

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: Minister Glen Murray

Ministry of Training, Colleges and Universities

From: Dr. John Tibbits, President

Conestoga College Institute of Technology

and Advanced Learning

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Part 1: Mandate – Conestoga

Conestoga provides career-focused education and training programs that prepare students for success in the new knowledge economy and promote economic prosperity throughout the region and across Ontario. The institution's comprehensive range of programs – from apprenticeships through degrees – reflects the area's diverse and changing job market and local workplace skill requirements. One of only three Institutes of Technology and Advanced Learning in Ontario, Conestoga serves one of Canada's fastest growing regions. The institute is midsized, providing local and regional access to approximately 11,000 full-time, 35,000 continuing education and 4,000 apprenticeship students through campuses and training centres in Kitchener, Waterloo, Cambridge, Guelph, Stratford, Ingersoll and Brantford. Conestoga is increasingly becoming a destination of choice for international students.

The region we serve is one of Ontario's economic engines, with a population predicted to grow to 1.1 million by 2031, much of the growth fuelled by immigration. The area's comprehensive economy features a range of industries with a variety of needs, from insurance and high tech to agriculture and advanced manufacturing. Rapid growth and increasing diversity have created additional community needs, from health care, language skills and services to retraining, as new industries replace more traditional ones.

Conestoga's student-focused, project-based learning model helps ensure that all students can reach their full potential. It provides learners with the skills and knowledge required for success in a variety of key industry sectors. A new Centre for Entrepreneurship supported by industry partners infuses an entrepreneurial focus across all programs and prepares graduates for the realities of the 21st century workplace.

Conestoga's enrolment in apprenticeship training and co-op programs is among the top three in the province, and among the top four in degree programming – the largest outside of the GTA. Employer satisfaction levels with the skills our graduates bring to the workplace are consistently among the very best in Ontario. Our graduates have higher employment and lower loan default rates than those from most other provincial colleges.

In his 2011 report, *Adapting for Prosperity*, economist Larry Smith describes Conestoga as "indispensable to local prosperity and the health and competitiveness of the labour force." Close to half of the adults in the local community have turned to Conestoga's training programs to build their careers, and our graduates have established more than 3,300 businesses. Conestoga's extensive Corporate Training program has served the workplace training needs of more than 500 area employers.

Our students have an enviable record of success, consistently achieving top honours in local, provincial and international competitions. Our career-ready graduates have the skills to meet today's labour-market needs, the adaptability to address tomorrow's challenges, and the strong entrepreneurial spirit that will contribute to individual and community prosperity in our rapidly changing economy.

Our educational partners include four leading Ontario universities in the communities we serve - Waterloo, Wilfrid Laurier, Guelph and McMaster. These partnerships have resulted in a growing number of shared programming initiatives that provide excellent learning experiences for post-secondary students across our region.

Conestoga has a proven track record of continuous improvement and growth – in our facilities, in the professional accreditation and certification of our programs (including Ontario's only college with an accredited engineering degree), in the success of our students and graduates, in our program offerings, and in the development of capital infrastructure and capacity to support ongoing growth. Full-time enrolment growth from 2006 to 2011 was 47 per cent, the highest in the Ontario college system and more than twice the system average of 19.1 per cent.

Despite this rapid growth, however, studies show that the area continues to be severely underserviced. Our four local universities attract top students from across the country and around the world. Admission to their programs is highly competitive. Conestoga's continued growth and leadership in polytechnic education is essential to provide broader access to postsecondary education and serve the needs of our community.

Our bold vision for the transformation of postsecondary education in Ontario will increase access as well as student and graduate success, improve productivity, and ultimately lead to a better alignment of labour needs and available workers across the province.

Priority objectives:

With a target of **25 per cent enrolment growth in the next three years**, Conestoga is committed to the delivery of polytechnic education for a diverse set of learners to drive economic development in a globally competitive environment.

Continued innovation in teaching and technology-enabled learning will move Conestoga to a cross-disciplinary/cross-institutional flexible learning environment aligned with the needs of the 21st century learner and workplace.

