with them to read anywhere, anytime, on their own device; they are convenient because hundreds of eTextbooks can be accessed via laptop, tablet or mobile device and no longer need to be carried in heavy backpacks; they save time as students are able to retrieve information rapidly, take notes easily with digital post-its and quickly edit with multi-colour highlighting, dictionary and cut and paste options.

Develop the initial business model and serve as the implementation partner for the Ontario Online Institute (OOI)

Capitalizing on the College’s existing experience in delivering quality online education, Algonquin will partner with the Ministry, OntarioLearn and leading-edge technology companies to develop and deploy an initial working business model for the Ontario Online Institute (OOI). Once operational, the scalable, student-centric model will be made available to all Ontario postsecondary institutions, delivering on the Government of Ontario’s commitment to build the OOI.

With an investment of \$6 million over two years, we propose a partnership between the Ministry and Algonquin to adopt best practices that are modeled after competency-based learning institutions like Southern New Hampshire University and the Western Governors University consortium.⁸ Supported by the provincial government, OntarioLearn and the private sector, this partnership would see Algonquin work collaboratively to develop the operating model and serve as the implementation partner for the OOI.

Committed to building a student-centered platform for online education, the College will leverage its extensive expertise collaborating with leading-edge technology suppliers to develop an end-to-end online environment that can be scaled across all colleges and universities within two years. The iterative development approach will serve as a model not only for improvements in online education but in traditional on-campus education as well.

Because of Algonquin College’s investment in technology-enabled learning, the College has the ability to lower investments in physical infrastructure. Through online activity, the College has been able to maintain a physical infrastructure ratio of 70 gross square feet per student—39% lower than the 2010 average of 113 gross square feet for Ontario colleges. The College has effectively increased access to Algonquin high quality programs while avoiding costs to Ontario’s postsecondary system of over \$100 million. Algonquin College has proven that the broad adoption of technology-enabled learning practices has the ability to increase access, improve quality and lower cost.

Implementing the Ontario Institute for Digital Education (OIDE)

Acting on the College commitment within the Strategic Mandate Agreement (SMA) October 2012, Algonquin launched the Ontario Institute for Digital Education. Within the mandate of the OIDE, Algonquin is transforming higher education; the OIDE is focused on the analysis, advocacy, community building, professional development and cost-saving collaborations of technology-enabled learning.

No other Ontario institution has Algonquin’s experience delivering year-round, continuous intake online programs and services. Our commitment and continued investments in this area have improved access at the institutional level, while also examining and testing new approaches that have the potential to dramatically lower costs at the system level.

2.3 Component of differentiation: Student population

Algonquin College has grown to be one of Canada's largest colleges and polytechnics with student enrolment rising steadily at an annual average growth rate of over 4% since 2008.^{9,10} Algonquin reached a full-time equivalent of 16,858 in 2012-2013.

Algonquin College covers a large geography extending through Eastern Ontario and beyond

Algonquin College's sphere of influence extends into, and beyond neighbouring municipalities. Although most students registered in Algonquin College online courses are drawn from Eastern Ontario, Algonquin College is beginning to break down geographic barriers with increased uptake of online courses, particularly from small communities across Ontario.

Self-paced online learning not only improves access for all students, wherever they may live, but facilitates the retention rate for students by providing more academic options to succeed in postsecondary education and contribute to the economy after graduation.

Inquiries into the Algonquin College online programs come from far afield. The Centre for Continuing and Online Learning eAlgonquin portal reports 1,718,745 visits and 296,175 unique visitors from 2621 unique cities over the period of January 2011-December 2013.¹¹ With targeted programs, Algonquin College online has the opportunity to extend its reach to under-served or emerging markets with its online programs.

Canada's share of international students has grown consistently since 2009, drawing approximately 2.7% of students studying abroad. Between 2001 and 2010 international student enrollment in Ontario postsecondary institutions increased from 4% to 7% in universities, and 2% to 12% in colleges.¹² In 2012-2013, 1,965 international enrolments were registered for language training; 16% enrolled in levels of study toward admittance to a postsecondary diploma or degree program and 7.5% flowed through to these programs at Algonquin College.

Algonquin College's broad range of programs meets the educational needs of a diverse student population

By streamlining access and mobility for all qualified learners, improving retention rates to program completion and producing successful graduates who contribute to Ontario's economic prosperity, Algonquin College represents a leading model in support of Ontario's Reaching Higher Access to Opportunity Strategy.

Algonquin attracts a high proportion of its full-time enrolment (60%) from non-direct populations;¹³ most (78%) of these learners are between the ages of 18 – 24 years old and one fifth (20%) above the age of 25. Responses to the College's First Year Student Survey indicate that non-direct learners previously worked full-time outside the home, studied at university, attended another community college, were self-employed, or were looking for work while unemployed prior to attending Algonquin.¹⁴

Algonquin online learners are more likely to be female, mature, study part-time, and have already earned a postsecondary qualification. Online delivery will play a key role in attracting an older demographic and a broader distribution of learner profiles to Algonquin. Through the Centre for Continuing and Online Learning, Algonquin College delivers 20 full-time and 41 part-time programs including 11 Ontario College Graduate Certificates.

Algonquin College includes comprehensive programs to suit a diverse student population and to address the local labour market needs to support the regional economy. Due to the College's strategic approach to programs and services, qualified students across eastern Ontario and beyond have access to quality postsecondary education.

Algonquin College recognizes shifting demographics and will play a key role in institutional specialization

Algonquin College is exploring the skills needed for highly trained graduates due to shifts in population demographics. This will affect programming to meet the needs of several population groups and address their educational and societal requirements:

Aboriginal people represent the youngest segment of the Canadian population. Aboriginal people are migrating to Ottawa for employment, education and family reasons; Ottawa is home to the largest Inuit population outside the North.¹⁵ Algonquin College leads the province in facilities and support-staff dedicated to this group including a dedicated counselor and having an event coordinator; the Aboriginal Education Council is highly representative across First Nations, Inuit and Métis in the region.

Elderly Canadians Canada's population is aging. Over the next ten years, the number of Canadians aged 15-29 years old will decline by 1% in Ottawa, 15% in Renfrew and 16% in Lanark counties.¹⁶ By 2031, Ottawa's

senior citizens will account for almost 50 per cent of the population and very elderly citizens (over 80 years old) will more than double, placing demands on health, long term care facilities and relevant community-based services.¹⁷

Newcomers Ottawa has become the fourth destination across the country and the second choice in Ontario for recent immigrants to Canada. Newcomers to Ottawa are more likely to have already earned a university degree than recent immigrant arrivals in any other Canadian city. Recent immigrants to Ottawa are often of prime working-age (18-49). Newcomers 25-29 years of age come to Ottawa primarily for work while newcomers 18-24 years are often here to study.¹⁸

Students with disabilities One in five people in Ontario will experience a mental illness at some point in their lifetime.¹⁹ Nearly 18 per cent of people living in the Ottawa area have activity limitations including vision disabilities, deafness or being hard of hearing, intellectual or developmental, learning, mental health issues, cardiac or diabetic conditions, balance, cognitive, among others. Algonquin College has been identified as a leader in the province for the provision of accessible services for people with disabilities. In collaboration with York University, Algonquin will pilot services toward setting the province-wide standard for the transition of learners with Autism spectrum disorder from high school to postsecondary education.

Algonquin's Centre for Students with Disabilities introduced the position of Learning Strategist for Apprentices with Disabilities and as a result has observed a passing rate of 96 percent for the different levels. The Centre also provides e-counselling services to students with disabilities as an alternative to traditional face-to-face appointments: through e-mail, students set up academic accommodations and access disability support services.

Algonquin College services lead the way in support for student access, retention, success and mobility.

Affordable learning with units based on competencies

Learning units offer postsecondary learners an option to achieve discrete competencies. When a student is not successful in one of these courses, rather than complete the course in its entirety, the student would need to complete only the learning units where they were not successful. Students could be eligible to save upwards of \$330.00 per course. With a working model for learning unit development, Algonquin College will have developed an approach that could be replicated system-wide to advance the quality, scale and breadth of online education in Ontario.

