



Ministry of Training, Colleges and Universities

Institutional Vision, Proposed Mandate Statement and Priority Objectives

A submission to begin the process of developing strategic mandate agreements (SMAs):

To:

The Ministry of Training, Colleges and Universities

From:

Ann Buller, President and CEO

Centennial College

Response Template

Part 1: Centennial College - Proposed Mandate Statement

Our Mandate Statement

Leaders in quality, relevant, and innovative postsecondary education that is industry relevant, evidence-based, practice-focused, and entrepreneurial and prepares students for careers in the global economy and citizenship in a civil society.

We were established as Toronto's first publicly funded college in 1966. Today, we offer exceptional and innovative programs in business, communications, community and health studies, science and engineering technology, general arts, hospitality and transportation. The mandate statement highlights our leadership role in providing quality, relevant and innovative postsecondary education (PSE). We also recognize that the curriculum and learning experiences provided must be industry relevant, evidence-based and practice-focused in order to prepare students for Ontario's creative economy. The term innovative in delivering PSE implies that it is creative as well as ensuring it is affordable and financially sustainable. Our philosophy is that we provide opportunities for higher education for everyone and providing pathways and supports that will accomplish that inspirational goal.

Access

We are proud of our community college historical roots providing access and programs to students within our Scarborough area encompassing eight of Toronto's thirteen priority neighbourhoods; we recognize the need to evolve to meet the needs of our community defined in its broadest context. Our community will enclose three more priority neighbourhoods with the development of the Centennial College Aerospace Campus at Downsview Park. In later phases of the project, we will see the infusion of other college programs focusing on health and community studies that will prepare students for working in this community.

Our students are diverse learners whether they are domestic, non-direct or international and have many challenges with adult literacy. We will need to continue to provide expertise and leadership in successful literacy and access, pathways and foundations programming that include: certificates, diploma, advanced diploma, post graduate certificates and four year degrees. We will continue to offer a wide range of credentials from trades training to undergraduate degrees, as well as grow applied research and business incubation and commercialization activity with our industry partners.

We will continue to develop four-year bachelor degree programs and establish strong collaborative and joint partnerships. Our intent is to create a Centre for Degree Completion to expand our degree offerings as well as increase our capacity to develop collaborative and joint partnerships with interested universities for degree completion and to position us as a lead institution in the transformation of advanced diplomas to three-year degrees with baccalaureate

completion. We believe in, support and will drive the process for the transferring of advanced diplomas to degrees. Our College will continue to provide avenues for more accessible transfer information to students and to simplify the process for all students seeking to transfer credits between colleges and universities. Our Centre for Degree Completion will provide unique student advising support to assist students to identify and complete the preparatory courses and bridging programs for students who aspire to complete degrees but are missing admission or completion requirements.

Our strategic partnerships with other educational institutions, business and industry provide our students with greater access, flexibility, transferability and mobility to achieve their educational and career goals within Ontario and beyond.

Mobility

Our students are diverse and complex learners who are interested in a broad scope of programs ranging from certificate to diploma, advanced diploma, graduate certificate and bachelor's degrees with flexible delivery methodologies that include hybrid and online as well as off-site and overseas options.

Our Comprehensive College is known for providing a range of degree completion options and pathways for students regardless of their starting points, their individual journeys, or the destination they are seeking during their cycle of learning towards meaningful work and meaningful lives. We recognize the key to the success and viability of three-year degrees lies within our proven ability to work with universities and other colleges to ensure seamless transferability of our students to and from institutions regardless of the entry and planned exit point of PSE, including the choice to pursue graduate education. We are committed to focusing on learning outcomes to "examine policies and procedures on admissions, curriculum and program design, as well as the measurement of student accomplishments"¹. In the development of our three-year degree programs and in the establishment of partnerships with other universities we will be exploring the Europe-wide system based on three cycles (3-year Bachelor, 2-year Master's and 3-year PhD) to promote mobility.

Our Centre for Degree Completion will provide students with supports and services to improve access and mobility between institutions and identify individual educational development plans to determine the quickest and most efficient route to degree completion. The Centre will support the needs of students in our bridging programs, degree programs, joint and collaborative programs with university partners, and students who seek to continue their education and complete degrees in other post-secondary institutions.

The design of our new baccalaureate degrees will focus on flexible modes of delivery to appeal to students employed in sectors that traditionally have not required PSE and to meet the needs of students from smaller and more rural communities. Overall, we will continue to build our capacity and infrastructure for flexible delivery formats for all program types especially in terms of student supports. We acknowledge that online learning and the application of advanced technology in teaching and learning is an integral part of college education. Our focus of online

¹ Association of Universities and Colleges of Canada (2009). *The Bologna Process and Implications for Canada's*

learning is shifting towards the concept of progressive credentialing – a system that would go beyond a narrow perspective on primarily offering courses and focus instead on pathways that provide students with greater flexibility to access the full range of options available in higher education. We will be developing three and four-year degree programs with 20 per cent of the courses offered in hybrid or online format with a 10 per cent yearly increment until the 50 per cent goal has been reached.

We are extending our outreach efforts and development in the international markets in order to remain leaders in international education. This supports our belief that our students need to make connections with the world.

Innovation

Our vision is to be the leading Ontario College in educating future entrepreneurs and innovators. Our strategic plan includes preparing graduates with innovation and entrepreneurial skills and capacity who are stimulated by the creative practice of innovation. We will develop and integrate entrepreneurship learning outcomes that focus on a student's creative and managerial ability to engage in and lead the innovation and commercialization activities required in a knowledge economy.

Our focus will remain on applied learning with the goal of enhancing graduate employability and employer engagement thereby increasing productivity and jobs. We will retain this critical advantage as a provider of skilled workers for industry employers and will present within this mandate a new, innovative, multi-partner model (colleges, universities, industry and government) for skills development, knowledge transfer and research and commercialization in the area of aerospace. We are a leader in aerospace education, training and innovation. To demonstrate this level of leadership, we will create a world-class aerospace cluster site at Downsview Park over a three-phased multi-year operational plan. Our Downsview Park Aerospace project will create an integrated campus that brings together: aerospace and aviation education, training and re-training, private and public participation in an Innovation Research Hub for research and development, technologies development, industry cluster and light manufacturing to meet private and public sector needs.

Student focused teaching and learning

We place a priority on the student experience throughout the cycle of learning in alignment with the social inclusion and economic prosperity imperatives of our community, province and country. We are truly a learning-centered college that puts students first in everything we do and that includes a focus on the organizational culture, staff recruitment and development, technology, learning outcomes and teaching and learning strategies to ensure student success.ⁱ We recognize that as the world becomes smaller, our role in it and the role of our students must become largerⁱⁱ; and for this reason, we place a strong emphasis on the principles of global citizenship, social justice and equity.² Our Signature Learning Experience (SLE)ⁱⁱⁱ is a distinctive educational experience that integrates these principles to open a world of knowledge and insight that reaches beyond the acquisition of career skills and competencies. The emphasis on citizenry guides our students and graduates to make transformational impacts in their workplaces, not only

² Centennial College (2006). *Our Book of Commitments*. Centennial College's Strategic Plan, p. 1.

as innovators and entrepreneurs but also as socially conscious citizens engaged in building a civil society.

We will continue with our efforts to internationalize the student learning experience from various perspectives. We have adopted a definition of internationalization at the national, sector, and institutional levels to include “the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education” (Knight, 2003, p.2). Our approach to internationalization^{iv} is within a context of global citizenship and social justice. We have been integrating this additional dimension of internationalization into the curriculum and have seen it actualized through our interactions with students both inside and outside the classroom.