Productivity will be increased provincially through the transformation of the Ontario PSE system. Conestoga will further increase productivity by optimizing the use of capital and human resources as well as streamlining program design and delivery.

Part 2: Vision – Conestoga

Conestoga's vision is to be recognized as a **world-class institute for polytechnic education**, a leader in applied learning and solutions-based research to support the needs of learners and our community. Building on our existing strengths, we will provide a full range of programming from preparatory to apprenticeship to diploma, degree and advanced credentials. Our vision includes a college based pre-university component and interconnected pathways to promote greater access and student success.

We believe that Ontario's postsecondary education system must be transformed to recognize the value of applied education and the range of credentials now required to support economic and commercial innovation. We support the vision proposed by Colleges Ontario for a distinct, equal and complementary role for colleges that includes three-year degrees and expanded options to meet the needs of today's students.

Conestoga is ideally positioned to provide leadership in a transformed PSE system for Ontario that places appropriate value on applied learning and paves the way to improved productivity through innovation. To do so, we will draw on our proven track record for continuous improvement and growth, our established dedication to academic quality and excellence, our documented history of successful regional, sectoral and educational partnerships, our strong entrepreneurial spirit and our commitment to a sustainable future.

Part 3: Priority Objectives – Conestoga

Priority #1: With a target of **25 per cent enrolment growth in the next three years**, Conestoga is committed to the delivery of polytechnic education for a diverse set of learners to drive economic development in a globally competitive environment.

Current circumstances: Conestoga's geographic location, breadth of programming, proximity to four leading universities and growing community will ensure continued demand for the services we provide. Building on our record of growth can help the government achieve its commitment of a 70 per cent PSE attainment rate among Ontario's adult population. Current successes include:

- full time enrolment growth of 47 per cent from 2006 2011, the highest in the Ontario college system
- a further 10 per cent growth in first-year enrolments in 2012
- increase in **international student enrolment** by 44 per cent in the last two years
- higher enrolment in Ontario's Second Career initiative than any other college, 2008-2011
- more than 250 per cent increase in enrolment in Ontario's School-College Work Initiative, 2010-2012
- key provider for the delivery of apprenticeship training
- ongoing growth among **underrepresented groups** such as Aboriginals, newcomers to the region, first generation, and those who require academic upgrading or retraining

Services to ensure success for students from underrepresented groups have resulted in extra costs as documented by Colleges Ontario. Conestoga realizes there will be challenges ahead as we support an increasing number of these students, and will continue to demonstrate fiscal prudence with support from the government through policy changes.

Aspiration: To address the unmet demand for applied, labour-market focused education to the broadest possible population, Conestoga's enrolment will grow by 25 per cent in the next three years.

We will:

- Build on existing initiatives to meet the educational needs of traditionally underserviced and at-risk populations
- Expand the range of credentials and programming options, as recommended by Colleges Ontario
- **Enhance** our partnerships with industry, universities and the region to extend our presence and service the growing needs of the Region of Waterloo and contiguous areas, including Brantford and Guelph
- Accelerate the development of industry-focused centres for excellence and innovation in the areas of Healthy
 Communities, Food Innovation (Field to Fork), Engineering and IT, and Apprenticeship and Trades. These centres,
 supported with significant private sector investment, will connect graduates to employers through unique
 program specializations. Programs, grounded in the tradition of applied learning, will provide recognition of
 student achievements through the evolution of the colleges' academic credentials (e.g., three-year, four-year
 honours degrees and future consideration for applied Masters) and ensure graduates are globally competitive.

Parameter A - How achievement of the objective will affect total enrolment and enrolment mix

Target growth of 2,500 full-time students within three years with the following enrolment mix:

- Pre-University (8%)
- Diploma (21%)
- 3-year degree (new credential) (23%)

- Certificate (12%)
- Graduate certificate (13%)
- 4-year degree (23%)

<u>Program Approval Requests</u> – Based on guidance provided by our Program Advisory Committees and other industry partners, Conestoga will continue to develop new programming, including 3-year degrees, that responds to labour market needs and provides relevant professional skills. The focus will be in Health and Community Services, Food Processing, Engineering and Information Technology. Future programs could include: degrees in Public Health, Nursing, Graphic Design, Early Childhood Education, as well a variety of credentials related to Food Processing, Food Safety, Information Technology and Supply Chain Management.