Leveling the field with eTextbooks

eTextbooks will increase the access to, and affordability of, required course materials. When fully implemented, the eTextbook program at Algonquin will ensure that 100% of students have access to 100% of their required resources, 100% of the time. With the College's goal of providing these resources at 50% of the current suggested print-based price points, Algonquin anticipates an estimated savings for Algonquin students to be \$5.0 million annually.

With eTextbooks, students have the opportunity to interact with educational resources in a variety of ways to suit their learning style. Digital resources are: expansive because content can be linked electronically to other related websites; printable on demand when students when/ if desired; adaptable as most eTextbooks can be listened to ('text to audio') and allow for multimedia support, images and sounds. Digital materials transition easily to audio, supporting Accessibility for Ontarians with Disabilities Act (AODA) compliance.

Online learning improves access for students particularly for disenfranchised populations

Algonquin College's delivery of online courses provides learners with flexibility and easier access among the traditionally disenfranchised learner populations as reported in Multi-Year Accountability Agreement (self-identified) enrolment of students with disabilities (12 per cent), First Generation Students (26 per cent), and Aboriginal students (6 per cent).²⁰

Global service standards across each campus, including the fourth College campus online

Algonquin will set itself apart from postsecondary institutions by creating personalized and well-supported learning experiences that engage students in-person and online. With the use of learning analytics, review of learning platforms and assessment of industry best practices, Algonquin will create unique and meaningful learning experiences that are scalable, improving efficiencies and lowering operational costs while maintaining high levels of service. The learner will be empowered with self-serve access to services as needed, on-demand, and online.

Automating systems contributes to an efficient and financially sustainable education system

Over the course of the year, Algonquin introduced numerous innovations to enhance the student and client experience, including electronic confirmation for those who receive financial support through the Ontario Student Assistance Program (OSAP); an online resource specifically for first-generation students (the first of its kind in Canada); and an app for Android, iOS and Blackberry devices that provides staff and students mobile access to College emergency planning measures.

Algonquin College initiated value stream mapping, using LEAN Value Stream methodology, for establishing an in-person One-Stop Service model for learners in the Student Commons. As a result of feedback from student and employees, Algonquin identified the best way to implement this integrated service delivery model in the Commons. The student support services located across the campus were united in the new facility. Educational institutions across Ontario and abroad have taken an interest in Algonquin's Value Stream efforts that are streamlining College processes while maximizing value to our learner clientele.

2.4 Component of differentiation: Research and Graduate Education

Algonquin recognizes the value of research and development (R&D). As a partner in community development, the College has broadened the role of faculty, students and staff in research and development to participate fully in the challenges and success of industry partners. The College enriches its curricula and the experiences of its students and faculty while adding value to the community it serves.

The Office of Applied Research and Innovation (ARI) involves students and faculty with local organizations, business, and industry to collaborate on projects that provide practical solutions to every day issues and create new and innovative products and services. At Algonquin, ARI mobilizes students and integrates them through applied research in to local innovation and economic development. It supports faculty involved in research, especially faculty in degree programs who are expected to participate in research or scholarly activities.

Stimulating the economy with world class research and innovation

Algonquin College professors and students, primarily undergraduates, collaborate closely with industry and community partners on fundamental research that leads to new knowledge, or applied research that leverages existing knowledge, to solve current challenges and advance market-driven opportunities. Algonquin partners have broad impact on local, national and international economies. For instance, in close collaboration with Algonquin College, HousAll created robust temporary shelters that were built in Haiti; ImpaKt Protective developed leading-edge technologies to better identify and manage head injuries in sports globally; Fluidware opened domestic and international markets with its industry-leading online survey and competition management products and services. Algonquin is an indispensable partner to industry, pushing the bounds of knowledge, developing Highly Qualified and Skilled Personnel (HQSP²¹), supporting the professional development of faculty and building businesses, not just technologies.

Engaging faculty to enrich teaching and learning

Faculty undertake projects and initiatives that promote improvements in teaching and learning and interdisciplinary collaboration, and that enhance student success and engagement. The College is committed to supporting this Applied Research in Applied Learning. Faculty are encouraged to leverage the Faculty Innovation Fund to obtain funds that are set aside during the College's budgetary process, to support faculty-led innovative projects and ideas. Faculty proposals to the Fund are measured against innovation contributions to teaching strategies; improvements to student engagement; breadth of reach to impact the greatest number of students; collaboration between departments, programs or campuses and alignment with current College Priorities. Applications are also made to funding organizations. Research results are disseminated internally through seminars and externally through publications and conference presentations.

Commercializing research outcomes with the Executive-in-Residence program

The Executive-in-Residence (EIR) program, initiated and funded by the Algonquin College Students' Association, was created to foster entrepreneurship. Entrepreneurship skills are increasingly important in a rapidly-changing world where traditional jobs are disappearing. An EIR creates visibility of entrepreneurship at the College, engages students with the external community and provides resources for those who want to explore their entrepreneurial ideas and convert research outcomes into market realities.

Meeting employer demand through applied research and innovation

Employers seek graduates with entrepreneurial skills and innovation literacy. With applied research projects, students tackle real world challenges to acquire these skills and knowledge. Applied research projects encompass a wide variety of activities and include products, processes and services from marketing research and business planning, web application development, product design and manufacture to health care applications and environmental activities.

ARI involves students and faculty with local organizations, business, and industry to collaborate on projects that provide practical solutions to every day issues and create new and innovative products and services. Across Algonquin, 629 students, 88 employers and 47 faculty were involved in more than 154 applied research and development projects in fiscal year 2012-2013.

Research centres offer support and inspire students to participate

ARI supports the efforts of entrepreneurs, small and medium enterprises and large companies, and strengthens the skill sets of Algonquin faculty, while providing students with great experiential learning opportunities.

Algonquin has five Research Centres within ARI that are well aligned with the Strategic Program focus areas and regional communities:

- The Algonquin **Health and Wellness Research Centre** contributes significantly to health and wellness research in Ottawa while assisting with the development of highly trained personnel for the health and wellness sectors.
- The **Construction Research Centre** supports the adoption of digital technologies and analytical tools by the industry.
- The **Design Centre** focuses on User eXperience design for digital and associated technologies.
- The **Full Spectra Centre** collaborates with clients on wave-based technologies such as wireless, photonics and electricity.
- Applied Research has expanded to Algonquin's regional campuses through the **Rural Economic Research and Development Centre (RERDC)**, a joint initiative between the **Pembroke and Perth** campuses, supported by the resources of the ARI Office Ottawa.

Looking to the future with the inauguration of the Algonquin School of Graduate Studies

Through its deep connections with industry and the external community, Algonquin has become increasingly aware of the need for 8-24 month, sector-specific, specialized programs that prepare graduates within sectors with high employment demand. Recognizing the highly-educated population of the College community (second in educated population for Canadian urban centres with 40.1% have a degree or higher),² Algonquin offers a wide variety of Graduate Certificates that would be branded under the banner of the Algonquin College School of Graduate Studies. Further Graduate Certificates are being planned in the Strategic Program areas that will enhance graduate preparedness for the labour market. In addition, all new Graduate Certificates will require a research competency.

2.5 Component of differentiation: Program Offerings

Algonquin College is the only English language college serving a region of more than 1.75 million people living in an area greater than 35 thousand square kilometres.²² The College is focused on providing programs that serve a highly diverse population of learners where community access, student success and employer requirements are priorities. In Eastern Ontario, learner demand for Algonquin College programs ranges from language training to applied degrees. The College works closely with local employers to ensure that graduates are trained and credentialed to meet workforce qualifications for employment and to contribute to the economic prosperity of the region. Algonquin College includes comprehensive programs to suit a diverse student population. Due to the College's strategic approach to programs and services, qualified students across eastern Ontario and beyond have access to quality postsecondary education.