We will remain student focused in everything that we do and strive to provide our students with experiential learning opportunities to promote engagement and retention and to make meaningful connections with employers in the workplace. We integrate these experiences into our curriculum and provide the necessary support and infrastructure for sustainability through our business planning processes. We believe that learning happens best in a safe and supportive environment, when it allows for collaborative and interactive opportunities and when the activities are experiential and project-based. This will help them to get the real-world experience they need to establish new businesses today that will help them become the needed employers of tomorrow. For this reason, we are developing the concept for a Centre of Excellence in Simulation, Research and Innovation with CAE through our Institute of Emergency Management and Public Safety and Applied Research and Innovation Centre.

Research

Centennial College has institutional strength in its Applied Research and Innovation Centre’s (ARIC)^v that provides invaluable expertise, support and resources to faculty and industry. We work with industry partners and universities to advance knowledge translation and commercialization. Our educational programs are enhanced by applied research conducted in collaboration with industry partners, mobilizing our faculty, students and facilities to assist industry in new product prototyping, development, and testing. Our impact supports the diffusion of innovation, as we fill in the dimensions that are not currently well supported in Canada.

We will be engaging our students in applied research to promote essential skills in innovation and entrepreneurship. Our focus will remain on applied learning with the goal on graduate employability and employer engagement—increasing productivity and jobs. Centennial College will retain its critical advantage as a provider of skilled workers for industry employers and will present within this mandate a new, innovative, multi-partner model (colleges, universities, industry and government) for skills development, knowledge transfer and research and commercialization in the area of aerospace. Centennial College will be recognized as a leader in aerospace education, training and innovation. To demonstrate this level of leadership, we will create a world-class aerospace cluster site at Downsview Park over a three-phased multi-year operational plan. Our Downsview Park Aerospace project will create an integrated campus that brings together: aerospace and aviation education, training and re-training, private and public

participation in an Innovation Research Hub for research and development, technologies development, industry cluster and light manufacturing to meet private and public sector needs.

Our Applied Research and Innovation Centre (ARIC) and its infrastructure and support services as well as our existing Centre of Entrepreneurship (COE)^{vi} will provide the necessary resources through knowledge and technology transfer, commercialization and business incubation in collaboration with the academic schools to stimulate, generate and accelerate the innovation activities of primarily, but not exclusively, small and medium-sized enterprises (SMEs).

Productivity

Our business planning and decision-making processes are based on three fundamental criteria: i) enrolment, ii) budget, and iii) quality. We use an evidence-based approach to strategically manage enrolment through innovative marketing and student recruitment strategies, proven transition and retention tactics, and through the development of a program mix grounded in relevance and quality. Our Strategic Enrolment Management (SEM) committee, with college-wide representation, delivers the initiatives in the SEM Plan^{vii} and explores strategies related to improving our productivity and the bottom line by meeting enrolment growth targets.

We continue to give priority to differentiation by focusing on institutional strengths and areas of excellence, and the changing needs and demands of our society growth, and exploring cost efficiencies through shared or integrated services within the existing fixed infrastructure. We have documented our efforts in an inventory of shared services.

We will continue to develop strategies to improve productivity through innovation in teaching, technology, infrastructure, broad offerings of program and degree pathways, partnerships with businesses, organizations and the community, and in leveraging and pooling institutional resources.

In summary

We believe in “global citizenship, diversity, leadership in a new world, and quality education.”³ We will act on these beliefs so that our graduates have the skills and leadership capacity necessary to innovate and thrive in local and global markets. We are a dynamic college that offers a full span of programs, innovative delivery models and student services to identify/differentiate us as a Comprehensive College that provides a unique signature learning experience. Deep learning will occur through innovative and quality education that leads to meaningful work and meaningful lives.

Part 2: Centennial College – Vision

Colleges need to play a significant role in “transforming Ontario’s economy and society by developing the world’s best-educated and most highly skilled people”. Centennial’s vision, *‘Transforming Lives and Communities through Learning’*, positions our institution well to

³ Centennial College (2006). *Our Book of Commitments*. Centennial College’s Strategic Plan, p. 1.

achieve this goal. Our mission is to educate students for career success. This statement signifies the dynamic and changing nature of our business and the responsiveness of our institution especially with the awareness that the new knowledge economy is creating demands for higher levels of expertise, competencies and skills with the resultant need to acquire post-secondary education in non-traditional sectors and areas. Employees require strong math and English literacy, problem solving abilities, critical thinking, creativity, advanced communication skills and an ability to work in a diverse environment and lead change to meet real-world challenges.

We are committed to innovation and new ways of approaching teaching and learning and to facilitate and lead the potential for opportunities to produce skilled individuals through higher education, training and retraining pathways. In alignment with Centennial's Strategic Plan, the Book of Commitments, opportunities need to be created with an inclusive lens to ensure it is reflective of those individuals from under-represented groups.

We care about our students as learners, the education they receive, the employees they inspire to be and the citizens they become. Our mandate is to give priority to our differentiation by focusing on our strengths in programs and services to our students, our areas of excellence, changing societal and industry needs, and exploring productivity through innovation. It is through the creation of an inspiring, engaging, practice-focused and experiential learning environment and the formation of meaningful connections that we can transform the lives of our students and our communities throughout the cycle of learning.

Part 3: Centennial College - Priority Objectives

We will demonstrate our leadership in providing quality, relevant, and innovative postsecondary education that is industry relevant, evidence-based, practice-focused, and entrepreneurial and prepares students for careers in the global economy and citizenship in a civil society in three ways:

1. We will provide quality, relevant and innovative post-secondary education that takes a holistic approach to a student's personal growth and development in addition to being industry specific, evidence-based, and practice-focused.
2. We will ensure that our graduates have the knowledge and competencies to succeed in the local and global market place as contributing members of our civil society.
3. We will improve our productivity and excellence through innovation in teaching and learning, applied research and in leveraging our resources and partnerships.

Priority #1: Centre for Degree Completion

Our vision

The Centennial College Centre for Degree Completion is the creation of a hub that serves as a starting conduit for students to access the information they need, the supports required to make decisions about their pathway opportunities, and their growth and progression for degree

completion that best serve their career and personal aspirations and the talent acquisition needs in Ontario and beyond.

Focus on student choice

The College Applicant Survey™ (Academica Group, Inc.) shows that 9 per cent of college applicants report that their single main reason for applying to college was “to prepare for further university studies”, and almost one third of college applicants reported that their “ultimate academic credential” was a degree (CO, 2009). Centennial College's Centre for Degree Completion demonstrates our commitment to improve the accessibility and quality of students' post-secondary education experience and to help students to achieve their goals in obtaining their credentials of choice. The concept of the Centre for Degree Completion focus on student choice and aims to assist students to determine the quickest and most efficient route to degree completion. The Centre will support the needs of students in our bridging programs, degree programs, joint and collaborative programs with university partners, and students who seek to continue their education and complete degrees in other post-secondary institutions.

Our partnership program with Ryerson University for the RPN to BScN three-year pathway began in 2005 and was the first program to offer diploma prepared registered practical nurses the chance to obtain their baccalaureate degree in nursing. This program was offered by both institutions in hybrid delivery at regional access centres (RACs) throughout Southern Ontario and designed to provide one year of Prior Learning Assessment and Recognition (PLAR) and one year of academic upgrading at College tuition. This program is an exemplar of innovation, portability, sustainability, effectiveness and partnerships and was awarded the ACCC Program Excellence Award 2010-2011 in the bronze category. We will continue building on the success of our existing joint programs and forging collaboration with universities to provide students with more and better choices. An improved credit-transfer system in Ontario will be a great support for this initiative.