<u>Balance of Research and Teaching</u> – Our primary focus is teaching and learning. The applied research undertaken at Conestoga is faculty-led and tied to outcomes within the course and program to improve the academic learning experiences of students while also providing practical solutions to industry.

Parameter B - Any distinctive advantage, strength or characteristic of your institution that makes achievement of the objective credible, likely, and desirable

Conestoga is primed for further growth given:

- Our location in Canada's Technology Triangle, a growing and economically diverse region
- Cost-effective expansion capabilities (our master plan allows for a growth of 1 million square feet in facilities)
- Accessibility by public transit from the western end of the GTA

Particular strengths include:

- High job placement and low OSAP default rates of our graduates
- Professional recognition of our programs that gives our graduates an edge. Conestoga is home to Ontario's only
 college-delivered engineering degree with professional CEAB accreditation. The Accounting, Audit and
 Information Technology degree is accredited by all three accounting associations (CGA, CA and CMA). The
 Architecture Project and Facility Management degree is the only one in Canada, and one of 13 in the world,
 recognized by the International Facility Management Association Foundation.
- Leadership in the design and delivery of co-op diploma dual-credential apprenticeship programs
- More than \$30 million of industry investment in the last five years to support program expansion

Parameter C - The timeframe for achieving the objective, resources allocations or redirections required, and metrics to be used to measure progress towards achieving the objective

<u>Timeframe</u> – Three to five years, contingent upon the new credentials framework proposed by Colleges Ontario. <u>Resource allocations-redirections</u> – Human resource redirection and expansion will be needed to accommodate increased enrolment and year-round programming. In-year funding will support essential investment in student access and success initiatives. Additional facilities will be required as enrolment grows.

<u>Metrics</u> – Annual full-time enrolment, graduate and employer satisfaction, graduate employment rates (KPI), graduates employed in our region and OSAP default rates.

Parameter D - Where applicable, the innovative initiatives that your institution is pursuing to improve productivity in administration, teaching, research and learning associated with the objective and any associated costs and resource implications

- Collaboration with Laurier Brantford in Business, Life Sciences, Community Services, IT, and Media Studies with improved access for students in Aboriginal communities
- Collaboration with the City of Guelph and the University of Guelph to expand applied learning opportunities for students in that community
- Ongoing collaboration with U of Waterloo and Schlegel Villages to provide innovative research and training for enhanced seniors care, resulting in the appointment of Canada's first college-based CIHR research chair
- Collaboration with Communitech (the high-tech sector association) and local universities for digital media
- Further development of our centres for excellence and innovation to augment the unique student, postsecondary education and industry value that Conestoga provides for the communities we serve. Productivity will be improved through relocating programs to align with the Centres on our various campuses.

Parameter E – Any public policy tools that you need to achieve the results

- One-time innovation funding to support the development of centres for excellence and innovation We endorse Colleges Ontario's recommendations for:
- Three-year degrees and four-year honours degrees awarded by colleges
- The design and execution of a college-based system of degree approval and review through OCQAS
- A revised funding formula and tuition policy for colleges, aligned with the new credential framework
- The expansion of apprenticeship opportunities, with a greater role for colleges in supporting student access and success

Parameter F – How this objective correlates to one or more of the government's principles and parameters for higher education

Conestoga's priority for ongoing enrolment growth supports all three principles and parameters for higher education.

Priority #2: Continued innovation in teaching and technology-enabled learning will move Conestoga to a cross-disciplinary/cross-institutional flexible learning environment aligned with the needs of the 21st century learner and workplace.