Increasing demand for applied degrees

Ottawa boasts the highest number of residents with a postsecondary education in Canada, a high percentage of people who speak multiple international languages, a young, entrepreneurial workforce and more engineers, scientists and PhDs per capita than any other city in the country.²³

Algonquin has identified industry need for advanced credentials; there is immediate opportunity for Algonquin to significantly expand the number of applied degrees it offers.

Ottawa's largest industry and single largest employer is Federal Government Public Administration which, despite job cuts, grew from 19 to 21.5 per cent share of the labour force from 2006-2012.²⁴ The hiring practices and policies of the Federal Government often demand applicants have a postsecondary degree to be included in the selection process, particularly in finance, business and administration occupations. Algonquin College has a unique, niche opportunity to deliver job-ready, degree credentialed graduates by increasing its offer of targeted, applied Public Administration degree programs locally. Its Bachelor of Applied Business (e-Business Supply Chain Management) produces graduates that are highly sought by the Federal Government.

Across sectors, as the workforce ages and leaders retire from their management positions, replacement demand will become a large proportion of employment demand (preliminary forecast of 80%). With replacement demand, employers will seek out experienced candidates to fill positions. Healthcare and educational services' administrators will focus greater efforts on succession planning and replacing retirees. Employers seeking to hire persons in the applied science field almost invariably have a preference for degreed applicants with relevant experience (typically 5 years). In business studies, occupation trends suggest stronger demand for degree qualifications than for diploma or certificate qualifications. Algonquin College will need to expand its graduate certificate and degree programs in Health and Wellness; Digital Technologies and Design; Engineering, Technology and Trades; and Management, Administration and Leadership in order to meet the demands of the employer community.^{25,26}

Across industry, there is demand for a higher level of applied skills. Ottawa's market is unique with specific industry human resource practices that require degrees or graduate education to be considered for employment. Evidence supports the need for a greater array of Algonquin College applied graduate certificate and applied degree to meet market demand.

Delivering Joint Collaborative Degrees and Diploma programs

Unique in both the Ontario college and university systems, joint programs distinguish themselves by combining the professional knowledge, skills and abilities traditionally associated with both college advanced diplomas and degree programs with the breadth of a liberal arts education. It allows students to complete a college diploma and degree program to fulfill the requirements in four to five years, rather than six to seven by the traditional route. Algonquin has a number of varied joint programs with Carleton University and the University of Ottawa. These appeal to high school graduates who are looking for a program that provides a fusion of vocational knowledge and skills with the benefit of completing a degree in their chosen field.

Program quality assurance

Algonquin College has a robust program quality assurance process including an Annual Curriculum Review, an Annual Program Mix Review, and a cyclical 5-year in depth Program Quality Review. These processes include evidence-based and participatory inquiry to determine that programs and their courses are achieving the intended learning outcomes. Results guide curriculum design and delivery, pedagogy and educational processes. This process enables the College to incorporate changes to policy or strategic directions on an annual basis as required. The Program Quality Assurance Process Audit (PQAPA) conducted April 2011 designated Algonquin College quality assurance to the criteria of a 'Mature Effort', representing the highest designation achievable attesting to the strength of Algonquin's processes. Program optimization is operationalized, with programs introduced and phased out annually.

Emphasizing inter-professional studies

Algonquin designs its curricula to bring together learners from across different fields of study and disciplines. The College is creating a context that requires interprofessional working relationships, much like a workplace environment. With new WIL opportunities, applied research and programming that brings students across disciplines together, Algonquin is providing a superior learning environment. Students will be applying hard and soft skills to achieve learning goals, better preparing them for a career in their chosen field.

Algonquin College's up to 10 identified areas of program strength

As a comprehensive college servicing a large population and wide-geographic areas, Algonquin has developed strong programs in areas that are of importance to employers in Ottawa and Eastern Ontario.

1. Health and Wellness
2. Digital Technologies and Design
3. Hospitality and Tourism
4. Management, Administration and Leadership

5. Communications, Creative Media and Entertainment
6. Public Safety and Law
7. Engineering, Technology and Trades
8. Community Studies
9. Environment and Natural Resources

Algonquin College's 3-5 program areas that will be a strategic focus for the next three years

Based on employer input, labour market analysis and applicant demand, Algonquin plans to strategically focus on expanding existing or developing new programming in four key areas in the 2014-2015 to 2016-2017 timeframe.

1. **Health and Wellness:** The rapid changes in healthcare delivery through the integration of technologies and management of chronic disease will be critical to sustaining our system. These changes demand a new generation of health and related workers who support wellness in the community and who are technologically literate with a broad scope of practice. This area is well aligned with the Health and Wellness Research Centre.
2. **Digital Technologies and Design:** Algonquin programs have a unique applied aspect that provides students with the diverse skills necessary for competing in this challenging global arena. Applied research is an integral part of the learning within this area. Expected growth in applied research projects and cross-departmental collaborative programs differentiates this stream. Opportunities exist for exploring new program development in digital media, co-ventures with Carleton University or the University of Ottawa as well as cross-departmental collaboration. The Full Spectra and Design Centres provide research support in this area.
3. **Management, Administration and Leadership:** The local labour market, particularly the federal government, is looking for graduates with degree-level qualifications in the area of business systems development, public administration, management and leadership. The local high-tech industry and other sectors are looking for graduates with advanced entrepreneurship skills. This area provides support to all five research centres through the provision of marketing and business applied research services.
4. **Engineering, Technology, and Trades:** The engineering disciplines are well represented at the College and graduates are readily employed by Large Enterprises (LE), Small and Medium enterprises (SME) and utilities. Automotive programs are strong and the College is developing programming in the aviation sector. Other disciplines such as biotechnology, water and waste water treatment, and photonics are supplying the needs of local and regional employers. The trades are one of the Ottawa region's largest sectors and many of the technologists and tradespeople receive their training at Algonquin. In Eastern Ontario, Algonquin has the largest concentration of construction and trades programs. The new Bachelor of Building Science builds on the existing strengths in this area and will provide industry with job-ready, knowledgeable employees. A strong applied research focus is developing in this area, supported by the Full Spectra and Construction Research Centres.

2.6 Component of differentiation: Institutional Collaboration to Support Student Mobility

Institutional collaboration, sharing knowledge of leading practices

Algonquin College is a leader in efficiency modelling. Its partnerships between institutions ensure students have access to a continuum of learning opportunities within a coordinated system. This may include, but is not limited to, credit transfer pathways and collaborative or joint programs between or within sectors. Greater collaboration between and within sectors will work to maximize recognition for prior learning and strengthen pathways so that students can better navigate learning options with a differentiated postsecondary education system.

Algonquin collaborative degrees

Carleton University Bachelor of Information Technology Multimedia and Design
Carleton University Bachelor of Information Technology Network Technology
Carleton University Bachelor of Information Technology Photonics & Laser Technology
University of Ottawa Bachelor of Science in Nursing

Algonquin College aims to ensure its funded operational expenditures are in line with the provincial funding it receives — and at the same time, seeks opportunities to increase non-funded revenue and meet capital needs through strategic business partnerships. Algonquin practices and processes ensure the College operates as an efficient and financially sustainable education enterprise, maintained as a model for other educational institutions to emulate.

Improving student pathways to successful outcomes using financially sustainable methods

Algonquin College is developing a framework for efficient and effective program costing that could be adopted system-wide. Managers will be empowered with real-time business analytics to advance program quality. New reporting capabilities and predictive analytics will allow for forecasting and/or program costing scenarios, providing managers an early warning system, avoiding costs of programs in decline. Across the system, Ontario colleges agree that standardizing academic program costing would allow for meaningful comparisons and accurate assessments of local program financial viability.

First mover advantage, Strategic Programs and Services Planning

The Algonquin College Strategic Programs and Services Planning (SPSP) project analyzed every program and service and assessed their performance in terms of relevance, demand, quality, and resource utilization. The SPSP Task Group on Cross College Metrics assembled and established costing metrics for college wide use (*e.g.*, space costing).

