STRATEGIC MANDATE AGREEMENT

Durham College of Applied Arts and Technology and the Ministry of Advanced Education and Skills Development 2017-2020

| of Advanced Education and Skills | Applied Arts and Technology by: |
|----------------------------------|---------------------------------|
| Development by: | - Chovse |
| Sheldon Levy Deputy Minister | Don Lovisa President |
| • | Feb 15. 208 |
| Date | Date |



SIGNED for and on behalf of the Ministry



SIGNED for and on behalf of Durham College of

Table of Contents

Section 1: Introduction

Preamble Institutional Vision, Mission, Mandate Aspirations

Section 2: Shared Objectives and Priorities for Differentiation

- 1.0 Student Experience
- 2.0 Innovation in Teaching and Learning Excellence
- 3.0 Access and Equity
- 4.0 Applied Research Excellence and Impact
- 5.0 Innovation, Economic Development and Community Engagement

Section 3: Enrolment Strategy, Program Direction, Sustainability and Partnerships

6.0 Enrolment Strategy and Program Direction

- Domestic and International Enrolment Projections
- International Strategy and Collaboration
- Strategic Areas of Program Strength and Expansion
- Apprenticeship
- Financial Sustainability

7.0 Institutional Collaboration and Partnerships

Section 4: Ministry Commitments

Preamble

This Strategic Mandate Agreement between the Ministry of Advanced Education and Skills Development and Durham College outlines the role the College currently performs in Ontario's postsecondary education system and how it will build on its current strengths to achieve its vision and help drive system-wide objectives and government priorities.

The Strategic Mandate Agreement (SMA):

- Identifies and explains the shared objectives and priorities between the Ontario government and the College;
- Outlines current and future areas of program strength;
- Supports the current vision, mission, and mandate of the College and established areas of strength within the context of the College's governing legislation;
- Describes the agreed-upon elements of the new College funding model, including:
 - a College's enrolment plans and the initial midpoint levels of weighted funding units that will be funded in the corridor funding model during the period of this SMA; and,
 - differentiation areas of focus including metrics, and targets.
- Provides information on the financial sustainability of the institution; and,
- Informs Ministry decision-making and enables the Ministry to align its policies and processes to further support the College's areas of strength.

The term of the SMA is from April 1, 2017 to March 31, 2020.

The agreement may be amended in the event of substantive policy or program changes that would significantly affect joint commitments made in the SMA (e.g., Major Capacity Expansion and Highly Skilled Workforce). Any such amendment would be mutually agreed to in writing, dated, and signed by both signatories.

Ontario's Vision for Postsecondary Education

Ontario's colleges and universities will drive creativity, innovation, knowledge, skills development and community engagement through teaching and learning, applied research and service. Ontario's colleges and universities will put students first by providing the best possible learning experience for all qualified learners in an affordable and financially sustainable way, ensuring high quality and globally competitive outcomes for students and Ontario's economy.

Durham College Mandate, Mission and Vision

Institutional mandate, mission, and vision statements describe where an institution currently is and where it sees itself in the future.

Vision

Durham College is the premier postsecondary destination for students to succeed in a dynamic and supportive learning environment. Our graduates develop the professional and personal skills needed to realize meaningful careers and make a difference in the world.

Mission

The student experience comes first at Durham College.

Values

- Integrity and transparency we behave and communicate sincerely and honestly
- Respect we treat everyone with dignity, deliver superior service and offer a safe environment
- Equal access and diversity we embrace uniqueness, ensure accessibility and champion all learners
- Personal and team accountability we do what we say we will do and are creative and innovative in how we conduct our business
- Collaboration we create opportunities to work together to foster learning and achieve success

Aspirations

The Ministry recognizes the importance of supporting institutions to evolve and acknowledges the strategic aspirations of its postsecondary education institutions. The SMA is not intended to capture all decisions and issues in the postsecondary education system, as many will be addressed through the Ministry's policies and standard processes. The Ministry will not be approving any requests for capital funding or new program approvals, for example, through the SMA process.

Institutional Aspirations

Durham College's (DC's) aspirations are reflected in the goals outlined in its 2017-2020 Strategic Plan, which are linked to the college's four pillars of business: Our students, our people, our business and our community. The goals are:

- 1. To provide students with the best possible learning experience.
- 2. To optimize the experience and expertise of our people and help them make the best possible contribution towards the student experience.
- 3. To manage resources responsibly and ensure that we are financially and environmentally sustainable, demonstrate good governance and are leaders in the support of outstanding teaching and learning.
- 4. To contribute and respond to the economic, social and environmental well-being of our community.

Domestic population growth

Durham Region's population is expected to increase from approximately 700,000 to 1 million over the next 10 years. With an institutional mandate to foster economic growth in the region by providing the necessary postsecondary seats to meet postsecondary demand, DC aspires to grow its domestic student population in response to this anticipated economic and population growth.

Due to the implementation of the new College Funding Model, DC's aspirations for domestic enrolment growth may be tempered since, after 2019-2020, the Ministry's core operating funding will no longer be directly linked to changes in enrolment levels. This may result in the college limiting growth in domestic enrolment in some programs and focusing on international growth.

While the SMA projections represent zero domestic growth so the college maintains a steady per student funding rate under the new College Funding Model, the projections do not reflect the college's growth aspirations or expectation of demand over the coming years.

Addressing and studying urban issues

DC registers an economic impact of more than \$800 million to Durham Region (2015) and the college's presence can be felt virtually everywhere. Committed to being a thought leader while responding to community needs, DC continually works to advance its role as a community hub including the mobilization of key employers to boost the strategic development of innovation in the region. This includes initiatives such as the Idea Summit, which is leveraging key corporate partners to stimulate investment and innovation.

DC is collaborating on an initiative with the City of Oshawa, the University of Ontario Institute of Technology (UOIT), the Canadian Urban Institute and the University of Toronto's Civil Engineering department that will see Oshawa evolve into a city known for addressing and studying urban issues, finding opportunities and

implementing solutions. Oshawa would become a teaching city, in the same way that some medical centres become recognized as teaching hospitals.

Applied research, entrepreneurship and innovation

DC recognizes the contributions the college can offer to small and medium-sized enterprises (SMEs) through applied research, entrepreneurship and innovation. As DC's culture of applied research, entrepreneurship and innovation continues to grow, more faculty are engaging in collaborative projects with companies, resulting in a meaningful economic impact. In addition, including students in these projects enables them to gain from rich experiential learning opportunities, while refining their essential employability skills.

DC's emerging Artificial Intelligence (AI) Hub (described in Section 4) will address the strategic imperative for action on incorporating AI into the business operations of SMEs. As the college builds capacity in AI applied research, leveraging federal and provincial funding opportunities, it will also advance curriculum and extracurricular initiatives intended to provide students with emerging technical skills in computer programming and AI techniques.