Believing strongly in the principles of equal access to education and opportunity, Centennial College provides a great range of preparatory courses and bridging programs for students who aspire to complete degrees but are missing admission or completion requirements. The Centre will also serve internationally trained immigrants (ITIs) and career transitioning learners (Second Career, Canadian Forces exiting service personnel, or retirees) to obtain degrees and to find jobs. Pathway Advisors at the Centre will provide students with information regarding the full range of the College's preparatory programs, for explicating pathways at any stage of entry or inquiry. This will assist current and prospective students in post graduate and advanced diplomas to identify courses or programs that will provide them with advanced credit and PLAR and to establish their pathways and advance their goals. Faculty members will employ a partnership learning approach, encompassing a highly personalized and individualized communication process using various methodologies to interact with students on multiple levels. They will be encouraged to act as motivators in the Centre for learning and succeeding.

Technology-enabled learning and service

Technology has created new ways for Centennial College to develop innovative approaches for teaching and serving various needs of students. We currently use and will continue to expand on multiple social media channels (e.g. Twitter, Face book, Google+) to assist the applicant ,

students, alumni and the community in receiving current, credible and relevant information about degree courses, pathways, PLAR, articulation agreements and the transfer credit processes. We will also expand our community engagement through technologies such as video conferencing, Skype, and web chats.

Another unique feature of this Centre using technology would be the centralizing of services that would support various forms of on-line assessment for the type of learning needed to meet individual goals. Our vision includes a process whereby Pathway Advisors would create individualized learning (pathways) development plans for each potential student. We can support this with further links to provide more personalized advising about the offerings of our college, our partner institutions, our current articulations and exchanges, and a range of credentialing bodies. We would assist students to make effective use of the ONCAT online application that presents a wide range of transfer options at both the course and program level. It is essential that applicants receive advice and guidance to manage their expectations of postsecondary education.

In addition, we will exploit distance learning opportunities for degree programs with online institutions worldwide, while providing on-site student services and support. We believe a quality online learning experience has to be supported by local on-site technology and personnel. New three and four year degree programs will be developed with 20 per cent of courses delivered in hybrid or online format that will increase by 10 per cent on a yearly basis until a goal of 50 per cent is achieved. We are exploring a partnership with the online institution Athabasca University and other academic centres of online excellence that would allow students to complete degrees on our campus.

Experiential teaching, learning, and research

An infrastructure of academic services at the Centre will provide quality support, facilities and resources that relate to baccalaureate learning to students, faculty and staff. Academic services will encompass writing support (for scholarly writing development), peer tutoring and mentoring, research support (proposal writing, data analysis using SPSS, presentation and poster development), access to industry- and market-driven applied research, innovation and commercialization opportunities and career advising.

A research space, linked to both our ARIC and our CEO will be built within the Centre for students and faculty to congregate, deliberate and disseminate findings and explore research questions for further projects, especially those that lead to commercialized products, processes and services. Enhanced library supports at the Centre such as the expansion of collections, online databases and e-book resources will provide students with necessary materials based upon the research needs. A consolidated space will display the collection of scholarly work, research articles and innovation success stories and will store current and archived research materials and products for use by faculty and students. Students will have a designated space to complete their work as research assistants.

Professional development support as part of the Centre's service will serve our degree program faculty members who are actively engaged in scholarly and applied research activities. Our

faculty will also engage in collaborative research initiatives with faculty across schools in Centennial or in conjuncture with university partners will be encouraged.

Through collaboration with our CEO and ARIC Centre, the Centre for Degree Completion will provide students entrepreneurial training and the opportunity to work together with industry partners in their fields of study. The Centre will also provide a central location for access to extracurricular activities that extend students' educational experience to include social events such as joining clubs and attending events sponsored by various student groups. The extracurricular network of activities would include upcoming events, athletics, social meeting areas and off-campus connections.

We believe that our proposed Centre for Degree Completion would provide an innovative, unique, student-focused service and facility that will ensure access and opportunity, and pathways to learning and work that will create skilled and knowledgeable contributors to our local communities, our nation's economic prosperity and our global participation.

For a description of priority #1 - Centre for Degree Completion in relation to a)-f) see Chart 1.

Priority #2: To be the Leading Ontario College in Educating Future Entrepreneurs and Innovators

Our vision

Our vision is to be the leading Ontario College in educating future entrepreneurs and Innovators. Building on our commitment and success on preparing graduates with innovation and entrepreneurial skills, we will continue working toward this vision by: (1) finding ways to align and make more financially sustainable our Applied Research and Innovation Centre (ARIC) and our Centre of Entrepreneurship (COE) ; (2) developing and integrating entrepreneurship and innovation learning outcomes in our curriculums; (3) erase the wall between classroom and workplace by introducing The Innovation Storefront program.

Educating Future Entrepreneurs - Centre of Entrepreneurship (COE) & Applied Research and Innovation Centre (ARIC)

Our strength in entrepreneurship activities through our COE is a unique and distinctive characteristic of Centennial College. The Centre has been in the business of supporting local economic development through its training, consulting and advisory services since it was established in 1988. It has successfully delivered the Ontario Self-Employment Benefit Program (OSEB), supporting close to 3,000 unemployed individuals in starting and operating a new business.

The COE has an extensive in-house resource base of trainers and advisors with business and entrepreneurial backgrounds, as well as experience working with entrepreneurs and early stage businesses. The Centre provide many services and opportunities such as a dedicated space with other student entrepreneurs, support and resources from advisors and experts, skills to develop a business plan and follow-through action plan, professional feedback on their business concept and connections through the COE network for potential financing.

The COE has partnered with three groups to draw from their member base as potential clients: Canadian Armed Forces; Canadian Union of Skilled Workers, and the Ontario Society of Professional Engineers (OSPE). Programs available at the Centre including OSEB, Independent Television Producers Program, Summer Company, and a recently modified New Business Start-up Program that will become a certificate program in November 2012.

Applied research and innovation is about finding solutions to complex problems, turning inspiration into innovation. Our national recognized and highly successful ARIC connects industry partners with our talented faculty and students to develop, design, test and bring results to market. Since 2006, ARIC has helped more than 100 companies through applied R&D, technology transfer and commercialization. ARIC has leveraged over \$7 million in federal and provincial fund through NSERC, Fed Dev, OCE and CONII.

We will continue build on the success of our COE and ARIC and find ways to further align, integrate and make these two Centres more financially sustainable and increase their capacity to meet market demand. We are currently preparing a strategic document with an implementation plan to promote our work through social media. These channels will allow us to provide additional resources to entrepreneurs and to showcase our successful entrepreneurs—including students—and connect us to communities with similar mandates including other business and entrepreneurial incubators globally.

Knowledge and competency-based education - developing and integrating entrepreneurship and innovation learning outcomes in our curriculums

We will build upon existing work such as the Conference Board of Canada's Innovation Skills Research Initiative that will assist workplaces and individuals to identify and assess innovation skills to determine congruency between their innovation skills capacities with their innovation needs. The development of innovation and entrepreneurial learning outcomes specific to each program area and/or discipline is based on four foundational skill sets: 1) generating ideas; 2) taking calculated risks and being entrepreneurial; 3) developing and maintaining interpersonal relationships; and 4) turning ideas into marketable products, processes, and services through business detail orientation.

We will utilize our comprehensive program review process to identify appropriate programs from various schools that prepare graduates in professions and trades that have high rates of self-employment and/or have high rates of innovation skills required in the workplace. There are a number of appropriate and relevant programs that are ideal to focus on the integration of innovation and entrepreneurial learning outcomes for self-employment that include but are not exclusive to , Broadcasting and Film Animator, Game Developer, , Auto Mechanic, Computer Technician, Refrigeration and Air Conditioning Systems Mechanic, Fitness Professional, etc. In addition many programs from software engineering to social service worker produce graduates for careers that require constant innovation in the development of new or revised products and processes.

Evidence of meeting learning outcomes would rely on designing reliable and valid evaluative methods such as the creation of a business plan, which would include all of the preceding information for a start-up business in the respective industry sector.