Knowledge uncovered by the SPSP Task Group informed College program costing. By completing the goals of this project in 2013-2014, program costing that has been informed by the SPSP Task Group efforts will be formalized and automated; this will meet the College's Business Plan commitments to expand managers' ability to access data through business intelligence tools and improve their ability to make insightful decisions.

Centralized Course Outline Management and Mapping System (COMMS)

Developed over a 10-year period, COMMS combines web-based course outline development, program mapping and direct-to-student delivery with cloud-based storage. Institutions using a common platform such as COMMS would be able to share curricula easily, map courses for credit transfer, and streamline Prior Learning Assessment and Recognition processes. They will also be able to ensure that curricula, vocational learning outcomes, general education outcomes, essential employability skills, and course learning requirements are mapped against program-level outcomes and requirements.

During the 2013–2014 academic year, Algonquin has made COMMS available to Confederation College and has set up pilot sites for 9 other Ontario Colleges. Algonquin is prepared to extend this system to MTCU and all Ontario colleges as a centralized solution. Province-wide implementation of COMMS would be a key step toward the development of common core courses, credit transfer and curriculum sharing—resulting in better-quality courses, higher productivity, lower costs, less duplication and a more coordinated college curriculum.

Enhancing student mobility is critical to successful completion of programs and expanding student opportunities

Competency-based learning units create opportunity for mobility across the postsecondary system. Only recently have learners and employers dramatically shifted their attitudes towards e-learning. More readily accepted, e-learning has become the preferred channel for employer-support skills upgrading, particularly in 'bite-sized' courses rather than the traditional back-to-school calendar.²⁷

Competency-based learning units offer postsecondary learners an option to achieve discrete competencies. The new model for curriculum development improves the recognition of learner outcomes which in turn eases student mobility, enhances the student experience by reducing redundant course work and realizes course delivery efficiencies. The College will introduce the learning units as a pilot in 2014 and upon evaluation, will consider adopting the model more broadly.

Algonquin College Management of Facilities as it Relates to Academic Delivery and Related Services

Algonquin has operated the College Space Management Committee (CSMC) since 1990. As a space management committee, CSMC has successfully led the College through numerous strategies to optimize the use and allocation of space resources. Algonquin's space management model has received international recognition for its effectiveness and achievements. The CSMC is responsible for the stewardship of College facilities necessary for the successful delivery of all approved programs and activities offered at all campuses of Algonquin College. The Committee is the decision maker regarding the allocation of space resources to academic, administrative and support services.

The CSMC is a key part of the College's administrative process and has allowed the College to support sustained enrolment growth with minimal changes to its foot print. Algonquin's square footprint per student is among the lowest in the Ontario College system. The Committee led the way toward extended delivery into the evening and weekends for Algonquin full-time postsecondary programs to maximize scarce academic space. The CSMC has hosted a number of delegations from other Ontario Colleges over the years to study its operations and understand how Algonquin has been able to make it an important part of the College's management process.

Business Intelligence

In 2011–2012, 10 per cent of Algonquin College data was accessible through a common Business Intelligence (BI) portal. By 2016-2017, Algonquin College is targeting that 100 per cent of its data will be accessible online. With secure access to College program and performance data, Algonquin College will facilitate data-driven decision-making to enable financial sustainability over the long term and to strengthen the College's ability to move forward with high-quality program initiatives. Algonquin will provide employees with a model for institutional business analytics and data sharing and Ontario institutions with a robust framework for efficient and effective program costing. The College is investing in systems to facilitate data-driven decision-making that will enable financial sustainability over the long term, to strengthen the College's ability to move forward with high-quality program initiatives and to enable strategic collaborations.

Program Costing

Algonquin College is developing a framework for efficient and effective program costing that could be adopted system-wide. Managers will be empowered with real-time business analytics to advance program quality. New reporting capabilities and predictive analytics will allow for forecasting and/or program costing scenarios, providing managers an early warning system, avoiding costs of programs in decline. Across the system, Ontario colleges agree that standardizing academic program costing would allow for meaningful comparisons and accurate assessments of local program financial viability.

Responsibility Centred Management model

The College is piloting a Responsibility Center Management (RCM) governance and management model to establish modern business practices that encourage growth and entrepreneurial decision-making.

Enhancing and integrating automated systems

Algonquin has completed multi-year plans to implement enterprise resource planning (ERP) systems for Human Resources and Information Services (HRIS), Finance, Customer Relationship Management (CRM), and deployed and trained staff on a new Cognos business intelligence environment to improve access to actionable insights within the College. Algonquin has undertaken an Integrated College Development Plan that considers physical and technological infrastructure needs together, establishing a roadmap of capital needs to pursue 21st century campus planning objectives and strengthening the College's ability to move forward with high-quality program initiatives.

Create an Ontario Institute for Digital Education (OIDE)

A consortium of individuals, institutions, and organizations committed to quality online education, the OIDE will leverage Algonquin's experience to build a member-sustained, not-for-profit organization. It will focus on analysis, advocacy, community building, professional development, and on advancing cost-saving collaborations in technology-enabled learning to help transform higher education.

Bringing together all 45 postsecondary institutions in the province, the not-for-profit OIDE will be dedicated to helping institutions and individual educators improve the quality, scale, and breadth of online education in Ontario. Leveraging Algonquin's experience and applied insights, the OIDE will collaborate with learning organizations, government agencies and private-sector supporters to continually strengthen the foundation for digital education across the province—while working to ensure online education becomes part of everyday life, accessible to and affordable by anyone, anywhere, at any time.

With a funding model similar to the Ontario Colleges Library Association, the OIDE will leverage start-up funding from the Ministry to transform to a member-sustained model by 2017. This will help ensure the OIDE meets the needs of its members, providing services of measurable value and fulfilling the government's vision of higher education transformation—in which innovation, productivity and access are at the forefront of all technology-based learning implementations.

Part 3.1: Algonquin College – Possible College sector metrics to report on financial sustainability

Surplus/ deficit position

Accumulated surplus/ deficit

Net assets to expense ratio

Debt servicing ratio

Debt burden (debt to revenue or expenses)

Total debt to asset ratio

Net income to revenue ratio

System-wide metric for pension plan funded status (and the projected changes in funding obligations)

Compliance with Broader Public Sector (BPS) Accountability Act

Part 3.2: Algonquin College – MTCU metrics within each component of differentiation