Current circumstances: Conestoga provides students with the skills and knowledge required for success in the 21st century workplace. The job-readiness of our graduates is enhanced through exposure to cross-disciplinary projects that encourage innovation, cross-cultural collaboration and applied research with industry partners to develop solutions for real-world problems. Current successes include:

- First college in Canada selected to participate in the Hewlett Packard Catalyst STEM-preneur consortium to develop more effective approaches to STEM education with 315 educational institutions in 15 countries.
- Centre for Entrepreneurship, seeded with close to \$1 million of private sector investment, serves as an incubator for innovation, research, collaboration and business formation for students and community members.
- Canada's most powerful college FM radio signal broadcasts 24/7 and facilitates 'learning-by-doing'.
- Accelerated, fast-track and continuous intakes with year-round opportunities are offered in 23 programs.
- Conestoga will accelerate initiatives related to technology-enabled learning. Current investment in a new learning management system (Desire2Learn) will support learner needs for collaboration, communication, critical thinking and creativity, provide real-time analytics and support partnerships with local universities.

Aspiration: Further development of a cross-disciplinary and cross-institutional flexible learning environment that will meet the needs of a diverse range of students with interconnected postsecondary pathways.

We will:

- Transform the delivery of programs with universities, community partners and across the college, including:
 - Shared space: year-round optimization of existing spaces to provide options for students; expanded programming in Brantford at WLU campus (including 2+2 partnerships); interchangeability of courses between institutions; development of a multi-disciplinary campus with Guelph and its university; the Schlegel Centre for Research and Innovation with UW that will focus on innovation for seniors care
 - A culture of continuous program improvement in collaboration with our partners
- **Promote** increased cross-disciplinary activities internally and externally:
 - o Industry-focused centres for excellence and innovation (e.g., a cross-disciplinary and cross-institutional centre supporting field to fork innovation for culinary, food processing, nutrition and food safety)
 - o Cross-disciplinary credentials, across the college and in conjunction with local universities (e.g., to produce graduates who have specialized skills in the areas of aging and mental health)
- Accelerate technology-enabled learning and delivery through:
 - Continued leadership in the use of simulation to improve learning, enhance quality and reduce reliance on practicums
 - o Increased access to online offerings for undergraduate liberal arts electives with the University of Guelph
 - Enhanced support for student success through our virtual online learning community that promotes literacy, numeracy and career development through self-help, student-to-student and student-to-tutor mentoring anywhere, anytime, 24/7
 - o An expanded and more robust OntarioLearn, as recommended by Colleges Ontario
- **Expand** flexible learning and delivery:
 - o Evolve academic systems and structure to support flexible learning and delivery
 - Redesign programs and review program delivery to improve access (e.g., increase in common courses, continuous intake, year-round offerings, modular delivery)
 - o Provide pathways that allow students to make program/institutional changes in a timely, cost-effective way
 - Provide an expanded college credential continuum to ensure students have access to the education that best suits their strengths and goals

Parameter A - How achievement of the objective will affect total enrolment and enrolment mix

Enrolment growth by credentials and level of student mix

- Increase in flexible programming (e.g., face-to-face, hybrid, online, continuous) and clearly articulated pathways
- New programs and credentials that will contribute to the breadth and depth of our program mix
- Increased student retention through initiatives to support learner success with 24/7 access

<u>Balance of Research and Teaching</u> – Our primary focus is teaching and learning. The applied research undertaken at Conestoga is faculty-led and tied to outcomes within the course and program to improve the academic learning experiences of students while also providing practical solutions to industry.