The college recognizes that talent acquisition and lack of robust platforms remain significant barriers to growth and success for SMEs. DC is well positioned to provide graduates with the in-demand skills and access to applied research that is required to build and incorporate these necessary technical platforms. DC will continue to build and deliver entrepreneurship services that provide students with challenging and innovative programming that allows them to imagine, explore and create solutions that have commercialization potential. In particular, the new Centre for Collaborative Education (CFCE), which will open in 2018, will provide a new home for FastStartDC, an entrepreneurship service designed to help students develop and launch their own businesses.

College transition to Polytechnic¹

DC recognizes that the college system has continued to evolve over its 50-year history in response to societal demands for a responsive and relevant postsecondary system that prepares students for today and a future workplace. The college has successfully expanded its credential framework, launched applied research operations and is more relevant to university graduates, those displaced by economic and societal shifts and those requiring real-world skills, than ever before. Part of this evolution is a shift to a distinct third option between university and college — one that combines deep, theoretical learning with applied, hands-on experience. At DC, we believe this unique combination will give our students the best possible chance to succeed in their personal and professional lives. With the polytechnic model of education well established around the world, DC also strives to adopt this model and differentiate itself in the global, postsecondary marketplace.

¹ The ministry acknowledges Durham College's request for a polytechnic designation. The ministry will be undertaking a review of this issue and has noted Durham's position.

Shared Objectives and Priorities for Differentiation

1.0 Student Experience

This section captures institutional strengths in improving student experience, outcomes and success. This section recognizes institutions for measuring the broader learning environment, such as continuity of learning pathways; retention; student satisfaction; co-curricular activities and records; career preparedness; and student services and supports.

1.1 Institutional Approach to Improving Student Experience

DC takes a college-wide approach to supporting the student experience, which is supplemented by specific strategies designed to reach targeted student groups based on the interests, needs and phases of their learning journey.

This philosophical and practical approach begins with an individual's first point of contact with the college through to graduation and/or an application to one of DC's more than 450 academic pathways. It continues throughout all stages of the academic journey via a wide range of student supports, including the transition from student to alumni after graduation.

The student experience is enhanced by DC's approach to service provision. For example, the Student Services building was one of the first buildings in the college system to be built for the specific purpose of delivering multiple services to students in one efficient and accessible environment. In addition, the Student Success Coaching program, a pilot project that began in 2015, has resulted in employees across campus being trained as coaches to ensure students receive similar and consistent support from all service areas, from their first day on campus through to graduation.

The coaching model is a based on a theoretical framework that shifts from advising or giving information to students, to helping them set goals and learn problem-solving skills. The pilot has expanded throughout DC's student support areas over the past two years with positive results in student satisfaction and engagement. The coaching model is delivered in every department, from summer orientation programs to Student Academic Learning Services (SALS), the Access and Support Centre and the Career Development office.

As the project moves forward, each service department is implementing mechanisms to track student engagement and the impact services have on student success. DC also actively engages with multiple partners to enhance the student experience, making connections within the campus, between institutions and with community partners to help students engage effectively with their communities during their academic careers and beyond.

DC is committed to maintaining a delicate balance between providing support for a successful student experience and recognizing that its students will typically re-engage with their home communities after graduation. Community partnerships that provide opportunities for students, during and after their time at DC, are critical to facilitating a smooth and successful transition to each student's chosen career path. There is a growing demand for student mental health supports and developmental programs.

DC is committed to continually advancing the student experience through its many departments and service offerings, in addition to connections with organizations in the community and throughout Ontario. This includes:

- The Campus Health Centre, which partners with the Ontario Shores Centre for Mental Health Services to offer cognitive behavioural therapy to students with identified mental health needs in addition to implementing a demonstration project focused on research related to youth anxiety and depression.
- The Financial Aid and Awards office, which partners with Enriched Academy to provide online financial literacy workshops for students and the Weston Foundation to support at-risk students in apprenticeship programs.
- Employers across industries and community-based organizations, including not-for-profits.
- City of Oshawa, Region of Durham and other municipalities and townships across the region who provide work placements/co-ops and employment opportunities for graduates.

Responding to changing demographics and the interest in graduate certificates and degrees

Postsecondary education is no longer considered a point-in-time experience and a growing number of DC students are not direct-entry students from high school. The non-direct entry population includes those who have completed a previous college diploma or university degree, students who have course equivalent work experience, students returning to start new careers and students who are engaged through the Workplace Safety and Insurance Board. College education is a continuous learning experience throughout a student's career journey and DC is responsive to the increasing demand for advanced certificates, diplomas and degrees. DC draws most of its students from Durham Region, with most graduates staying in the region and contributing to the local economy. To meet the needs of employers, experiential learning opportunities such as work placements, internships and co-operative education options will continue to expand to help facilitate the transition from student to employee.

Planned initiatives to improve the student experience include:

- Increasing access to SALS online for weekend flex and continuing education students, including the production of three videos demonstrating how to access online supports for health sciences. For the purpose of SMA2, while there is no increase projected in the number of students serviced by SALS, the college will measure the impact of SALS on students.
- Developing a strategic response to student mental health/resilience by building on the success of the
 Student Success Coaching program to focus on strength building and proactive measures. This will be done
 through an increase in student-coach meetings during the Start Strong program, which is a pre-orientation
 program designed to help students familiarize themselves with the campus, gain vital information about
 how to succeed as a college student and begin to form their DC support network. In addition, DC will work
 to increase direct staff-to-student contact, through the addition of a health educator and a full-time mental
 health nurse.

Expanding co-operative education, which allows students to combine classroom learning and real-world
experience through paid work terms that alternate with academic terms. An opportunity for students to
earn while they learn, co-op is an excellent way to build employer networks, explore career pathways and
apply in-class teachings to practical situations. Entrance into the co-op option is competitive, with interested
students required to apply during their first year of study. DC is piloting co-op with two programs starting in
2017 and has a goal to expand to 13 programs in 2018.

1.2 Examples of Institutional Initiatives

Student success coaching

DC's Student Success Coaching pilot program has resulted in more than 500 students working with trained employees to develop success plans that pro-actively identify strategies and resources. This helps students to become better equipped to face challenges while building resiliency to inevitable college stressors before issues escalate and require intervention. With appropriate resources, the pilot will be expanded to all incoming DC students, with each connected to a success coach as part of the Start Strong program. Students will then continue to receive coaching from student services personnel throughout their academic careers to support their individual success plans. Contact with coaches in each department will be tracked according to frequency and will be self-reported to determine impact on success.