Ontario's Differentiation Policy Framework Components of Differentiation	Source	Metrics for Ontario Colleges	2009-2010	2010-2011	2011-2012	2012-2013
Jobs, Innovation, and Economic Development	KPI report	Graduate employment rate	87.9%	84.9%	85.7%	84.8%
	KPI report	Employer satisfaction rate	91.6%	92.1%	91.1%	94.1%
	Graduate survey	No. of grads emp. in job related to field of study 6 months after grad	68.3%	64.8%	65%	63.2%
	Institution	Work-Integrated Learning metric tbd				
	Institution	Co-curricular metric tbd				
	Institution	Employer metric tbd				
Teaching and Learning	KPI report	Graduation rates	62.9%	62.9%	64.2%	64%
	MYAA	Retention rates 1 st to 2 nd year	74.1%	74.1%	73.8%	77%
	MYAA	Retention rates 2 nd to 3 rd year	90.2%	90.2%	96.2%	91.2%
	MYAA	Retention rates 3 rd to 4 th year	92.8%	92.8%	91.7%	92.8%
	MYAA	Total no. of programs offered with co-op (cert/dip/ad dip/grad cert/degree)	N/A	N/A	27	33
	MYAA	Total no. of students enrolled in a co-op	N/A	N/A	2,021	3,578
	MYAA	Total no. of ministry funded courses offered in eLearning format	N/A	611	651	715
	MYAA	Total no. of ministry funded programs offered in eLearning format	N/A	17	23	23
	MYAA	Total no. of eLearning registrants	N/A	9,821	13,730	19,843
	KPI report	Student satisfaction rates	80.7%	79.8%	80.3%	81.5%
	Institution	Hybrid delivery metric tpd				
	Institution	Mobile Learning Program metric tpd				
	Institution	E-textbook metric tbd				
	Institution	"Learning Enterprises" metric tbd				
	Student Population	MYAA	Total no. of full-time first generation students	1,333	4,204	2,800
MYAA		Proportion of first generation students enrolled	10.02%	30.9%	20%	26.3%
MYAA		Total no. of part-time first generation students	N/A	N/A	N/A	N/A
MYAA		Total no. of full-time students with disabilities	1,591	1,814	1,827	1,757
MYAA		Proportion of students with disabilities enrolled	80	13.3%	13%	11.8%
MYAA		Total no. of part-time students with disabilities	12.56%	94	183	115
MYAA		Total no. of full-time Aboriginal students enrolled	1,534	588	644	900
MYAA		Proportion of Aboriginal students enrolled	11.52%	4.3%	4.6%	6%
MYAA		Total no. of part-time Aboriginal students enrolled	N/A	N/A	N/A	116
CSER		Total no. of full-time French-language students enrolled	N/A	N/A	N/A	N/A
CSER		Proportion of French-language students enrolled	N/A	N/A	N/A	N/A
MYAA		Total no. of full-time international students enrolled	529	780	860	779
MYAA		Proportion of international students enrolled	4.0%	5.73%	6.14%	4.97%
MYAA		Proportion of an institution's enrolment that receives OSAP	N/A	20%	20.7%	21.4%
Institution		Demographic metric tbd				
Institution		Catchment metric tbd				
Research and Graduate Education		NSERC	Number of Research Chairs	N/A	N/A	N/A
	NSERC	Total Tri-council funding	N/A	N/A	N/A	N/A
	Institution	Graduate Certificates metric tbd				
	Institution	Professors engaged in applied research tbd				
	Institution	Industry engagement in applied metric tbd				
	Institution	Students engaged in applied research tbd				

Program Offerings	CSER	2&3 year diploma enrolment concentration by cluster, as share of institutional enrolment	Seeking Ministry guidance as the not clear which clusters are being referenced.			
	CSER	Enrolment concentration in degrees in applied areas of study by occupational cluster, as a share of institutional enrolment				
	CSER	2&3 year diploma enrolment concentration by cluster, as a share of system enrolment				
	CSER	Enrolment concentration in degrees in applied areas of study by occupational cluster, as a share of system enrolment				
	Institution	Enrolment concentration, program areas of focus	Information currently not available. Additional guidance requested as to level of detail required.			
	Institution	Target enrolment, program areas of strategic focus				
	Institution	Enrolment concentration, program areas of strategic focus				
These are total numbers, but can be broken down if desired. More specific no. for pass/fail and funding will be available in January.	EOIS-APPR	Number of apprentices in each trade	460	454	575	445
	EOIS-APPR	Pass/Fail rates of apprentices in each trade	95+	95+	95+	95+
	EOIS-APPR	Funding for apprenticeship by trade	~\$5.3MM	~\$5.3MM	~\$5.3MM	~\$5.3MM
	Institution	Graduate Certificate metric tbd				
	Institution	Students in applied degrees metric tbd				
	Institution	Applied degree metric tbd				
Institutional Collaboration to Support Student Mobility	KPI	Number of college graduates enrolled in university	209	223	252	235
	ONCAT	Number of college and university pathways and/or articulation agreements reported through ONCAT	N/A	N/A	N/A	14
	Institution	Competency-based learning metric tbd				
	Institution	Collaborative/joint degree metric tbd				

Appendix 2 – Enrolment Data

Table 1: Baseline College Full-Time Headcount (Eligible and Ineligible)									
Baseline projection for the college as a whole, excluding Second Career clients. These should include additional capacity which has already been funded through capital projects currently underway. These projections should not include the impact of introducing three-year degrees; the impact of proposed projects; or, assume provincial approval of future projects or associated policy decisions (e.g., three-year degrees, program approvals, development of new campuses, etc.).									
	Eligible Students								
	Actuals			Preliminary	Projected				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Certificate/Diploma	13642	14253	15181	16090	16581	16581	16581	16581	16581
Degree	275	310	362	400	485	485	485	485	485
Total Eligible Full-time College Headcounts	13917	14563	15543	16490	17066	17066	17066	17066	17066
	Ineligible Students								
	Actuals			Preliminary	Projected				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Certificate/Diploma	1346	1316	1293	1307	1421	1486	1521	1556	1593
Degree	18	22	22	24	32	32	32	32	32
Total Ineligible Full-time College Headcounts	1364	1338	1315	1331	1453	1518	1553	1588	1625
Total Full-time College Headcount (Eligible + Ineligible)	15281	15901	16858	17821	18519	18584	18619	18654	18691

Table 2: Projected College Full-Time Headcounts (Eligible and Ineligible)

Enrolment projection for the college as a whole, excluding Second Career clients. In addition to the baseline projections in Table 1, these projections should include the impact of proposed projects and provincial approval of future projects or associated policy decisions (e.g., three-year degrees, program approvals, development of new campuses, etc.).

	Eligible Students								
	Actuals			Preliminary	Projected				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Certificate/Diploma	13642	14253	15181	16090	17006	18283	19306	20322	20800
Degree	275	310	362	400	485	645	1149	1373	1925
Total Eligible Full-time College Headcounts	13917	14563	15543	16490	17491	18928	20455	21695	22725
	Ineligible Students								
	Actuals			Preliminary	Projected				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Certificate/Diploma	1346	1316	1293	1307	1421	1486	1521	1556	1593
Degree	18	22	22	24	32	32	32	32	32
Total Ineligible Full-time College Headcounts	1364	1338	1315	1331	1453	1518	1553	1588	1625
Total Full-time College Headcount (Eligible + Ineligible)	15281	15901	16858	17821	18944	20446	22008	23283	24350

Appendix 3: Identifying Institutional Program Strengths and Strategic Areas of Focus

In SMA proposals, colleges and universities have been asked to identify activities that profile their institution’s strengths. The following tables are intended to help demonstrate the link between those identified areas of institutional strength and program areas – both current and future.

- In the first table, please identify up to 10 areas of program strength for your institution. Please describe the rationale used to select these program areas.
- In the second table, and within the context of limited future enrolment growth, please identify 3-5 specific program areas that you plan to build upon to further enhance your institution’s identified strengths and provide a rationale for each.

This information will be used to inform SMA discussions about existing and proposed areas of program strength. It will also assist the ministry and the Strategic Mandate Advisor in seeing alignments between institutional strengths, planning and program offerings.

Information outlined is not meant to be an exhaustive list of programs offerings.

Current Areas of Program Strength

Please identify up to 10 areas of program strength for your institution. Please describe the rationale used to select these programs. This information will assist in establishing current programming strengths and areas of expertise.