Parameter B - Any distinctive advantage, strength or characteristic of your institution that makes achievement of the objective credible, likely, and desirable

- Proximity to four universities, allowing for the ease of collaboration
- Use of simulation that allow students to experience real-life workplace situations in a safe and cost-effective manner (e.g., Heavy Equipment Operator, Aviation and Nursing)
- Conestoga's state-of-the-art Cowan Health Sciences Centre that provides leading-edge learning opportunities both to our students and those from the University of Waterloo
- Collaboration with the University of Waterloo and Schlegel Villages in the Schlegel Research Institute for Aging and one of Ontario's three Centres for Learning, Research and Innovation for long-term care
- A funded industrial research chair for Senior Care (CIHR/Schlegel)
- Eligibility for research funding from NSERC, SSHRC and CIHR (Tri-Council Approved)

Innovation in teaching and learning has produced:

- Project-based learning that is recognized for providing unique skills aligned with the needs of the workplace
- The only college engineering program to place first in the senior division of the Ontario Engineering Competition, an annual event for students from accredited engineering degree programs
- More medals at Skills Canada than any other college, including a medal at the World Skills competition
- Top Canadian college ranking in SME Baja car competitions against an international field of 120 teams
- A first-place global ranking for student teams in an international business simulation competition
- A top-two finish in our debut performance at Certified Management Accountants university case competition

Parameter C - The timeframe for achieving the objective, resources allocations or redirections required, and metrics to be used to measure progress towards achieving the objective

<u>Timeframe</u> – Three to five years.

<u>Resource allocations/redirection</u> – Investment in LMS and faculty training; redirection of resources as the result of ongoing program viability analysis.

<u>Metrics</u> – Graduate and employer satisfaction, graduation rate, enrolment numbers in flexible deliveries, multiyear plan for academic development and renewal.

Parameter D - Where applicable, the innovative initiatives that your institution is pursuing to improve productivity in administration, teaching, research and learning associated with the objective and any associated costs and resource implications

- Industry-focused centres for excellence and innovation to increase focus, unique capability and synergy with industry and university partners (e.g., Healthy Communities, Food Processing)
- Deployment of Desire2Learn and development of a Centre for Enhanced Learning
- Continuation of HP Catalyst program, with Conestoga as the lead institution
- Further development of flexible learning (e.g., redefine semesters, redesign programs, increase student mobility)

Parameter E – Any public policy tools that you need to achieve the results

- Increased funding for applied research at colleges
- Additional investment to support transformation of teaching and learning (e.g., simulation-enhanced learning)
- We endorse Colleges Ontario recommendations for the development of world-class, technology-enabled flexible learning, including:
 - o Expansion of OntarioLearn as the platform for broader, more efficient access to post-secondary education
 - o The ability of colleges to develop and deliver fully online degrees
 - o Support for the use of digital technologies, open educational resources, and mobile learning programs

Parameter F – How this objective correlates to one or more of the government's principles and parameters for higher education?

Conestoga's priority for teaching and technology-enabled learning supports the government's three principles.

Priority #3: Productivity will be increased provincially through the transformation of the Ontario PSE system. Conestoga will further increase productivity by optimizing the use of capital and human resources as well as streamlining program design and delivery.

Current circumstances: As documented by Colleges Ontario, colleges have been achieving strong outcomes for students while improving productivity for many years. Ontario colleges educate students at a cost to the government that ranks second lowest per full-time equivalent (FTE) among the provinces. Much of the potential for real productivity improvement lies in rethinking the roles of institutions within Ontario's post-secondary system. Conestoga's system-leading enrolment growth has resulted in an effective grant per FTE that is lower than the Ontario system average. The current operating grant model, which does not recognize enrolment growth for two years, leaves 10 per cent of our current students unfunded. This inequitable funding mechanism inhibits the ability of mid-size colleges to meet the needs of fast-growing regions, and does not reward performance.

Current successes include:

- Facility operating costs per square foot that are among the lowest in the system
- Implementation of differentiated staffing within the constraints of collective agreements
- Development and hosting of inter-college corporate computer systems
- Effective partnerships with sectoral groups to create employer-responsive programming and to garner significant investment for the development of innovative facilities such as:
 - o Masonry Training Centre, Waterloo in partnership with Ontario Masonry Contractors Association
 - o Heating, Refrigeration, Air Conditioning Training Centre, Waterloo in partnership with local Contractors
 - Roofing Training Centre, Waterloo in partnership with Ontario Industrial Roofing Contractors Association
 - Institute of Food Processing Technology, Cambridge in partnership with Alliance of Ontario Food Processors
 - o Power Training Centre, Ingersoll in partnership with the town and the regional power utilities

Aspiration: We will be recognized as a productivity leader for both our methodologies and our results.