This initiative would provide graduates with the competencies to start a business upon completion of their respective program of study or to provide innovation ready skills in any workplace environment.

Erase the wall between classroom and workplace - The Innovation Storefront

We have incorporated experiential learning inside and outside of the classroom and have increased engagement with faculty and the community where appropriate as a means to erase the boundaries between the classroom and the workplace.

We believe that learning happens best in a safe and supportive environment, when it allows for collaborative and interactive opportunities and when the activities are experiential and project-based. For this reason, we are developing a new interdisciplinary and experiential learning program named The Innovation Storefront. In the program, students from eight different Schools at Centennial College will work in teams to provide innovative solutions to local businesses. The Innovation Storefront will encourage entrepreneurial solutions through a collaboration of industry, government funding agencies and Centennial College. Student led and faculty supervised teams would apply their knowledge, skills and the ability to produce business deliverables for local companies. The Innovation Storefront will provide many resources to students, faculty and staff including an Executive In Residence, Mentorship program and a hub for Community Partners who support this innovative initiative. It will help local businesses to achieve higher levels of productivity while preparing our students in a leadership role to be future entrepreneurs and innovators.

In summary, through all the initiatives listed above, we are working toward our vision to becoming the leading Ontario College in educating future entrepreneurs and innovators. Our students will receive the entrepreneurial and innovation skills and knowledge to think critically and creatively, the experiences to display their ingenuity, and the ability to learn and discover what will serve them well in any workplace.

For a description of priority #2 - To be the Leading Ontario College in Educating Future Entrepreneurs and Innovators in relation to a)-f) see Chart 2.

Priority #3: Centennial Aerospace Campus at Downsview

Our vision

We will create the Centennial Aerospace Campus at Downsview Park as an example of a progressive and cutting-edge initiative designed to achieve higher levels of productivity through innovation in experiential teaching and learning, modern and relevant program design, partnerships with businesses and community, financially sustainable infrastructure, and effective use of institutional resources.

Alignment with the labour market demand and the government's priorities

The goal of the Centennial College Aerospace Campus at Downsview project aligns perfectly with the labour market demand and the government's priorities. This project increases the capacity of our College to prepare students for employment in the aerospace industry where demand is increasing, and the number of adequately trained professionals is insufficient.

The aerospace sector is expanding around the world and in the GTA while the aging work force is unable to meet the projected industry demand. According to the 2012 Toronto Board of Trade report, the productivity growth of the aerospace industry is the strongest among all other industry clusters in Toronto – this signals more employment opportunities ahead. In addition, the drive for lower fuel and maintenance costs in passenger aircraft has created a sustained period of investment in the replacement and retrofit of existing fleets, in research and development, and in technical innovation.

The government recognizes the immediate economic and social impact of increased training capacity in the aerospace industry where jobs will go elsewhere if Ontario cannot provide enough trained workers. The federal government is concerned with protecting Canada's competitive position as roughly \$3.9 trillion in new passenger and business aircraft are on order worldwide. For similar reasons, Ontario's Ministry of Economic Development and Innovation (MEDI) has named aerospace as one of six priority sectors for development.

The specialized new facility and expanded program offerings of the Downsview project will draw students nationally and internationally to Centennial College. This creates opportunities for new entrants to the aerospace work force as well as opportunities for retraining or enhancing the skill sets of existing employees within the industry. Two manufacturers have already signed partnership agreements with Centennial College recognizing the fact that they need to expand their workforce to meet future production targets and research and development objectives.

Experiential Learning and partnerships with businesses and community

We aim to provide students with an experiential learning environment to produce graduates with the employable knowledge and skills in the aerospace industry. This project continues our philosophical approach to easing the wall between the traditional classroom and the workspace. With each successive phase of development – from the initial campus to the Aerospace Innovation and Research Hub, to the sector incubator – students and industry will have the opportunity to work collaboratively, to catalyze and transform this sector in Ontario for positive local and global market impact. We will leverage our successful Applied Research and Innovation Centre's record of accomplishment with NSERC, FedDev, and OCE for industry-academic R&D, technology transfer and commercialization. As well, retraining for those currently working in this rapidly changing field will bring the classroom to the shop floor, the research lab, the boardroom and the market place.

We have already established academic, private sector, and community support relationships that include: signed contracts with Bombardier Aerospace and Lockheed Martin; expressions of support from the City of Toronto; Aerospace Industry Association of Canada; and Department of National Defence, and academic co-location and collaboration commitments from the University of Toronto Institute for Aerospace Studies (UTIAS), Ryerson Institute for Aerospace Design and Innovation, and York University.

Modern and relevant program design

Expansion of aerospace training programs at the Downsview site will also create opportunities for interdisciplinary programs that bridge across different schools within the College, such as the School of Transportation, the School of Business, and the School of Engineering Technology and Applied Science. As the aerospace program mix grows at the new campus, and as industry relationships and involvement deepen, the potential for cross-sector and cross disciplinary and collaborative or joint university-college initiatives will be enriched. Engineering and technology bachelor programs and collaborative applied research projects in partnership with GTA universities are two clear areas of potential. Looking forward the College also recognizes the need for other college programs focusing on health and community studies that will prepare students for working in the community that encloses three priority neighbourhoods.

Financially sustainable infrastructure and effective use of institutional resources

The establishment of a new site for aerospace training is a high priority for this college for a number of reasons. After the last expansion of the aerospace program facilities back in 2003, we are now operating at absolute maximum capacity with no options for further expansion at our Ashtonbee campus (where this training currently occurs). In order to grow our programs to meet the needs of industry, Downsview Park has made the historic de Havilland building available to the College. Because the former de Havilland plant is structurally sound and purpose-built for aircraft, the time and expense of renovation is significantly less than new construction. The main campus building can be operational by the fall of 2013. Another additional benefit that arises from the proposed relocation is the proximity to an active runway that will easily facilitate our ability to accept donated aircraft, equipment and components.

At the Downsview site, our programs will be in close proximity to corporate training partners, providing access to runways and specialized facilities, equipment, resources, and relationships, including manufacturer and supply chains. The advantages of this site will increase over time as other public and private sector players in the aerospace field build around Centennial's Aerospace Campus. Advanced research development and commercialization activity, and manufacturing and maintenance operations will provide a wealth of enriching experiences and opportunities for the College's students and faculty in close collaboration with industry. Ultimately, the proposed Centennial Aerospace Campus is the best conceivable way to meet the need to replace the College's repurposed facilities and accommodate expanded Aerospace programming. At \$38.9 million in capital costs and \$3.0 million in operating cost per year for the first few years (\$1.5 million per year for the preceding years) in operating costs, and the creation of 58 full-time positions (35 full-time academic and 23 full-time support) plus 225 part-time academic positions, this is an extremely cost-efficient way of achieving the education, employment and economic objectives at the heart of Centennial's mission.

Contribution to the national and local economy

Given that 78 per cent of the Aerospace industry in Canada is export-driven, this initiative is important to the national economy since it brings new dollars from the international markets to the Canadian economy mainly through exporting of aircrafts. It will also have a strong positive

impact on the regional economy because it accelerates the establishment of the aerospace industry in the GTA and Ontario, drawing critical private sector resources and expertise to the province. This will spawn innovation, productivity, and jobs for the future while maintaining Downsview Park's heritage and local urban planning principles.

In summary, the creation of the an aerospace campus at Downsview will result in the co-location of key postsecondary institutions and will accelerate Ontario's competitiveness in this sector, strengthen the Ottawa-Quebec aerospace corridor, attract and create new companies and new investments, and grow jobs. The Aerospace Campus will bring business, academia and government together to strategically commercialize new technologies while revitalizing the surrounding cultural and residential neighborhoods as a great place to live, learn and work.