Institutional Program Strengths (maximum 10)		
Program Area (for example, Occupational Cluster)	Total Full-time Headcount (Eligible) (2012-13)	Rationale
Health and Wellness	2061	The rapid changes in healthcare delivery through the integration of technologies and management of chronic disease will be critical to sustaining our system. These changes demand a new generation of health and related workers who support wellness in the community and who are technologically literate with a broad scope of practice.
Digital Technologies and Design	1966	Digital technologies and design focuses on the intersection of design, digital media and technology in the communication realm. Digital technology is a strong focus of Ottawa-based companies whose history of exceptional software development created a robust industry encompassing gaming, interactive media, digital animation, computer aided design and information systems. Combined with solid creative design skills these technologies are interdisciplinary and are important to the social and economic growth of Ottawa and beyond. Large and small companies have arisen from the intellectual property and personnel assets of Nortel and Ottawa is a hotbed of start-ups, many of whom collaborate with the College through applied research. Algonquin is a leader in integrating design for usability with efficiency in coding to produce high quality digital products and services. The College provides many of the employees, especially for local small and medium enterprises.
Hospitality and Tourism	503	Algonquin is the most comprehensive and diversified hospitality management, tourism/travel, wellness, culinary/baking training entity in Canada. With over 3000+ registrants a year, it now offers 18 programs from pre-apprenticeships in culinary arts to a four year degree in Hospitality and Tourism Management along with several certificates, diplomas and graduate certificates in complementary disciplines. Multiple intakes are offered throughout the entire year, which support

Institutional Program Strengths (maximum 10)		
Program Area (for example, Occupational Cluster)	Total Full-time Headcount (Eligible) (2012-13)	Rationale
		employer demands, and the School is truly becoming a leader in the area of applied learning using technology. The School of Hospitality and Tourism also operates five learning enterprises and is heavily involved in Applied Research. Work-Integrated Learning is embedded in all programs. The School has an international component through established articulation agreements with institutions around the world.
Management, Administration and Leadership	3029	Algonquin currently delivers a broad range of academic programming in the major areas of management, administration and leadership. Graduates find work in the public sector and in the growing private sector of the local economy, in a range of fields including accounting, marketing, human resources, and international business.
Communications, Creative Media, and Entertainment	1737	The world of media communications is an industry in constant change. The advent of new social communication platforms has redefined how we communicate, gather information and consume entertainment media. The importance of this industry within Ottawa has been identified by Invest Ottawa as a key sector. Algonquin's creative media programs mirror the convergence that is occurring in the industry. Programs in game development, script writing, mobile applications and interactive media are bridging the divide between conventional radio, film and television media. In addition, these successful programs continue to raise the bar in terms of real-life applied learning in the communication space. Students are making positive contributions to the community, act as ambassadors for the college and are sought by employers across Canada.
Public Safety and Law	1246	Policing, emergency management and law is an expanding field of study with increasing focus on engagement of the broader community in understanding the complexity of issues influencing public safety. We are expanding our offerings in this area to recognize the centrality of public safety.
Engineering, Technology and Trades	2059	The engineering disciplines are well represented at the College and graduates are readily employed by large enterprises, and small and medium enterprises and utilities. Automotive programs are strong and the College is developing programming in the aviation sector. Other disciplines such as biotechnology, water and waste water treatment, and photonics are supplying the needs of local and regional employers. The trades are one of the Ottawa region's largest sectors and many of the technologists and tradespeople receive their training at Algonquin. In Eastern Ontario, Algonquin has the largest concentration of construction and trades programs. The new Bachelor of Building Science builds on the existing strengths in this area and will provide industry with job-ready, knowledgeable employees. A strong applied research focus is developing in this area.
Community Services	1563	Community services programming addresses a unique need in the community for workers to meet the needs of a diverse population including for example, early learning, developmental service and social service workers.
Environment and Natural Resources	743	Algonquin College has created a niche for itself in this program area. Its regional campus, Algonquin College in the Ottawa Valley (ACOV), delivers four full-time programs in this cluster that account for most of ACOV's enrolment growth over the past decade and attract the majority of its out of town students. Outdoor Adventure, Outdoor Adventure Naturalist, Environmental Technician and Forestry Technician have positioned the Campus as the Outdoor Education Leader in Eastern Canada and enabled it to penetrate non-traditional recruitment markets and build its reputation as a destination for higher education outdoor training. At the heart of these programs are innovative industry partnerships that integrate student learning in the classroom (theory) and in the outdoors

Institutional Program Strengths (maximum 10)		
Program Area (for example, Occupational Cluster)	Total Full-time Headcount (Eligible) (2012-13)	Rationale
		(practical). The Ottawa campus delivers a further seven programs in this cluster in areas of interest to employers such as horticulture, water and waste water treatment and environmental management and assessment. These offerings are meeting the needs of employers in the region and across the province. Non-traditional delivery cycles for some of the programs are advantageous for students wanting a quicker pathway to employment, and also support employers who are facing labour market skill shortages.

Proposed Areas of Program Strength

Within the context of limited enrolment growth, please identify 3-5 program areas that will be a strategic focus in the next three years. Please be specific when describing your rationale for focusing on these areas.

Programs for Growth or to be Established (maximum 5)				
Program Area (for, example, Occupational Cluster)	Total Full- time Headcount (Eligible) # (2016-17)	Target Total Full-time Headcount (Eligible) as a proportion of institutional Total Full-time Headcount (Eligible) % (2016-17)	Planned New or Expanded Programs (including credential level)	Rationale
Health and Wellness	930	23.5		
			2014-15	
			Digital Health Ontario College Graduate Certificate	Urgent need for graduates to work with a transitioning sector including ehealth records.
			RN-Perinatal Nursing Ontario College Graduate Certificate	Specialized training for nurses in perinatal care especially high risk mothers and babies has been requested locally.
			Occupational Therapist Assistant/Physiotherapist Assistant Ontario College Diploma	Focused on keeping individuals at home especially those with chronic illness. A growing demand with scarcer health resources.
			Developmental Services Worker Ontario College Diploma (Expansion Pembroke)	This intensive program delivered over 45 weeks will prepare students to work in the public and private sector, supporting individuals of all ages who may have physical, cognitive and or developmental disabilities within the region.
General Arts and Science Pre-Health Ontario College Certificate (Expansion Pembroke)	The Pembroke campus offers a number of health programs. A local preparatory health program will facilitate access to these programs for individuals who otherwise might not have the opportunity to pursue health studies.			

Fitness & Training Ontario College Certificate	Capitalizes programming within the most rapidly growing industry of health and welfare services, regionally and nationally.
Hospitality Services Ontario College Certificate (Perth Expansion)	To address growth in tourism in Lanark county with training not currently addressed at the PSE level.
Online Programming - Expansion	Expansion of online programming within the health and wellness cluster.
2015-16	
Retirement Home Management Ontario College Graduate Certificate	The School of Hospitality and Tourism at Algonquin College has a 40+ year history of providing training in the areas of Hotel and Restaurant Management and Culinary Arts. More recently the school embarked on the delivery of food and nutrition management. It is clear that the School has significant experience in providing training related to and associated with the managing of retirement homes. The available data on current and future needs and the growth of this industry are clear given demographic trends. In fact, industry professionals are anticipating a crisis situation whereby in the very near future there will be insufficient facilities to meet the need.
Interprofessional Mental Health and Addictions Ontario College Graduate Certificate	An area of unique collaboration across disciplines to address the significant mental health and addiction needs of our community.
Museum and Cultural Resources Management Ontario College Graduate Certificate	A shift in focus to a graduate certificate recognizing the changing landscape in the discipline of museum and management of our cultural resources.
Culinary Tourism Ontario College Graduate Certificate	The School of Hospitality and Tourism at Algonquin College has a deep history in the area of culinary training. Currently several programs are offered including three apprenticeships. Throughout the world food, wine and beverages, have become the basis to major tourism development. We believe that the province of Ontario is at a point in tourism development when this very specific program can support at a local regional and provincial level, the growth of the tourism industry in the coming years.
Pharmacy Technician Ontario College Diploma	A growth area related to the needs of an aging population and the careful management of pharmacare in our community.
Canadian Hospitality and Tourism Exploration Ontario College Certificate	In recent survey results published in Business Week Magazine, the hospitality and tourism industry was identified as the industry that will show the largest need for trained staff in 2014. The College has a strong history of training in the area. This program will give students a strong basic introduction to some of the trades and future career potential within that industry. The Ontario Tourism Education Council and the Canadian Tourism Human Resource Council clearly identify in

			many of their recent studies the gap between supply and demand in trained professionals in the coming years.
		Food and Chronic Disease Management Ontario College Certificate	A unique offering that acknowledges the importance of food in the management of chronic disease, which is a growing health consideration given an aging demographic.
		Dog Grooming Ontario College Certificate	Increase in veterinary practices and associated animal care with a local demand for this specialized training.
		Online Programming - Expansion	Expansion of online programming within the health and wellness cluster.
		2016-17	
		Bachelor of Digital Health	A transdisciplinary approach to the needs of the broad health community integrating diverse technologies into the field.
		Health Administration Ontario College Graduate Certificate	Focus on health management at the middle management level which was identified as a training need in the Prism Report commissioned by Algonquin in 2012.
		Animal Rehabilitation Ontario College Graduate Certificate	With increasing rehabilitation needs of animals, this is an area of specialization.
		Beverage Management Ontario College Graduate Certificate	The School of Hospitality and Tourism has offered for several years, such programs as Bartending and Sommelier. In fact, at the 2013 World Sommelier Championships, an Algonquin graduate ranked second. Similar to food, wine, microbrewing and micro distillery, the study of beverages have become very popular with the general public, but more importantly have become a subsection of the hospitality and tourism industry. The upcoming labor shortage in this industry warrants such a program.
		Online Programming - Expansion	Expansion of online programming within the health and wellness cluster.