To increase revenue, we will:

- Manage enrolment growth to:
 - o provide more opportunities for domestic students, to meet local labour market needs, increase revenue and produce economies of scale
 - o increase international student enrolment to assist with regional skills shortage, generate revenue and support the globalization of our programs
- Drive international and domestic enrolment growth through a new credential framework (3-year degree)
- Expand corporate training and continuing education activity
- **Develop** additional complementary revenue sources (IELTS)
- Enhance partnerships with industry and government for facilities, equipment and curriculum

To increase cost-effectiveness and efficiency, we will:

- Review staffing models and human resource allocations
- **Redesign** program and curriculum to respond to the new PSE framework
- Adopt emerging technology-enabled modes of delivery
- Continue process changes and partnering for further administrative and support efficiencies
- **Grow** inter-institutional systems through appropriate technology

Parameter A - How achievement of the objective will affect total enrolment and enrolment mix

These measures will drive growth across the full spectrum of credentials enabling us to meet the 25 per cent target.

Parameter B - Any distinctive advantage, strength or characteristic of your institution that makes achievement of the objective credible, likely, and desirable

Conestoga achieved the highest enrolment growth in the Ontario college system between 2006 and 2011 (47 per cent vs. 19 per cent system-wide). The college is poised to efficiently accommodate continued growth with a

comprehensive range of programming that responds to a strong regional economy and leverages recent investments in new facilities and specialized equipment.

Unique to Conestoga is its cost-effective growth potential. The main campus on the 401 highway in a fast-growing, accessible urban area has the potential to almost double in size on existing serviced lands, adding 1 million square feet of facilities. Our central location in southern Ontario allows for ready access from southwestern Ontario through to west GTA. Additionally, Conestoga has established relationships with Wilfrid Laurier University, University of Waterloo and a range of community organizations, including Schlegel Retirement Villages and Communitech, to share facilities and grow enrolment in a cost-effective manner.

Parameter C - The timeframe for achieving the objective, resources allocations or redirections required, and metrics to be used to measure progress towards achieving the objective

<u>Timeframe</u> –Three to five years, dependent upon transformational changes and opportunities that arise from the Strategic Mandate process.

<u>Resource allocations</u> – Strategic enrolment management will optimize the capacity and productivity of current resources. Enrolment growth will necessitate additional staff as well as redeployment of human resources. Additional support mechanisms will be required to ensure student success.

<u>Metrics</u> – Domestic and international enrolment growth, average section size, enrolment in alternative delivery programs, year-round programming, graduate and employer satisfaction, graduation rate, graduate employment rate, Conestoga Program Performance Indicators, including cost-effectiveness.

Forecasting precise productivity improvements at this point is premature, given the number of variables including system redesign, policy changes, curriculum redesign and other factors.

Parameter D - Where applicable, the innovative initiatives that your institution is pursuing to improve productivity in administration, teaching, research and learning associated with the objective and any associated costs and resource implications

- Increase enrolment during winter, spring and summer to maximize space efficiency
- Multiple entry points and pathways that allow students to achieve their potential
- Improved utilization of existing facilities through the use of technology-enabled learning
- Continued optimization of human resource allocations
- Shared IT approach with Collège Boréal that has resulted in better service and reduced costs. Other colleges have expressed interest in joining this shared IT initiative

Parameter E – Any public policy tools that you need to achieve the results

- Multi-year college tuition framework that recognizes both the distinct nature of tuition fee policy in the college sector and new credentials
- Funding framework that aligns with the government's vision and recognizes performance on a current basis
- A process to review current staffing models with a view to improving productivity and meeting learner needs

Parameter F – How this objective correlates to one or more of the government's principles and parameters for higher education?

Conestoga's priority for increased productivity supports the government's three principles.