In addition to student success coaching, DC offers a comprehensive academic advising program, with student advisors committed to guiding students through their college experience. This includes: helping them navigate through their studies via customized academic plans that suit their individual needs; offering assistance with the identification of career goals and academic decisions; and plans to promote success in the event of failed subjects, low grade point average, etc.

Student Academic Learning Services

SALS is committed to helping DC students reach their academic goals. This includes providing various types of assistance, such as: English-language support; learning strategies; peer tutors; assistance with writing skills; and subject-specific support in science, math and business via online modules and resources, workshops, tutorials and individual appointments at both the Oshawa and Whitby campuses and Pickering Learning Site. Students are also provided access to computers that can be used for academic purposes.

SALS has a presence within DC Connect, the college's learning management system. Free to DC students who register, SALS Online provides access to learning and writing skills modules, videos, tip sheets and help modules for math, science, accounting and statistics. In addition, a variety of quizzes and tests are available to help students assess their understanding of key topics and concepts in the disciplines of science, math and business.

Along with SALS, student advisors also support every academic school and program.

Learning transitions

The Start Strong and Backpack to Briefcase (b2B) programs provide DC students with support in the initial and advanced transition phases of their learning journey. The Start Strong program is designed to help first-year students familiarize themselves with the campus, gain information on being a successful college student, develop a support network by connecting with students and staff and learn more about financial aid and credit transfers. b2B helps students and new alumni transition more smoothly from college to the workplace to position them for career success. The initiative provides students and new alumni with access to insight, skills and networks, in addition to the expertise they gain in their academic programs. It also offers students

opportunities to connect with employers, learn how to build a comprehensive, relevant and appropriate social media presence and gain valuable leadership skills.

College-wide approach to mental health

Over the past year, more than 200 support staff participated in Mental Health First Aid training as part of DC's effort to ensure that students receive appropriate help in a timely manner. The training has been effective in identifying students who may require a referral for more specialized mental health care and helping employees better manage situations where a student is in distress. As part of DC's effort to ensure that students find timely and effective support from any employee when they are in need, the number of employees being trained was expanded in spring 2017 to include more than 200 full-time academic employees.

Academic program connections with industry

In addition to DC's Program Advisory Committees, which are comprised of exceptional leaders in their fields who have diverse program-related experience and expertise and are willing to work collaboratively with DC's academic community to ensure curriculum quality and student and graduate success, each DC program provides students with multiple opportunities to engage with industry. Some examples include:

- The Supply Chain cluster, which holds an annual student/alumni dinner where alumni from various sectors speak to graduating students about key industry trends and various career options.
- Sport Management students, who host a large, industry-wide conference that draws students from DC and other academic institutions to learn from individuals representing multiple sectors within the sports industry.
- The Marketing Business Administration program, which runs the DC Marketing Competition, where alumni return to campus as judges for projects completed by marketing students. Students receive constructive critiques on their marketing strategies from graduates willing to provide meaningful and relevant feedback from a current industry perspective.
- The Gerontology Activation Coordination program, which offers a real-world classroom experience to students via the Aging Simulation Lab. The lab gives students access to an aging simulation suit, enabling them to experience various aging scenarios, including exploring physical changes (e.g., movement, posture, gait and strength) and sensory impairments (e.g., hearing, vision and tactile grip). This provides a creative and innovative way to engage students in learning about the aging population, allowing them to gain empathy and compassion for their future clients, shift beliefs and reflect on the implications of their future professional practice and care. In addition, students access the Adult Day Program Living classroom experience, which enables them to learn on-site in the community via a day program that facilitates increased awareness through practical experience.
- The School of Justice and Emergency Services and the School of Interdisciplinary Studies, which involve students and faculty in the Justice Games as well as the Paralegal mock trial cup, which provides an opportunity for students to demonstrate their law and advocacy skills while developing their public speaking and legal research abilities in a real-world setting.

Academic remediation for UOIT students

DC offers academic remediation opportunities to UOIT students on academic probation who would otherwise face a gap year before re-entering their program. Ninety-six students participated in the program during the 2015-2016 academic year and 113 students in 2016-2017, as reported by mid-year. Demand for this program is growing, but is not supported through the current funding formula.

1.3 Metrics and Targets

| System-wide Metrics | 2019-20 | | |
|--|--------------|--|--|
| System-wide Metrics | Target Range | | |
| Overall Student Satisfaction Rate | 75.2-76.5% | | |
| Student Satisfaction with Services (Q39) | 62.4-64% | | |
| Student Satisfaction with Facilities (Q49) | 73.9-74.5% | | |

| Institution-specific Metrics | 2019-20 Target Range |
|---|-------------------------|
| Number of students provided with academic support through SALS | 4,200-4,400 |
| Impact of SALS support in helping students prepare for successful completion of academic year | 80-85% |

2.0 Innovation in Teaching and Learning Excellence

This section focuses on innovative efforts including pedagogical approaches, program delivery and student services that contribute to a highly skilled workforce and ensure positive student outcomes. This section captures institutional strengths in delivering high-quality learning experiences, such as experiential, entrepreneurial, personalized and digital learning, to prepare students for rewarding careers. It includes recognition of student competencies that improve employability.

It begins to identify indicators of quality that are currently available and within an institution's control.

2.1 Institutional Approach to Innovation in Teaching and Learning Excellence

Experiential learning definition: DC supports the Colleges Ontario definition of experiential learning, which is "Experiential learning is an activity facilitated or recognized by a college, where students participate in workplaces or environments/activities that simulate workplace activities, so that they can learn while doing. Experiential learning opportunities enable students to develop vocational and employability skills valued by employers."

Experiential learning

DC delivers a range of experiential learning opportunities that are key to the student experience offered by the college's diverse student population and the employers who consider DC a leading education partner in Durham Region. This may include any of the following learning activities:

- Laboratories, workshops and/or field experience
- Industry-specific and industrial shops
- Simulation activities and the use of interactive technology
- Capstone projects designed to address real-world problems
- Applied research projects, providing research and development solutions through funding opportunities, faculty expertise, research facilities and student learning experiences
- Research projects that model or simulate solutions
- Prototype development and testing
- Adoption of new technologies and knowledge
- Development and evaluation of new or improved products and processes
- Co-curricular activities
- Service learning
- Clinical or field placement and/or internship
- Co-operative education placement
- Entrepreneurship (e.g., FastStart) and social entrepreneurship (e.g., DC Enactus chapter)
- Apprenticeship
- Relevant independent volunteer and/or work experience

Work-integrated learning experiences

With 70 per cent of DC graduates over the last two years participating in a field placement, the most common form of experiential learning provided by the college, most DC programs provide a work-integrated learning experience as a formal component of a program of study. These opportunities provide a chance for students to practice technical skills learned in the classroom while refining their interpersonal, communication and problem-solving skills in a professional workplace. Many programs offer a work placement, while others offer clinical placements. In addition, a new co-op program is being piloted with two programs in 2017 and plans to expand to 13 programs in 2018. Co-op enables students to combine classroom learning and real-world experience through paid work terms that alternate with academic terms.