Program Area (for, example, Occupational Cluster)	Total Full- time Headcount (Eligible) # (2016-17)	Target Total Full- time Headcount (Eligible) as a proportion of institutional Total Full-time Headcount (Eligible) % (2016-17)	Planned New or Expanded Programs (including credential level)	Rationale
Digital Technologies and Design	712	18		
			2014-15	
			Cyber Security Incident Prevention and Response Ontario College Graduate Certificate	Cyber security is a rapidly escalating concern for any government agency or business. This program will prepare students to participate in incident prevention and response as part of an organization's Cyber Security Team, to protect information and information systems.
			Online Programming - Expansion	Expansion of online programming within the digital technologies and design cluster.
			2015-16	
		Advanced Sound – Film Cluster Ontario College Graduate Certificate	Digital audio engineering skills are required in this multifaceted industry. Film, sound and production are integrated together as a specialization within the film and music cluster. This cluster is a strategic focus of Invest Ottawa that is concentrating on the continued development, retention, competitiveness, and enhancement of the city's film and television industry. Algonquin is the only college in the Eastern region with a Music Industry Arts program. By developing an advanced sound program offering, not only would students receive high-level training in music related sound, but would also capitalize on the growing film and entertainment industry within the region. Algonquin would be the only Eastern Region college to focus on this growing area.	
		Advanced Post Production Ontario College Graduate Certificate	To assist in growing the entertainment industry in Ottawa, production houses are seeking employees who are well versed in all aspects of production. This unique program will ladder from our successful TV Broadcasting program as well as the proposed Bachelor of Film and Media Productions. This cluster is a strategic focus of Invest Ottawa that is concentrating on the continued development, retention, competitiveness, and enhancement of the city's film and television industry. By developing advanced programming within the film and production area, Algonquin would be the only Eastern Region college to offer this mix and train for potential employment opportunities in this	

				sector.
			Bachelor of Information Technology (Information Resource Management) Collaborative with Carleton University	Changes in the information/library processes necessitate a re-examination of how information is stored and accessed. This program addition will build on the successful foundation of three existing Bachelor of Information Technology programs delivered jointly with Carleton and extend the well-established partnership that benefits students by reducing the time for attainment of a diploma and degree from six to four years.
			Online Programming - Expansion	Expansion of online programming within the digital technologies and design cluster.
			2016-17	
			Bachelor of Technology, Business Systems Development	This program builds on Algonquin's strengths in IT and business. It prepares students as business systems development specialists as they acquire in-depth knowledge and skills in the IT field and a strong foundation in business. This unique combination of skills equips graduates for employment in a wide variety of diverse roles within a business.
			Bachelor of Film and Media Productions	The Ottawa film industry is growing and the time is right to offer a degree that combines the theoretical aspects of film and the hands-on applied production aspects. This cluster is a strategic focus of Invest Ottawa that is concentrating on the continued development, retention, competitiveness, and enhancement of the city's film and television industry. The Ottawa region facilitates an average of 700 filming days that translate into over \$50 million of production. By developing advanced programming within the film industry, Algonquin would create a niche and be the only Eastern Region college to offer this mix and train for potential employment opportunities in this sector.
			3D Modelling Ontario College Graduate Certificate	The Prism Report commissioned by Algonquin in 2012, indicated a growth in 3D modeling. This OCGC would ladder from our Game Development and Animation programs offering a unique skill set within the entertainment cluster. Algonquin's Game Development and Animation programs receive accolades from our industry partners.
			Photography – Modification to 3 Year Ontario College Advanced Diploma	The three-year advanced diploma will increase the emphasis on digital video production, a key requirement for today's photographer. The Photography program is the highest demand program in the School of Media and Design.
			Music Industry Arts Ontario College Diploma – Expansion	Since it started in 2010, the Music Industry Arts program has been oversubscribed and enjoys a strong articulation agreement with the pre-Music program in GAS. Student demand continues to grow each year. The Music Industry Arts program at Algonquin is the only program of its kind in the Eastern Ontario Region creating a unique niche for the School of Media

			and Design.
		Interactive Multimedia Development Ontario College Diploma – Modification	The conversion of the IMD program to a three-year advanced diploma will allow the students to further develop their skills in digital video and other unique digital media spaces. This will serve the growing digital media industry in Ottawa.
		Online Programming - Expansion	Expansion of online programming within the digital technologies and design cluster.

Program Area (for, example, Occupational Cluster)	Total Full- time Headcount (Eligible) # (2016-17)	Target Total Full- time Headcount (Eligible) as a proportion of institutional Total Full-time Headcount (Eligible) % (2016-17)	Planned New or Expanded Programs (including credential level)	Rationale
Management, Administration and Leadership	1004	25.3		
	2014-15		Brand Management Ontario College Graduate Certificate	Marketing companies are focusing on brand management of their products and services, a specialized function of increasing demand in a global marketplace.
	Entrepreneurship Acceleration Ontario College Graduate Certificate	The local high-tech and other industries have indicated a need for graduates with advanced entrepreneurship skills.		
	Business Ontario College Diploma (NSDP Perth Expansion)	This offering will address a portfolio gap in offerings given growth in small and medium size businesses in Lanark county.		
	Office Administration - Medical Ontario College Diploma (Perth Expansion)	Required to address local growth in health services and to complement the high number of graduates in Office Administration providing another option for specialization.		
	Online Programming - Expansion	Expansion of online programming within the management, administration and leadership design cluster.		
	2015-16			
	Bachelor of Early Learning and Community Development	Aligned with the Early Years direction and outreach to the community this degree broadens knowledge across all segments of the population.		
	Bachelor of Commerce (Digital Marketing)	Increasing operations in foreign markets, as well as foreign competition, will require increased knowledge and experience in international marketing and advertising. In addition, expertise in new electronic avenues for sales and marketing, such as e-commerce is an ad-vantage. Employers will seek individuals with expertise in conducting advertising, marketing, promotions, public relations, and sales activities on the Internet. Additionally, the Prism Report commissioned by Algonquin in 2012 noted that in business studies, occupation trends suggest stronger demand for degrees over other qualifications.		