For a description of priority #3 - Centennial Aerospace Campus at Downsview in relation to a)-f) see Chart 3.

OBJECTIVE 1

We will provide quality, relevant and innovative PSE that takes a holistic approach to a student's personal growth and development in addition to being industry specific, evidence-based, and practice-focused.

Table 1: Centre for Degree Completion

CONSIDERATIONS	SPECIFICS	CENTRE FOR DEGREE COMPLETION
a) Effect on total enrolment and enrolment mix	Total Enrolment	<p>This project will result in 1,600 new full-time equivalent degree students. Centennial will introduce additional 5 new degree programs on top of five existing degree program proposals.</p> <p>Multiple pathways and flexible delivery will result in an increase in both full-time and part-time enrolment. Enhanced student mobility will attract those with previous college and university post-secondary education changing student demographics and increasing the numbers of students seeking three and four-year baccalaureate completion.</p>
	Enrolment Mix	<p>The wide range of program offerings will increase enrolment and alter the mix to include students who may not have previous access to post- secondary education, for example students studying from abroad and in rural areas of Ontario and across Canada. The online learning component will be of particular benefit to Aboriginal learners seeking postsecondary without leaving reserve lands.</p>
b) Distinctive institutional advantage, strength or characteristic that makes achievement of the objective credible, likely and desirable:	Our Institutional Advantage	<p>Our Strategic Enrolment Management (SEM) Committee and four-pronged SEM Plan focusing on performance measurement and assessment, program innovation and development, student recruitment and marketing, and student transition and retention</p> <p>Our existing collaborative and joint partnerships with industry (Canadian Forces, Toronto Fire Service, Motor Carrier Passenger Council of Canada and TTC, GoTransit Pacific Western, Can Air, Parks Canada, Canadian Geographics, and CanAir) and other PSE institutions (UTSc, Ryerson University, York University, UOIT,) and new ongoing discussions (School of Business - Nipissing and Algoma Universities)</p> <p>The extensiveness of our affiliation agreements internal and external to the College (i.e. Ontario Association of Certified Engineering Technicians and Technologists)</p>

CONSIDERATIONS	SPECIFICS	CENTRE FOR DEGREE COMPLETION
		<p>The infrastructure and supports for an Academic Excellence Unit (Centre for Organization Learning and Teaching; Office of Policies; Centre for Academic Quality)^{viii}</p> <p>Centennial’s Strategic Technology Plan and Centennial’s eLearning Strategy^{ix}</p> <p>Participation on HEQCO – the Tuning Project (learning outcomes)</p> <p>Commitment to lead transformation: responded to three HEQCO RFPs:</p> <ol style="list-style-type: none"> 1. 12/13-HEQCO-RFP-001: Productivity implications of a shift to competency-based education: An environmental scan and review of the relevant literature 2. 12/13-HEQCO-RFP-002: Productivity implications of shorter time to completion in postsecondary undergraduate programs: An environmental scan and review of the relevant literature 3. 12/13-HEQCO-RFP-003: Productivity –cost and quality—implications of the shift to online learning: An environmental scan and review of the relevant literature
	<p>Our Strength in PSE</p>	<p>Achievement of excellence in the level and number of accreditations, external program approvals, links to credentialing bodies, and awards</p> <p>Breadth of our program offerings (certificate, diploma, advanced diploma, postgraduate certificates and bachelor’s degrees)</p> <p>Our focus on quality management for all programs, our infrastructure for academic supports, engagement with our students and community members, and emphasis on ongoing learning for our staff to build our own capacity</p>
	<p>Our Distinctive Characteristics</p>	<p>Infrastructure for degree program development (i.e. Centennial College Degree Development Committee)</p> <p>Student demographics – heterogeneous and diverse in every measure, including our significant international enrolment</p> <p>Existing knowledge and experience with flexible delivery offerings (including online and hybrid modes, and modified school-work,-- School of Transportation Modified Apprenticeship Program and the School of Community and Health Studies RPN to BScN (Hybrid) program in partnership with Ryerson University) and specialized programming (i.e.</p>

CONSIDERATIONS	SPECIFICS	CENTRE FOR DEGREE COMPLETION
		<p>bridging programs for internationally-educated professionals and for aboriginal learners; Helping Youth Pursue Education - HYPE Project); both with extensive program evaluation and research</p> <p>Centennial’s success in globalization strategies including the highest numbers of international students in Canadian Colleges and the breadth and depth of international partnerships</p>
<p>c) Timeframe, resource allocations or redirections and metrics to be used to measure progress</p>	<p>Timeframe</p>	<p>Five bachelor degree approval with offerings commencing fall 2013; site visit fall of 2012</p> <p>Full implementation of e-Learning Strategy by 2014</p> <p>The Centre -</p> <ul style="list-style-type: none"> - 1st Phase - pathways and advising processes established – Fall 2013 - 2nd Phase – Degree Cluster offerings – 2014 - 3rd Phase - Physical Space for Centre operations - 2015
	<p>Resource Allocations</p>	<p>Space:</p> <ul style="list-style-type: none"> -1,600 new full-time students will require 75,000 g.s.f. of space in the Progress Campus and will result in the creation of 60 new full-time academic and support staff and over 300 academic part-time faculty. -An infrastructure of academic services at the Centre will provide quality support, facilities and resources that relating to baccalaureate learning to students, faculty and staff. -A learning space will be built within the Centre for students and faculty to congregate, deliberate and disseminate research or project findings. -Enhanced library supports at the Centre will provide materials based upon the research and capstone project needs of degree seeking students. -A consolidated space will display the collection of scholarly work and research articles and stores current and archived research materials and products and capstone projects for use by faculty and students. -Students will have a designated space to complete their work as research assistants. -The College Strategic Master Space Plan proposes a multi-purpose facility that would incorporate parking, academic and office space, and additional student housing at our largest campus location, Progress Campus. This academic and office space is envisioned as the new location for this center. We have also invested a scalable portal and learning management system that would support the integration of technology-enhanced delivery, as a key component of connecting students to

CONSIDERATIONS	SPECIFICS	CENTRE FOR DEGREE COMPLETION
		<p>web-based courses, Ontario Learn offerings and Massive Open Online Courses or MOOCS. This functional role for supporting technology enhanced learning is already in place with a collaboration between our Academic Excellence Unit's Centre for Organizational Learning and Teaching (COLT) and our Information Technology Services department.</p> <p>Operational Infrastructure and Human Resources: -Many aspects of the proposed Centre's infrastructure and human resources have already been established by our Academic Excellence Unit (AEU) and will be utilized for this initiative.</p> <p>Metrics</p> <p>KPI Results</p> <p>Number of collaborative and joint partnerships</p> <p>Number of three year and four year degrees</p> <p>Number of affiliation agreements and flexible pathways</p> <p>Student feedback on individual pathway plans</p> <p>Our Graduate Survey Results Percentage of hybrid/online delivery per program</p> <p>Enrolment numbers and graduation rates</p>
<p>d) Innovative initiatives to improve productivity in administration, teaching and learning and any costs and resource implications</p>	<p>Administration - -Use of ONCAT provincial database -Centralized service for all applicants that would support various forms of online assessment -The use of multiple social media channels (e.g. Twitter, Facebook, Google+) to assist the applicant, student, alumni and the community in receiving information -Expand community engagement through technologies such as video conferencing, Skype, and web chats</p> <p>Teaching and Learning- -Online/hybrid delivery of liberal studies</p>	