Fitness and Health Promotion

The Fitness and Health Promotion program sees students participate in an experiential learning opportunity at the UOIT ACE laboratory, a high-tech simulation environment designed to simulate extreme wind conditions and temperatures that can range from -40° to +60°C. Students use this highly specialized lab to create specific weather conditions that are used during an exercise assessment lab for other students. This unique experience allows students to undergo, observe and understand the impact of heat on cardiovascular function and thermal balance when exercising.

EnactusDC

Enactus is an international, non-profit organization dedicated to inspiring students to improve the world through entrepreneurial action; the college's first Enactus team launched during the 2016-2017 academic year. The team developed two projects: Youth Opportunities (Project YO) and We Grow Food @ School. Through Project YO, DC students connect with youth who are recipients of Durham Region's Ontario Works program, to help them enrol in college and be successful once enrolled. EnactusDC offers a series of workshops to teach youth about the college experience on such topics as applying to college and financial literacy. Each youth participant pairs up with a DC student peer mentor, who becomes a resource and friend to help guide them when they arrive at college. We Grow Food @ School is a collaborative partnership between We Grow Food and EnactusDC that is working to develop local food production solutions and experiential learning environments for students, empowering them toward food literacy and social entrepreneurship. Using a passive solar greenhouse design as the hub for an urban micro-farm, EnactusDC is aiming to develop a sustainable food production model that promotes food security and local self-reliance and improves the livelihoods of students, their families and their communities in an economically, socially and environmentally sustainable way.

Mediation – Alternative Dispute Resolution

The Mediation – Alternative Dispute Resolution program, offered through the School of Justice & Emergency Services, creates and supports Campus Conflict Resolution Services, which provides mediation types of services to students in conflict and proactive advice in class regarding conflicts in group work etc. In addition, the Police Foundations program sees second-year students participate in high-risk elementary schools in the Oshawa area on a weekly basis for one semester. Students are exposed to the varying degrees of at-risk students, enabling them to work on their communication, negotiation and interaction skills.

Motive Power Technician – Service and Management

Students in the Motive Power Technician – Service and Management program participate in a Kit Car initiative, which sees students build a vehicle from the ground up, over a two-year period.

North-Line Canada

The Office of Research Services, Innovation and Entrepreneurship (ORSIE) worked with North-Line Canada, a national distributor and equipment manufacturer of vehicle detection and highway management products, in

support of its goal to make cities smart via interconnected traffic signals that talk to each other. North-Line continues to collaborate with ORSIE when faced with a challenge in order to gain access to some of the brightest young minds and experts in the research field.

Bykart Software Ltd.

ORSIE worked with Pickering-based Bykart Software Ltd., a technology solutions provider for the health-care industry and creator of the Chemotherapy Appointment Reservation Manager (CHARM), to develop OpenHRx, a suite of integrated, health-care application services to complement the functions offered by CHARM. The software is used to manage the patient load-in clinics at the Odette Cancer Centre and the Louise Temerty Breast Cancer Centre at the Sunnybrook Health Sciences Centre in Toronto.

Gerontology – Activation Coordination

Students in the Gerontology – Activation Coordination program work with seniors in the community, creating programs and providing support to various agencies. An example of this is the Adult Day Program Living classroom, a collaborative project with a community agency that enables students to create activities and participate in programming by attending various adult day programs in the region. DC is working with the community agency to facilitate in-house clinics that will allow students to learn how to care for seniors through practical experience. The Program Advisory Committee actively works with faculty to identify hands-on learning opportunities for students in the community.

Occupational Therapist Assistant (OTA) and Physiotherapist Assistant (PTA)

The OTA/PTA program includes a course that provides an opportunity for students to work directly with community partners. For example, a community agency serving children with physical, emotional and learning challenges received grant funding for summer employment and hired 10 OTA and PTA students full time during the summer, with the expectation that the students would return to the program in the fall. At another community partner agency, students are working to develop custom assistive devices for clients using DC's 3D printer, following the agency's assessment of their clients to determine their unique equipment needs. In addition, a recent graduate is working with a designer to customize a feeding device for a child with Pfeiffer's syndrome who has fusion at her elbows. The graduate is working with the agency to create a customized bottle holder that will allow the child to self-feed and compensate for the absence of elbow flexion.

Sport Management

Sport Management students participate in a 500-hour field placement in their final semester. In addition, all advanced diploma programs offer field placement opportunities, ranging from 150 to 250 hours.

STEAM Day

Students from the School of Science and Engineering Technology (SET) celebrated science, technology, engineering, architecture and mathematics (STEAM) with an inaugural STEAM Day that showcased their capstone projects. Set by faculty to ensure they are as real as possible, projects included more than 52 interactive exhibits on such topics as biomedical, food innovations and customizable robotics software programs. Faculty and students from SET also operate the college's machine shop and served as judges for the annual FIRST® Robotics Competition: Ontario District – Durham College Event, which saw 1,000 competitors on more than 40 teams demonstrate their engineering skills and knowledge. In addition, many SET faculty and students run hands-on, public workshops for participants at the college-hosted, annual Science Rendezvous event, Canada's largest celebration of science and engineering.

Teaching excellence

DC demonstrates its dedication to teaching excellence for new and established faculty, and full-time and contract faculty by providing a range of opportunities and initiatives through the Centre for Academic and Faculty Enrichment (CAFE), further described in Section 2.2.

Planned contributions toward innovation in teaching and learning excellence

DC will:

- Continue to launch market-driven programs via the implementation of five new postsecondary programs; the development and launching of degree programs; MAESD consent for a new Healthcare Technology Management Degree; continuation of DC's five-year plan for the development of six degrees: and development of third-degree, Paralegal Studies, for submission in the 2018-2019 fiscal year.
- Expand the professional development sessions and activities offered by CAFE, increasing the number of sessions by 10 per cent. This includes new online webinars via DC Live to enable faculty to engage in training outside of traditional office hours and from anywhere; a new CAFE workshop series, including the development of templates to increase the use of the college's learning management system and offer faculty support and guidelines for developing content; and a new hub for testing and using new educational technologies (e.g., HoloLens, 360 Video, Sony Active Learning Software, Microsoft Hub) to enable faculty to access and test technology before implementing it in the classroom.
- Expand the number of programs offering a co-op with two programs planned for 2017 and identify additional co-op programs for introduction in 2018-2019 with a goal to expand to 13 programs in 2018.