Bachelor of Commerce (Human Resources Management)	Opportunities for employment in this occupation are expected to grow as human resource managers will be called upon to develop strategies for retaining and retraining workers in an aging workforce. Additionally, the Prism Report commissioned by Algonquin in 2012, noted that in business studies, occupation trends suggest stronger demand for degrees over other qualifications.
Bachelor of Public Safety	Recognizes the complexities of policing and public safety in the 21 st century, and of particular relevance to the Nation's capital.
Search Engine Marketing Professional Ontario College Graduate Certificate	Local private sector businesses looking to develop specialized talent in an evolving market with increasing internet applicability.
Global Supply Chain Management Ontario College Graduate Certificate	This program will provide an in-depth understanding of the strategic concepts and skills required to be successful in the demanding supply chain management (SCM) profession. These skills are in high demand by employers and will enable the graduates to contribute meaningfully to an organization's SCM objectives.
Retail Management Ontario College Diploma (Pembroke Year 2 to Bus.)	The retail sector is one of the fastest growing sectors of the economy. Graduates will be prepared to manage small to medium sized retail enterprises.
Bookkeeping and Payroll Ontario College Certificate	The MTCU predicts that due to the large size of the occupational group and the older age profile, thousands of jobs for bookkeepers will be created yearly due to natural attrition. It is noted that "Bookkeepers with specialized computer skills and those working towards recognized accounting designations are expected to be more successful in the labour market."
Online Programming - Expansion	Expansion of online programming within the management, administration and leadership design cluster.
2016-17	
Bachelor of Commerce (Financial Services)	Employers are continuing to feel the effects of a talent shortage for accounting and finance professionals according to the Global Financial Employment Monitor published by Robert Half. This degree program prepares students to enter this demanding profession. Additionally, the Prism Report commissioned by Algonquin in 2012, noted that in business studies, occupation trends suggest stronger demand for degrees over other qualifications.
Bachelor of Commerce (Accounting)	Employers are continuing to feel the effects of a talent shortage for accounting and finance professionals according to the Global Financial Employment Monitor published by Robert Half. The Bachelor of Commerce-Accounting degree program prepares students to enter this demanding profession. Additionally, the Prism Report commissioned by Algonquin in 2012, noted that in business studies, occupation trends

Program Area (for, example, Occupational Cluster)	Total Full- time Headcount (Eligible) # (2016-17)	Target Total Full- time Headcount (Eligible) as a proportion of institutional Total Full-time Headcount (Eligible) % (2016-17)	Planned New or Expanded Programs (including credential level)	Rationale
Engineering, Technology and Trades	629	15.9		
			2014-15	
			Plumbing Techniques Ontario College Certificate	The demand for plumbers is steady and high within the context of a construction industry that is increasing. This program will appeal to those who are seeking an apprenticeship but have not yet been able to find an employer willing to take them on or for those seeking an opportunity in the mechanical aspect of construction or a position in a related field.
			Online Programming - Expansion	Expansion of online programming within the engineering, technology and trades cluster.
			2015-16	
			Forensic Science Ontario College Graduate Certificate	The field of public safety is evolving and a component is understanding the science around forensic investigation in the federal government.
			Building Information Modeling Technician Ontario College Graduate Certificate	BIM is rapidly becoming common practice for all building stakeholders throughout the lifetime of a building, from design to property management. This expertise is currently scarce. The BIM OCGC will provide the knowledge and skills required to manage BIM related projects.
			Plumbing Technician Ontario College Diploma	Building on the Plumbing Techniques program, an optional second year will be added for 2015-16. This technician program will prepare individuals for work in design and building science surrounding plumbing/mechanical systems.
			Aircraft Maintenance Technician Ontario College Diploma	Currently, Algonquin offers a one-year program that enables students to complete a second year at Centennial College. A demonstrated local need for these skills exists that will be met by the development of a full two-year technician program at Algonquin.
		Nanotechnology/Nanoscience Ontario College Diploma	Nanotechnology tech-niques are needed to support the modern manufacturing, electronics and communications technology industries in the Ottawa area.	

			Mechanical Techniques Ontario College Certificate	This one-year program will introduce students to the field of mechanical engineering and prepare them to ladder into the second year of existing and new Algonquin programming including the Mechanical Engineering Technology, Manufacturing Engineering Technician, and Electro-Mechanical Engineering Technician – Robotics programs.
			Online Programming - Expansion	Expansion of online programming within the engineering, technology and trades cluster.
			2016-17	
			Bachelor of Automation and Robotics	Local employers in the manufacturing sector are seeking more expertise in automation and robotics in order to maintain a competitive product offering and higher value services. Other local employers are seeking expertise in data acquisition and analysis for research and automation.
			Online Programming - Expansion	Expansion of online programming within the engineering, technology and trades cluster.

Endnotes

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- ¹ Eastern Ontario includes primarily the counties of Ottawa, Frontenac, Hastings, Lanark, Leeds and Grenville, Lennox and Addington, Prescott and Russell, Prince Edward, Renfrew, Stormont, Dundas and Glengarry.
- ² Year-end 2012 Annual Development Report 2012, City of Ottawa, September 2013.
http://ottawa.ca/sites/ottawa.ca/files/attachments/ottpage/adr_2011_en_0.pdf
- ³ Annual Development Report 2012, City of Ottawa, September 2013, http://ottawa.ca/sites/ottawa.ca/files/attachments/ottpage/adr_2011_en_0.pdf
- ⁴ Results of the 2012 Employment Survey Planning and Growth Management Research and Forecasting Unit, September 2013
- ⁵ Ottawa Integrated Local Labour Market Plan 2012 Update, Updated March 2012 page 2-3
- ⁶ Prism Economics Analysis, College Market Research Analysis, Source Algonquin College administrative reports, page 43
- ⁷ Draft ISP Colleges Ontario. (2013). *Student and graduate profiles: Environmental scan 2013*. Retrieved from http://www.collegesontario.org/research/2013_environmental_scan/CO_EnvScan_12_Stu&GradProfiles_WEB.pdf.
- ⁸ Data for other Ontario colleges taken from multi-year accountability agreement (MYAA) reports
⁸ http://www.wgu.edu/about_WGU/overview
- ⁹ Colleges Ontario, Student and Graduate Profiles, Environmental Scan 2012, Prism Economics Analysis, page 7.
- ¹⁰ Prism Economics Analysis, College Market Research Analysis, Source Algonquin College administrative reports, page 8.
- ¹¹ eAlgonquin Analytic Data, Countries, December 13, 2013.
- ¹² Statistics Canada; Table 477-0019 Public postsecondary enrolments, Pan-Canadian Standard Classification of Education (PCSE), Prism Economics and Analysis, page 77.
- ¹³ Algonquin College Enrolment Distribution 2010-2013.
- ¹⁴ Algonquin College administrative report, First Year Student Survey administered internally: Prior to attending Algonquin, 24% were employed full-time outside the home, 7% attended university, 4% looking for work while unemployed, 2% self-employed, 1% homemaker.
- ¹⁵ Statistics Canada, 2006 Aboriginal Population Profile of Ottawa, the Aboriginal population in the Ottawa-Gatineau CMA represented 12,380 people of First Nations, Métis or Inuit groups and 17.3% or 2,240 were 15 – 24 years of age within the urban area.
- ¹⁶ Population by five-year age group, 2012-2036 - Reference scenario - Census divisions in Eastern Ontario, Ontario Ministry of Finance
<http://www.fin.gov.on.ca/en/economy/demographics/projections/table10east.html>
- ¹⁷ <http://ottawa.ca/en/city-hall/get-know-your-city/statistics/growth-projections-ottawa-2006-2031>
- ¹⁸ Immigration in Canada: A Portrait of the Foreign-born Population, 2006 Census, Statistics Canada, 97-557-XIE.
- ¹⁹ Equity and Inclusion Lens, Diversity Snapshot People with Disabilities, City of Ottawa, 2010.
- ²⁰ Algonquin College Multi-Year Accountability Agreement (MYAA) reported by headcount – the unaudited enrolment forecast for 2010-2011 reported to the Ministry on November 1, 2010.
- ²¹
- ²² <http://www.fin.gov.on.ca/en/economy/demographics/projections/>
- ²³ <http://ottawa.ca/en/city-hall/get-know-your-city/statistics-and-economic-profile/ottawas-workforce>.
- ²⁴ Results of the 2012 Employment Survey Planning and Growth Management Research and Forecasting Unit, September 2013
- ²⁵ Ottawa Integrated Local Labour Market Plan 2012 Update, Updated March 2012 page 2-3
- ²⁶ Prism Economics Analysis, College Market Research Analysis, Source Algonquin College administrative reports, page 117
- ²⁷ Prism Economics Analysis, College Market Research Analysis, Source Algonquin College administrative reports, page 117