CONSIDERATIONS	SPECIFICS	CENTRE FOR DEGREE COMPLETION
		<ul style="list-style-type: none"> -Interdisciplinary approach to some course delivery (research, liberal studies, sector-related – business) -Professional development support to serve our degree program faculty members who are actively engaged in scholarly and applied research activities -Faculty will be engaged in collaborative applied research initiatives with faculty across school in Centennial and with university partners -Faculty and students will be engaged in applied research that is industry and commercialization focused -Collaboration with Centre of Entrepreneurship and Applied Research and Innovation Centre to provide students with entrepreneurial training and the opportunity to work with industry partners <p>Costs -</p> <ul style="list-style-type: none"> -Incremental 1,600 full-time students will allow the College to use existing fixed administrative overheads <p>Resources -</p> <ul style="list-style-type: none"> -24 hours technology support
<p>e) Required public policy tools</p>		<ul style="list-style-type: none"> -Provincial government must take the lead on streamlining the credit-transfer system -Structure for recognizing completed credits must be mandated by the government -Funding mechanism for part-time degree delivery using online delivery; re-submission of degree approval for part-time delivery -Funding model that includes multiple measures of achievements in addition to the use of learning outcomes -Improve credit student mobility between colleges (three year degrees) and universities for baccalaureate completion and access to university programs at the Master’s level -OCQAS, in consultation with the PEQAB, the Ontario University Council on Quality assurance and the ministry, develop the quality standards for these three-year baccalaureate programs -Provincial restriction on the use of the term Honours be lifted for college four-year degree programs -Tuition fees for students enrolled in the three-year baccalaureate degree programs be set at a level above the average advanced diploma fee
<p>f) Correlation of objective to one or more of the principles</p>		<p>This objective correlates to all three principles:</p> <ol style="list-style-type: none"> 1. Putting Student’s First - by focusing on student choice 2. Meeting the Needs of the Creative Economy - by experiential teaching, learning and research and increasing partnerships between institutions and the community, and the businesses 3. Focusing on Productivity, Innovation and Sustainability - by providing technology-enabled learning and service

OBJECTIVE 2

We will ensure that our graduates have the knowledge and competencies to succeed in the local and global market place as contributing members of the civil society

Table 2: The Lead Ontario College in Educating Future Entrepreneurs and Innovators

CONSIDERATIONS	SPECIFICS	INNOVATION AND ENTREPRENEURSHIP
a) Effect on total enrolment and enrolment mix	Total Enrolment	This initiative will increase the focus and integration of entrepreneurship learning opportunities and the design and implementation of strategies to enhance student to peer and student to faculty engagement will result in improved student engagement, retention and graduation rates. This positive impact will increase retention of students in flow-through years and increase the applications and conversion rates to our programs.
	Enrolment Mix	This focus will be integrated in all postsecondary programs, preparing graduates for work with employers, or as self-employed, bringing entrepreneurship focus to all disciplines, targeting improvements for direct, non-direct and international visa student entrants
b) Distinctive institutional advantage, strength or characteristic that makes achievement of the objective credible, likely and desirable:	Our Institutional Advantage	<p>Existing use of incubators (i.e. Media, Business, Emergency Management and Public Safety Institute, Culture and Heritage Institute, and Energy Institute)</p> <p>Retro-fit of the Industry Experimental Design Lab (IEDL) that is part of the Applied Research and Innovation Centre (ARIC) completion date of January 2013</p> <p>Our focus on global citizenship, equity and social justice and integration of these principles and competences into curriculum Institute for Global Citizenship and Equity^x</p> <p>Development of strategic partnerships with industry to provide innovative, distinctive and green programs for training and re-training (Bombardier; Southlake Regional Health Centre; Pickering learning Site; and Blue Heron, etc.) Development of affiliate memberships to remain connected with and recognized by the industry and receive global recognition (United Nations World Tourism Organization - UNWTO)</p>

CONSIDERATIONS	SPECIFICS	INNOVATION AND ENTREPRENEURSHIP
		<p>Impressive portfolio of applied research initiatives in partnership with industry and conducted with support of internal and external funding (FedDev grant - Power Electronics Lighting Innovator Project; Aboriginal Solar PV Training; CONNII collaboration – Land use (Zoning) Creation Project – partnership with DMTI Spatial Inc.; United Nations Educational, Scientific and Cultural Organization (UNESCO)-UNEVOC Centre – specialized centres for technical and vocational education and training, providing opportunities for north-south collaboration and participating in global network sharing knowledge and skills, etc.</p>
	<p>Our Strength in PSE</p>	<p>All components of the Signature Learning Experience including GCELEs – Global Citizenship & Equity Learning Experiences and supporting infrastructure (including policies and procedures)</p> <p>Our focus on interdisciplinary and inter-professional practice</p> <p>Process for curriculum integration of entrepreneurial learning outcomes has begun and is reflected in 5 of 8 schools</p>
	<p>Our Distinctive Characteristics</p>	<p>Leadership Passport initiative including leadership product^{xi}</p> <p>Student portfolio requirement with both professional/career-focused and global citizenship and equity components</p> <p>Student access and support for international educational experiences, including study abroad and student/faculty exchanges</p> <p>College- and school-level in-service learning opportunities within Canada</p> <p>Youth and Community Engagement Relationship Model^{xiii}</p> <p>Development of a Social Action Fund – encourages greater community awareness on issues pertaining to social justice and global citizenship</p> <p>Our relationships with regional school boards as an active SCWI participant, to keep focused on the varying needs of secondary school students</p> <p>We have integrated simulation into various programs and have dedicated labs using low-medium-high fidelity models.</p>

CONSIDERATIONS	SPECIFICS	INNOVATION AND ENTREPRENEURSHIP
		<p>Some of simulated labs include: nursing, paramedic, police foundations</p> <p>Our Centre of Entrepreneurship - has been in the business of supporting local economic development through its training, consulting and advisory services since was established in 1988. It has successfully delivered the Ontario Self-Employment Benefit Program (OSEB) supporting close to 3,000 unemployed individuals in starting and operating a new business. The COE has an extensive in-house resource base of trainers and advisors with business and entrepreneurial background, as well as experience working with entrepreneurs and early stage businesses. The following are the programs available at COE: OSEB; Independent Television Producers Program; and Summer Company. The New Business Start-up Program has been modified and will become a certificate program in November 2012. The COE has partnered with three groups to draw from their member base as potential clients: Canadian Armed Forces; Canadian Union of Skilled Workers; and the Ontario Society of Professional Engineers (OSPE).</p>
<p>c) Timeframe, resource allocations or redirections and metrics to be used to measure progress</p>	<p>Timeframe</p>	<p>Create school-specific action plans with goals of replacing or enhancing traditional teaching to deliver a deeper experiential learning with a focus on entrepreneurship and innovation in all areas of work by 2013</p> <p>Retro-fit of the Industry Experimental Design Lab (IEDL) that is part of the ARIC by January 2013</p> <p>Improve and streamline Process for selecting and approval GCELE learning experiences in 2012</p> <p>Regular Space Committee meetings will occur through 2013-14 to examine space requirements for labs and other learning spaces</p>
	<p>Resource Allocations</p>	<p>Space:</p> <ul style="list-style-type: none"> -the Storefront will require 25,000 g.s.f. of new space in the Progress Campus and will result in the creation of 10 new full-time academic and support staff positions -have sufficient space for the creation of incubators with industry partners already in existing in ARIC and COE <p>Budget:</p> <ul style="list-style-type: none"> -will be sustainable through a combination of government grants and industry funding.
	<p>Metrics</p>	<p>Class climate data – faculty and program feedback/evaluation</p>