2.2 Examples of Institutional Initiatives

Centre for Academic and Faculty Enrichment (CAFE)

CAFE provides faculty with a range of professional development opportunities including face-to-face workshops and webinars (piloted during the 2016-2017 academic year): one-on-one support offered in person or via email and phone); customized school presentations based on identified faculty needs; specialized educational technology integration workshops (e.g., HoloLens, Sony Active Learning and Lynda.com); and self-study courses for faculty to develop their skills in areas including: hybrid teaching and learning, invitational teaching and virtual CAFE for learning management system (LMS) usage. In addition, faculty are given the opportunity to obtain the College Teaching Certificate, which consists of five courses that address content in teaching methodologies, curriculum design and development, assessment and evaluation, supporting diverse learners, professionalism and scholarly practice.

For new full-time faculty, CAFE offers a one-day faculty orientation session and facilitates, in partnership and collaboration with the eastern region colleges, Focus on Learning (FoL). FoL is a four-day program, led by established faculty, that enables new full-time faculty from eastern region colleges to engage in teaching teams that support the development of their teaching and learning practices. The program culminates in an opportunity for new, full-time faculty members to deliver a micro teach and receive feedback from their teaching teams in a collaborative and creative environment.

For new contract faculty, during the week and on the weekends, CAFE offers the JumpStart program, which provides an orientation to DC. The program includes an introduction and orientation to the college's LMS and supports the development of teaching and learning practices. For example, the Teaching Squares program can be accessed by both full-time and contract faculty, with the program providing participants with an opportunity to visit the classrooms of faculty members at UOIT and/or Ontario Power Generation (OPG). The intent of the program is to engage faculty in a discussion about how observations from classroom visits can inform their teaching and learning practices. Resources for developing online curriculum using the JumpStart model (distinct from JumpStart program) are also provided. Lastly, faculty are provided time (standard workload formula) for enrichment activities such as applied research, international activities, mentoring entrepreneurial students and obtaining academic degrees.

OntarioLearn and online learning

DC provides college system leadership in OntarioLearn, developing and delivering online courses and programs, with the college hosting 13,735 registrants, the largest number in the province and 50 credential programs, making DC second in the province for credential programs.

DC will support OntarioLearn's 2017-2020 Strategic Plan, which allows for a digital strategy to accommodate the changing needs of stakeholders and the reaching of new markets, while maintaining the highest standards of curriculum design and delivery through a co-operative model. This includes the development of two new fully-online programs that will be available through OntarioLearn and funded through eCampusOntario. The Data Analytics for Business Decision Making graduate certificate program is being jointly developed by DC and Algonquin and Lambton colleges and the eLearning Developer is being jointly developed by DC, La Cité Collégial and Seneca and St. Lawrence colleges.

In addition to OntarioLearn, DC offers 65 programs, that are either fully online or delivered through a combination of online and in-class courses, and 809 online courses via the School of Continuing Education (CE). CE is also working to develop three online micro-courses designed to help working business professionals strengthen a skillset (e.g., negotiation, handling office conflict, and giving/receiving feedback) with the delivery of the micro-courses set to pilot via a series of one-hour, live online sessions accessible through mobile technologies in the fall of 2017 and winter of 2018.

Entrepreneurship services for students

FastStartDC enrols all new participants in IdeaEngine, a customized online program with continuous intake to help refine their business ideas at the entry stage of the FastStartDC program. IdeaEngine is provided as a course in DC Connect, the college's LMS, with students progressing at their own pace. Upon completion of the course, students meet with a staff member to review their plans and develop a practical path forward, including being assigned a coach who will assist them throughout their journey. This includes face-to-face learning opportunities, competitions and networking events to enhance the learning experience and refine business concepts. The FastStartDC team can assist students with:

- Business plan preparation and one-on-one mentorship with an experienced team of advisors.
- Programs throughout the year (e.g., boot camps and student incubators).
- Connections to DC's community program and funding partners (e.g., Spark Centre, Futurpreneur Canada and Business Advisory Centre Durham (BACD), where students can find additional services and support to quickly advance and launch their businesses.

Dental Hygiene program

The Dental Hygiene program, which is accredited by the Commission on Dental Accreditation of Canada, integrates academic studies and clinical practice to prepare students for the practice of quality dental care in a professional, caring and safe environment. The Dental Clinic provides a teaching/learning environment for students enrolled in the college's dental programs and supports individuals of all ages with clients given the opportunity to receive oral hygiene care from students under the supervision of a registered Dental Hygiene faculty member and/or a licensed dentist.

The School of Skilled Trades, Apprenticeship and Renewable Technology (START)

START delivers unique industrial experiential learning experiences through its industrial and industry-specific shops (e.g., the welding, elevating device and automotive shop areas).

2.3 Metrics and Targets

| System-wide Metrics | 2019-20 Target Range | |
|---|-------------------------|--|
| Graduation Rate | 68-70% | |
| Number of students enrolled in an experiential learning program (WIL) | 2,550-2,750 | |
| Total number of registrations in ministry-funded courses offered in eLearning formats (2016 baseline: 11,317) | 11,100-13,300 | |
| Total number of ministry-funded courses offered in eLearning formats (2016 baseline: 662) | 370-455 | |
| Total number of ministry-funded programs offered in eLearning formats (2016 baseline: 49) | 22-32 | |
| Retention rates (Yr1 to Yr2) | 80-85% | |
| Retention rates (Yr2 to Yr3) | 81-85% | |
| Student satisfaction rate (overall) | 75.2-76.5% | |
| Student satisfaction with knowledge and skills | 86.3-87.5% | |
| Student satisfaction with learning experience | 77.7%-79.0% | |

| Institution-specific Metrics | 2019-20 Target Range | |
|--|-------------------------|--|
| Number of professional development training sessions organized/delivered by the Centre for Academic and Faculty Enrichment (CAFE) | 144-161 | |
| Number of students enrolled in non-credit entrepreneurial courses | 120-140 | |
| Key performance Indicator (KPI) Student Satisfaction Survey Q#20 (Quality of the learning experiences related to practical skills or hands-on aspects of your program) | 74-76.5% | |

3.0 Access and Equity

This section recognizes institutions for their efforts in improving postsecondary education equity and access. Institutions play an important role in providing equitable and inclusive environments that make it possible for students from diverse communities to thrive and succeed.

Institutions will also be recognized for creating equitable access opportunities that can include multiple entrance pathways and flexible policies and programming, with the focus on students who, without interventions and support, would not otherwise participate in postsecondary education. Examples include outreach to marginalized youth, transition, bridging and access programs for adults with atypical education histories and who did not meet admissions requirements.