CONSIDERATIONS	SPECIFICS	INNOVATION AND ENTREPRENEURSHIP
		<p>KPI results</p> <p>Annual and comprehensive program review action plans and recommendations</p> <p>The number of applied research projects, the research findings/results and the submission of final reports</p> <p>The number of applied research projects and capstone projects achieving commercialization stage</p> <p>Numbers of faculty/students accessing the Social Action Funds</p> <p>Number of programs that have mandatory entrepreneurial learning experiences</p> <p>Inventory of all programs for coop, clinical, field or work placement experiences</p> <p>Number of student incubators</p> <p>The number of programs with a capstone project</p> <p>The number of GCELE projects submitted and approved and the number of participants</p> <p>Participation stats from Global Experience Office (GEO) on student exchanges</p>
<p>d) Innovative initiatives to improve productivity in administration, teaching and learning and any costs and resource implications</p>	<p>Administration</p> <p>Teaching and Learning</p>	<p>There will need to be cross-divisional supervision to eliminate duplication of approaches and use of resources</p> <p>Innovative ways of teaching and learning through the Centre of Entrepreneurship (COE) and Applied Research and Innovation Centre (ARIC)</p> <p>New Business Start-up Program</p> <p>Developing and integrating entrepreneurial and innovation learning outcomes</p>

CONSIDERATIONS	SPECIFICS	INNOVATION AND ENTREPRENEURSHIP
		Designing reliable and valid evaluative methods such as the creation of a business plan <i>The Innovation Storefront</i> initiative
	Costs	The costs for this initiative and the integration of competencies into the curriculum will be covered within existing and fixed administrative overheads
	Resources	Configuration of incubators and simulated learning spaces Trainers and advisors with business and entrepreneurial backgrounds Expertise in experiential learning and its integration in curriculum Expertise to develop, implement and evaluate professional development opportunities for faculty Curriculum development expertise to revise existing curriculum based on entrepreneurial learning outcomes
e) Required public policy tools		Broader scope of tax incentives for employer-based experiential learning to reduce the costs that employers incur, and address impediments to work placements, such as the time required for police checks Post-secondary capital and operating funding models give greater recognition to the costs incurred by colleges in developing in-college simulation experiences
f) Correlation of objective to one or more of the principles		This objective correlates to all three principles: 1. Putting Students First – by recognizing that many students aspire to start businesses and by providing the education they need to become future entrepreneurs and innovators 2. Meeting the needs of the creative economy – by erasing the wall between classroom and workplace through The Innovation Storefront initiative 3. Focusing on productivity, innovation and sustainability – by developing and integrating innovation and entrepreneurship learning outcomes in our curriculums

OBJECTIVE 3

We will improve our productivity and excellence through innovation in teaching and learning, applied research and in leveraging our resources and partnerships

Table 3: Centennial Aerospace Campus at Downsview Park

CONSIDERATIONS	SPECIFICS	CENTENNIAL AEROSPACE CAMPUS AT DOWNSVIEW
<p>a) Effect on total enrolment and enrolment mix</p>	<p>Total Enrolment</p>	<p>Potential Enrolment:</p> <ul style="list-style-type: none"> -Enrolment would increase by approximately 500 students from approximately 350 students to 950 students in the next five years representing more than a 42% enrolment increase over current capacity. -Introduction of seven programs as well as expansion of existing programs' capacity to support the needs of employers in the industry including Bombardier is a contributing factor to enrolment growth. -Centennial serves the most diverse students and 50% of students come from first generation families. Expansion would include service to the Aerospace industry and provide three high priority neighborhoods with access to training and education that leads to sustainable employment. Centennial has developed expertise in this area as its main Progress Campus currently services four high priority neighborhoods. -Aerospace programs are one of the most attractive programs globally, therefore potential increase in international students will help Ontario economy. <p>Future Employment Opportunities:</p> <ul style="list-style-type: none"> -As one example of Ontario's Aerospace Companies, it is projected that Bombardier's new Global 7000 / 8000 program (the largest, most prestigious business aircraft available in the world) will add over 750 jobs in Ontario. <p>In terms of Bombardier:</p> <ul style="list-style-type: none"> -Over 600 employees at Bombardier's Toronto assembly site are eligible for retirement over the next 5 years. -75% of the Toronto production workforce is between the ages of 45-65, and will be eligible to retire over the next 20 years.

CONSIDERATIONS	SPECIFICS	CENTENNIAL AEROSPACE CAMPUS AT DOWNSVIEW
		<p>-This same demographic exists at other large Ontario aerospace companies – representing a very large training opportunity, with the potential benefit of re-skilling the sector to handle the unique technological challenges of the 21st century.</p> <p>-Canada is currently fifth in terms of global aerospace exports – a highly coveted position. A regional breakdown within Canada shows that Quebec has 45.7% of the employment, while Ontario is 2nd at 27.8%. (Source: Deloitte – Strategic & Economic Impact of Canadian Aerospace – 2010, p.7)</p> <p>-Providing critical training capacity for 3,000 new jobs in the aerospace industry including the construction and operations area</p> <p>-Assumption that average program enrolments consists of 85% domestic and 15% international students for incremental enrolment (Source: Deloitte – Strategic & Economic Impact of Canadian Aerospace- 2010).</p>
	<p>Enrolment Mix</p>	<p>Enrolment mix consists of a wide range of offerings and includes Certificate, Diploma, Advanced Diploma or Three Year Bachelor’s degree, Bridging and Collaborative/Joint programs. Programs will be offered in full-time, flexible, part-time (continuing education) and online/hybrid formats.</p> <p>Out of 2 existing and 7 new programs, there are 1-3 year Advanced Diploma program with three streams of study in the areas of Aviation maintenance, management and manufacturing , 4-2 year Diploma programs, 3-2 semester Certificate programs and 1-1 semester Certificate programs</p>
<p>b) Distinctive institutional advantage, strength or characteristic that makes achievement of the objective credible, likely and desirable:</p>	<p>Our Distinctive Advantage</p>	<p>Centennial has been teaching aircraft and avionics maintenance for 40 years, and was the first teaching facility in Canada to receive Transport Canada accreditation for its aviation technician programs.</p> <p>Developing collaborative partnerships with Industry, Institutions, Associations and Government to build on the teaching and learning experience is an ongoing process. Such examples include:</p> <p>Industry:</p> <p>-We have a partnership agreement with Bombardier (approx. 5000 employees) as its new Strategic Skills Trade Trainer of Choice in Ontario. The College has a contract with Lockheed Martin under the federal government’s Industrial Regional Benefit Program (IRB) for access to their curriculum.</p> <p>Institutional:</p> <p>-Some established partnerships are with University of Toronto Institute for Aerospace Studies (UTIAS), Ryerson</p>

CONSIDERATIONS	SPECIFICS	CENTENNIAL AEROSPACE CAMPUS AT DOWNSVIEW
		<p>University, the University of Ontario Institute of technology (UIOT), York University, University of Waterloo, and Algonquin College to increase productivity through collaborative research and programming. Associations: We have partnered with the Aerospace Industry Association of Canada (AIAC) in the ongoing renewal of aviation related industry training needs .</p> <p>Government: -<i>Municipal:</i> Participation with the City of Toronto’s Economic Development committee (ED13.3 Aerospace Campus/Cluster- Creating Jobs and Innovation for the Future at Downsview) -<i>Provincial:</i> Co-Chaired a working committee for MEDI to help address Industries needs for Skills and Training.</p> <p>This strategy aligns with the provincial government’s new sector growth strategy for aerospace (January 2012), which includes collaborative research and development incentives and will require well technician training programs as a means of expanding the industry’s technical capacity in Ontario.</p> <p>-<i>Federal:</i> Centennial is the only college in Ontario to sit and lead a sub-working group for Industry Canada (Emerson report) which will result in the creation of a national Aerospace strategy.</p> <p>On February 28, 2012, the federal government announced a broad review of its aerospace industry funding with an aim of improving competitiveness through changes to loan, grant, and tax-credit programs</p> <p>The federal cabinet has approved Downsview Park’s strategic plan, including the Centennial College’s Aerospace Campus as Phase 1 of the larger industry cluster development envisioned for the Park’s future.</p>
	<p>Our Institutional Advantage</p>	<p>Value Planning – An Aerospace Cluster Downsview Airstrip and Surrounding Lands – Aian Dobson^{xiii} (Phase 1)</p> <p>Creation of a predevelopment approach, preliminary financial model and master plan through earthdevelopment (Phase 2)</p> <p>School of Transportation is the largest school of aerospace and the only College in GTA offering aviation and aerospace</p>