3.1 Institutional Approach to Improving Access and Equity

As a key partner to the Durham Region economy, DC must respond to the region's ongoing population growth trend by providing new and expanded programs in an effective learning environment to an increasingly diverse and complex student population. The increase in the number of students with complex needs registering in post-secondary programs is driving increases in the demand for specialized services and the current funding model does not support the demand for this trend, as reported in the Deloitte, Enabling Sustained Student Success, Support for students at Risk report outlined by Ontario's Colleges (August 2017). Without sufficient funding, colleges are forced to spend operational dollars that would otherwise serve the broader student population.

The DC student population is comprised of:

- Direct entrants from high school
- First-generation students, who are the first in their family to attend college, university or an apprenticeship program
- Second Career students, individuals who have recently been laid off or laid off since January 2005, are unemployed or working at an interim job and choosing to retrain for a career that is in demand
- Mature students, applicants who are 19 years old or older without an Ontario Secondary School Diploma (OSSD) or equivalent, but with the admission required courses
- Domestic and international students
- Non-direct entrants, including a growing trend of university graduates entering DC following their university degree
- At-risk high school students participating in the Centre for Success and earning dual college credits
- Apprentices and pre-apprentices
- Under-represented groups such as self-identified Indigenous students and LBGTQ+
- Students with disabilities/exceptionalities and those requiring accommodations and supports for mental health challenges
- Students participating in one of DC's 450+ academic pathways to other institutions following their program
- Continuing Education students
- Corporate training clients participating in on-campus, online and North America-wide customized training
- Students taking OntarioLearn courses via DC
- Colleges who are clients of the DC-designed OntarioLearn programs

DC undertakes a college-wide approach to supporting and celebrating access to the DC learning experience for all students. This is done via an equity lens and supplemented by focused strategies that ensure academic success, student resilience and effective transitions to the workplace (e.g., experiential learning, work placements, etc.). In addition, DC is undertaking institutional research to uncover enrolment and retention patterns that will assist with future strategies in support of the student experience and student success.

3.2 Examples of Institutional Initiatives

School College Work Initiative: Centre for Success and Dual Credit program

DC's Centre for Success program, offered via the School College Work Initiative (SCWI), is a partnership between the college and five school boards, including Durham District, Kawartha Pine Ridge District, Durham Catholic District, Peterborough Victoria Northumberland and Clarington Catholic District and Trillium Lakelands District, that assists at-risk students by helping them find their way to college. At-risk secondary school students complete their high school academic requirements in a college setting via access to smaller class sizes, flexible schedules and increased one-to-one access to teachers, with the program boasting a 93 per cent success rate. In addition, students can earn at least one, and potentially more, college credits toward their postsecondary education at DC. SALS provides support to Centre for Success students via academic coaching and workshops designed to support their transition to college.

DC also offers the Dual Credit program through the SCWI, which allows students to participate in postsecondary courses and apprenticeship training, earning dual credits that count toward their high school and postsecondary diplomas, degree or apprenticeship certification. Dual credits engage students through exposure to college courses and culture, while supporting their successful transition to postsecondary education with more than 2,000 area high school students taking a dual credit with DC.

Student mobility between DC and UOIT

DC and UOIT are committed to providing students with a transparent and seamless credit transfer system that is aligned with MAESD's vision of increasing pathways between colleges and universities. This includes DC and UOIT collaborating on data exchange and analysis to report on the student pathways between the two institutions on an annual basis. Over the last three years, the college has seen a steady increase in both the number of students moving from DC to UOIT and from UOIT to DC, a reflection of the increasing interest among university graduates to enrol in DC graduate certificate and fast-track programs to gain valuable skills and handson industry experience in their chosen field. In addition, DC students interested in earning their degree have the opportunity to earn both an applied college diploma and a university degree while saving on tuition costs, completing their education on one campus while learning from both college and university experts.

Diversity dialogue: an exercise in inclusion

The Office of Student Diversity, Inclusion and Transitions (SDIT) pioneered a series of initiatives to provide avenues for student expression in the form of surveys, art, debates, Aboriginal circle process and dialogue. These focus group sessions and socials will continue, with student voices being acknowledged on campus and in the community, culminating in the production of a Diversity Journal. The office has also collaborated with other diversity and inclusion agencies including the Canadian Centre for Diversity and Inclusion, the Canadian Development Initiative, the Diversity and Immigration Office of the Regional Municipality of Durham, Durham Regional Police Service and the City of Oshawa's Diversity and Inclusion Team.

Apprenticeship and pre-apprenticeship programming and supporting community initiatives

DC promotes highly skilled workers and supports women in the trades by sponsoring Skills Ontario and hosting Women in Trades symposiums. DC recognizes the demands of an increasingly complex, ever-changing world and is committed to playing a vital role in helping employers respond to this challenge via the creation of a strong, diverse and highly skilled workforce. Through relationships with community partners such as OPG, DC continues to further prioritize and enhance its role in helping to develop the diverse workforce needed to meet the current and future needs of employers and support a stronger economy in Durham Region and across the province. The college is committed to increasing the presence of women in the skilled trades through its female faculty, successful alumnae and a senior academic leadership team that is comprised of more than 50 per cent women. In addition, strengthening female representation in the skilled trades and technical occupations to meet current and future skilled labour needs is critical and DC is committed to increasing the number of women enrolled in its science, trades and technology programs by 30 per cent over the next 10 years.

Indigenous Education Protocol for Colleges and Institutes

In October 2015, DC signed the Indigenous Education Protocol for Colleges and Institutes with six indigenous groups/communities. Durham Region has an Indigenous population of 1.5 per cent (8,905 persons according to the National Household Survey 2011), while DC's self-identified Indigenous student population is approximately 1.9 per cent of the college's total full-time enrolment based on records from the 2015-2016 academic year. With the protocol highlighting the importance of structures and the approach required to address Indigenous Peoples' learning needs while supporting self-determination and the socio-economic development of Indigenous communities, the signing of the protocol represents DC's ongoing commitment to supporting Indigenous students on campus. Since the signing, DC has experienced increased enrolment of Indigenous students on campus, increased involvement of the Indigenous community in the college and the leadership team continues to seek the advice of Indigenous advisors and elders on the development of an Indigenous Council, a Handbook Protocol and increasingly Indigenized curriculum initiatives. Indigenous events are also acknowledged and promoted on campus in alignment with the dictates of the Truth and Reconciliation Protocol.

Postsecondary preparatory programs

DC offers a range of postsecondary preparatory programs that are designed to help students strengthen their academic foundation and/or gain advanced standing in a postsecondary program that will fulfil their academic and career goals. For example, the one-year General Arts and Science certificate program, which has approximately 200 students, sees students learn effective communications, problem solving and critical thinking skills via courses based on wide variety of subjects selected according to individual interests and academic goals. This provides an academic foundation for many fields of study, including business, early childhood education, fitness and health, journalism, law and security, office administration and engineering technology.