CONSIDERATIONS	SPECIFICS	CENTENNIAL AEROSPACE CAMPUS AT DOWNSVIEW
		<p>programs</p> <p>Centennial’s Applied Research and Innovation Centre</p> <p>Centennial’s Strategic Technology Plan and e-Learning Strategy</p> <p>Integration of advanced technology into existing program/course delivery</p> <p>Centennial’s Inventory of Shared Resources (i.e. facilities and services; GTA Deaf and Hard of Hearing Grant; Human Resources; Information Technology; and OntarioLearn)</p> <p>Development of a College Space committee to maximize utilization of space and facilities</p> <p>Expanded capacity of our Development Office to increase major gifts</p> <p>Our Strength in PSE</p> <p>Centennial’s recognition by the Institute of Public Administration of Canada (IPAC) with a gold medal for its community outreach and student support programs</p> <p>Our reputation as a leader in international education</p> <p>Our reputation as a Comprehensive College, offering a range of pathways to, within and beyond the college</p> <p>Our PQAPA results</p> <p>Our demonstrated ability to financially support infrastructure development</p> <p>Current successes in obtaining contributions of others through philanthropy</p> <p>Our balanced college budget</p>

CONSIDERATIONS	SPECIFICS	CENTENNIAL AEROSPACE CAMPUS AT DOWNSVIEW
		Our commitment to Global Citizenship and Equity education
c) Timeframe, resource allocations or redirections and metrics to be used to measure progress	Timeframe	Please refer to PSI Capital Project Template for details ^{xiv} Phase 1: opening of the Centennial Aerospace Campus (de Havilland building) Phase 2: opening of the Research and Innovation Hub
	Resource Allocations	<p>Financial: Federal, provincial, municipal and private</p> <p>Human: The project will create 58 full-time jobs primarily academic and support staff to support enrolment increase</p> <p>Physical:</p> <ul style="list-style-type: none"> -2014/15 – completion of rapid transit at Downsview Park and new TTC subway line and new Metrolinx GO Train Station -Renovating the historic de Havilland aircraft manufacturing plant at the former Downsview airbase in the City of Toronto -Need for City of Toronto support of related infrastructure, on-site development and arterial infrastructure -Relocation of aviation programs to Downsview will allow for incremental growth of other programs at the College (Ashtonbee Campus) -Adaptive reuse of the de Havilland plant will provide faculty, students, and industry partners with approximately 108,000 g.s.f. -Only access to a private runway for the delivery of donated aircraft and for training purposes -Adjacent civilian aerospace and defense facilities, including Centennial’s training partner, Bombardier. -Future growth of institutional and commercial aerospace facilities surrounding the new campus -Adaptive reuse of existing structure, preservation of existing green space, improvements leading to reduced energy consumption, recycling of parts and materials and research and development contributing to greening of the aerospace industry.
	Metrics	<p>Job creations</p> <p>Increased tax base</p> <p>Increased TTC ridership</p> <p>Regeneration of surrounding services</p>

CONSIDERATIONS	SPECIFICS	CENTENNIAL AEROSPACE CAMPUS AT DOWNSVIEW
<p>d) Innovative initiatives to improve productivity in administration, teaching and learning and any costs and resource implications</p>	<p>Administration and Teaching/Learning – Administrators and educators have increased access to industry professionals and the latest aerospace technology allowing for an innovative model of hands-on industry experience that is embedded within the academic curriculum.</p> <p>Our programs at Downsview will:</p> <ul style="list-style-type: none"> -Be accessible -Utilize flexible delivery models where applicable (just in time – online and hybrid, part-time, flexible, full-time) -Provide multiple pathways (including prior learning assessment, laddering credentials from certificates to diplomas, advanced diplomas or three year degrees and bachelor degrees) -Maximize use of innovative learning technologies -Ensure career focused and life-long learning and skills upgrading opportunities through training and re-training -Optimize community and industry partnerships and engagement -Accelerate opportunities for market-driven applied research, innovation, entrepreneurship and commercialization -Foster multi-disciplinary team work and inter-professional skills training - Enrich joint university-college initiatives in teaching, learning and research <p>Innovation – The Aerospace Hub will bring business, academia and government together to strategically commercialize new technologies while revitalizing the surrounding cultural and residential neighborhoods, as a great place to live, learn and work. The creation of an aerospace hub at Downsview, and the co-location of the proposed post-secondary institutions will accelerate Ontario’s productivity and international competitiveness in this sector by:</p> <ul style="list-style-type: none"> -strengthening the Ottawa –Quebec aerospace corridor -drawing critical private sector resources and expertise to the province -spawn innovation, productivity, and jobs for the future while maintaining Downsview Park’s heritage and local urban planning principles <p>Capital Costs – The project will require \$38.9 million in capital and equipment budget to retrofit the deHavilland plant and purchase academic program equipment. Please refer to PSI Capital Project Template</p> <p>Operational Costs – Aviation programs are expensive to run from not only capital equipment requirements but also academic delivery perspectives since it requires very small lab section sizes and high full-time faculty to student ratios. Therefore, the project will need additional \$3.0 million in operating budget support per year for the first few years and \$1.5 million per year for the remaining years.</p>	
<p>e) Required public policy tools</p>	<p>Government policy and program initiatives should integrate in a coherent strategy, growing the aerospace industry in Ontario and making it more competitive internationally.</p>	

CONSIDERATIONS	SPECIFICS	CENTENNIAL AEROSPACE CAMPUS AT DOWNSVIEW
	<p>Ontario’s Ministry of Economic Development and Innovation (MEDI) has named aerospace as one of six priority sectors for development.</p> <p>The Province’s Aerospace Sector Strategy to explicitly identify a project of this kind as a key driver of future growth in Ontario.</p>	
<p>f) Correlation of objective to one or more of the principles</p>	<p>This objective correlates to all three principles:</p> <ol style="list-style-type: none"> 1. Putting Students First – by offering students better choices to learn through new technology and experiential learning 2. Meeting the needs of the creative economy – by providing modern and relevant program design and through partnership building 3. Focusing on Productivity, Innovation, and Sustainability – by improving productivity and contributing to the economy through innovation in infrastructure, teaching, technology and effective use of institutional resources. 	

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- ⁱ Centennial as a Learning-centered College - see Appendix 1
 - ⁱⁱ Centennial College (2006). Our Book of Commitments. Centennial College's Strategic Plan - see Appendix 2
 - ⁱⁱⁱ Our Signature Learning Experience - see Appendix 3 or Mandate Discussion Paper - Appendix 4, p. 3, 16-17, 20.
 - ^{iv} Centennial's Approach to Internationalization - see Appendix 5
 - ^v Applied Research and Innovation Centre - see Appendix 6
 - ^{vi} Centre of Entrepreneurship - see Appendix 7
 - ^{vii} Strategic Enrolment Management Plan - see Appendix 8
 - ^{viii} Academic Excellence Unit - see Appendix 9
 - ^{ix} Strategic Technology Plan and e-Learning Strategy - see Appendix 10
 - ^x Institute for Global Citizenship and Equity - see Appendix 11
 - ^{xi} Leadership Passport - see Appendix 12
 - ^{xii} Youth and Community Engagement Relationship Model - see Appendix 13
 - ^{xiii} Value Planning - An Aerospace Cluster Downview Airstrip and Surrounding Lands - Iain Dobson - see Appendix 14
 - ^{xiv} PSI Capital Project Template - see Appendix 15