In addition, the one-year Pre-Health Sciences (PHS) certificate program, which is in its inaugural year, has approximately 400 students working to improve their academic standing to successfully apply to other college and university programs, such as massage therapy, paramedic, practical nursing, kinesiology, etc. Students are given the opportunity to develop their knowledge and skill level in communications, math, biology and chemistry to better prepare them for their next academic program with two distinct pathways, one for advanced diplomas and degrees and one for certificates and diplomas. The certificates and diplomas pathway is available in a fully online format as a pilot program during the program's first year.

3.3 Metrics and Targets

| System-wide Metrics | 2019-20 Expected Value Range | | |
|--|---------------------------------|--|--|
| Number of students with disabilities enrolled | 900-1,200 | | |
| Proportion of students with disabilities enrolled | 9.4-12.5% | | |
| Overall student with disabilities satisfaction rates | 73.8-74.5% | | |
| Overall graduate satisfaction rates for students with disabilities | 70.8-73% | | |
| Employment rates for students with disabilities | 68.9-75% | | |
| Number of first-generation students enrolled | 2,398-3,000 | | |
| Proportion of first-generation students enrolled | 25-31.3% | | |
| Number of Indigenous students enrolled | 182-200 | | |
| Proportion of Indigenous students enrolled | 1.9-2.1% | | |
| Overall student satisfaction rates for Indigenous students | 67.7-74% | | |
| Overall graduate satisfaction rates for Indigenous students | 68.6-73% | | |
| Employment rates for Indigenous students | 77.3-80% | | |
| Number of French-language students enrolled | 125-135 | | |
| Proportion of French-language students enrolled | 1.2-1.3% | | |
| OSAP recipients as a proportion of all eligible students | 65.3-67.3% | | |
| Percentage of university graduates enrolled in college | 8.6-11.0% | | |
| programs | | | |
| Percentage of college graduates enrolled in university | 2.6-4.0% | | |
| programs | | | |

| Institution-specific Metrics | 2019-20 Target / Expected Value Range | |
|---|--|--|
| Number of DC SCWI students subsequently enrolled in a College of Applied Arts and Technology (CAAT) | 450-700 | |

4.0 Applied Research Excellence and Impact

This section captures institutional strengths in producing high-quality applied research that further raises Ontario's profile as a globally recognized research and innovation hub.

Applied research projects create or improve products, services and processes. College applied research gives industry firms access to the skills and competencies of faculty and students, facilities and equipment and markets and networks through the colleges' connections to local business and communities.

4.1 Institutional Approach to Applied Research Excellence and Impact

Supporting innovation and productivity gains in a thriving region

As a key educational partner in Durham Region, DC is committed to strengthening its contribution to innovation and productivity across several industries and sectors, as identified in its 2015-2020 Strategic Research Plan. Major themes include: cultivating healthy lives and resilient communities; advancing agriculture, agri-business and tourism; enabling technologies of the future; and enhancing scholarly teaching and learning. Since 2010, DC has received more than \$6.4 million in external funding from sources that include the Natural Sciences and Engineering Research Council of Canada (NSERC), the Social Sciences and Humanities Research Council of Canada (SSHRC), Ontario Centres of Excellence (OCE), Ontario Human Capital Research and Innovation Fund (OHCRIF), Ontario Council on Articulation and Transfer (ONCAT), National Research Council (NRC) and others. To date, 168 projects have been successfully completed involving more than 250 faculty and staff researchers and more than 500 students.

Growing the internal research culture

As DC continues to grow its research culture and support faculty engagement in research, it offers an Internal Research Fund (IRF) aimed at facilitating the development of innovative research projects that support the research interests of faculty and staff and provide experiential learning opportunities for students. The IRF is intended to attract those who are new to research by initiating smaller research projects that can eventually lead to ongoing research through external funding. This initiative enhances DC's research capacity by building on current strengths and taking advantage of new opportunities. The IRF complements the Innovation Fund provided by CAFE, which supports faculty experimenting and finding innovative strategies for effective teaching and learning, while also encouraging researchers of scholarly teaching and learning to disseminate their findings.

Policy framework to support market-relevant projects

As one of Canada's Top 50 Research Colleges for the last four years (Research Infosource 2016), DC has developed a mature policy framework and set of processes for promoting collaborative research opportunities, assessing potential projects, applying for funding, managing approved projects, reviewing ethical aspects of projects involving human participants, reporting activities and outcomes and managing budgets. Seven academic schools have a research co-ordinator who acts as a liaison between the school and ORSIE, with the college's team of research co-ordinators responsible for promoting applied research opportunities to their faculty colleagues, sourcing faculty expertise for new projects, and communicating school needs and interests to ORSIE. The research co-ordinators are also building their knowledge and expertise on relevant research matters to effectively fulfil their roles as research ambassadors.

Collaborations and partnerships

The success of DC's applied research endeavors is strongly linked to its relationship with industry, community organizations, industry associations, funders and local businesses. Since 2010, collaborations have been successfully negotiated with 78 companies and DC is a regular participant in the Durham Entrepreneurship Ecosystem Forum. Strong communication is in place with local economic development offices, the local Regional Innovation Centre (Spark Centre), BACD, Core21 (a shared office space for local startups and community groups), chambers of commerce and others. The Region of Durham Social Services Department has partnered with DC on numerous projects and continues to seek new opportunities for collaboration. A new collaborative research relationship is currently being formed with Lakeridge Health to support the hospital and other organizations in the health-care sector. Staff from OCE and the NRC's Industrial Research Assistance program are familiar with DC's applied research capabilities and regularly refer companies who are seeking an academic partner for applied research.

The Durham College-UOIT Innovative Initiatives Fund (IIF) is a competitive funding opportunity for faculty and staff looking to conduct joint applied research and innovation projects. Supported by \$300,000 in strategic funding (each institution is contributing \$150,000 towards the fund), the IIF supports collaborative projects proposed by faculty and staff at both institutions that address a need or solve a problem in a new way. The projects must be transformative for both institutions and pave the way for future collaborations, including with the broader community. The IIF program focuses on projects that concentrate on one or more of:

- Academic and student services initiatives
- Research and innovation
- Support for entrepreneurship
- Joint partnerships involving the community
- Joint administrative innovations

DC's planned contributions to applied research excellence and impact include:

- Continuing to advance entrepreneurship, including social entrepreneurship, with academic and community
 partners (e.g., FastStart and Enactus) to provide entrepreneurial-minded students and local youth with a
 dynamic learning environment. This includes engaging 60 students in formal extracurricular
 entrepreneurship learning, supporting 20 students to develop, launch and grow their own businesses and
 supporting teams of students in local and cross-jurisdictional events.
- Advancing applied research project opportunities across the four themes of DC's strategic research agenda, including securing a five per cent increase in project funding from the previous year, representing at least 25 projects and new 15 partnerships.
- Supporting the DC-UOIT Strategic Fund through to its second year, including ensuring that DC's second year of projects is aligned with the college's applied research agenda.

4.2 Examples of Institutional Initiatives

Hub for Research in Artificial Intelligence for Business Systems (AI Hub)

DC continues to expand its efforts in identified priority areas of applied research, including investment and project activity focused on developing AI solutions, which are in demand by industry, to address challenges and create opportunities. DC was recently awarded applied research funding through the Colleges Applied Research and Development Fund (CARDF) toward the development of a new AI research hub for business systems.

The hub will leverage AI techniques to deliver innovative, new systems that offer creative solutions to increase companies' productivity and growth and benefit users. Applied research will focus on solutions that create value and perform actions, with or on behalf of a business user, that behave in a fashion the user finds intelligent and beneficial. Technologies that have been identified for development in partnership with local industry include machine learning, data mining, pattern recognition and natural language processing.

Applied research supporting the craft brewing sector

DC is establishing a centre for craft brewing innovation, with a pilot brew line and brew lab to support the technical innovation gaps identified by the Ontario craft brewing sector. After extensive consultation with the Ontario Craft Brewers Association and many individual brewers, DC has identified needs in the areas of applied research, technical support, skilled labour, education, technical training and the development of a local fresh ingredient supply infrastructure. DC recently partnered with the Siebel Institute of Technology, the oldest brewing school in North America, to deliver a technical training pilot program for Ontario brewers, with the centre helping to address challenges in the areas of quality and consistency; experimentation with local ingredients and the design of great craft beers; the development and adoption of lab testing protocols suitable to small craft breweries; equipment and control system development; and the development of technical training for in-demand topics for short delivery. DC is also engaging with the Ontario Hops Growers Association to carry out applied research projects, with the objective of increasing the number of Ontario-grown hops.

Industry automation and control project

In the last year, DC has partnered with UOIT and the Spark Centre to administer a grant from the NRC – Industrial Research Assistance Program to support companies with automation and control needs. The project was successful, and DC anticipates that another grant will follow to allow its important work to continue.

Recent applied research project examples:

- WeTraq is a global tracking device designed to help families stay connected with loved ones with autism, dementia and Alzheimer disease. Conceptualized by WeTraq and brought to life through collaboration with DC students and faculty, this credit card-sized device can be kept by those at risk of wandering so that family members can track their whereabouts around the world.
- Precise ParkLink bridged the gap between parking management and parking technology by streamlining the
 parking payment process through a web-based portal called iPASS, but still required an iOS application.
 Through a collaborative project with DC, the iPass-X application was developed in combination with a Web
 API to allow clients to register, update and maintain their personal and parking profiles, view past
 transactions and request new cards and parking services.
- Woodleigh Farms Ltd. initially used unmanned aerial vehicles (UAV) to inspect in-progress crops with a
 normalized difference vegetative index (NDVI) and near-infrared (NIR) sensors, but required software that
 could incorporate and process the NDVI images into farmers' software programs. An applied research
 project with DC enabled the development of the bridging software required to process the data from the
 UAV and incorporate the high-resolution NDVI images into a variety of databases. This allowed Woodleigh
 Farms Ltd. to scout fields using different methods and with a high level of accuracy.
- Ansik Inc. initially developed a service platform called Pitstop that is powered by aggregating data from
 multiple sources to perform machine learning and data analytics that result in real-time diagnostics and
 predictive maintenance. Through an applied research project with DC, a functional dashboard, with
 dealership metrics and statistics was developed, providing the company with more control over interactions
 with their customers and other stakeholders.

4.3 Metrics and Targets

| System-wide Metrics | 2019-20 Target Range |
|--|-------------------------|
| Number of externally funded applied research projects (2016-17 baseline: 25) | 8-30 |
| Number of partnerships/collaborations with community/industry firms | 7-25 |
| (2016-17 baseline: 21) | |

| Institution-specific Metrics | 2019-20 Target Range | |
|---|-------------------------|--|
| Internal funding for applied research | \$55,000-\$205,000 | |
| External funding for applied research | \$270,000-\$500,000 | |
| Number of faculty and staff engaged in applied research | 21-28 | |

5.0 Innovation, Economic Development and Community Engagement

This section recognizes the unique role institutions play in contributing to their communities and to economic development, as well as to building dynamic partnerships with business, industry, community members and other colleges and universities. It focuses on regional clusters, customized training, entrepreneurial activities, jobs, community revitalization efforts, international collaborations, students, partnerships with Aboriginal Institutes and a program mix that meets needs locally, regionally and beyond.

5.1 Institutional Approach to Innovation, Economic Development and Community Engagement

DC has an \$800 million economic impact on Durham Region (Economic Modeling Specialists International Report, 2014), with the college also contributing to innovation through its academic programming, applied research, entrepreneurship and partnerships within the community.

Durham Region is a growing hub of activity supporting the startup community and DC partners with organizations to support students in launching new and innovative businesses. As an economic development activity and community builder, FastStartDC provides opportunities for students to conceptualize business ideas, validate their assumptions and develop their businesses. This is in addition to DC's partnerships with other local organizations that support the startup community. These include working with Spark Centre, BACD, Start-Up Durham, Durham Entrepreneurship Ecosystem Forum, Futurpreneur and other academic institutions to offer pitch competitions, networking events, mentoring, investor events, workshops, guest speakers, online and face-to-face accelerator programs and certificate programs.

Key groups include:

- Community organizations, including Lakeridge Health, the Abilities Centre and Grandview Children's Centre
- Local government, including the City of Oshawa, Region of Durham, Town of Whitby and Town of Cobourg
- International partners such as governments in Barbados, Kenya, Vietnam, Peru, India and others through educational leadership programming delivered by DC
- Local school boards via programs and initiatives such as the Dual Credit program and the Centre for Success
- Education-focused partners such as First Robotics (supporting STEM) and Science Rendezvous
- Innovation industry leaders, such as the Ideas Summit cabinet (GM Canada, OPG, AECOM, 360insights, Lakeridge Health, UOIT and DC)
- Multiple Indigenous groups such as the Durham Region Indigenous Advisory Circle

5.2 Examples of Institutional Initiatives

Supporting student startups

Since the launch of FastStartDC in 2014, several students have had positive experiences developing business ideas and starting businesses, with 22 student companies actively supported and some successfully selling to international markets. This includes:

- Ohh Products Inc. started by a graduate of DC's Law Clerk Advanced program. FastStartDC worked with the student on branding, marketing, packaging and a business strategy and she is now selling her products in retail locations across Canada and has five brand ambassadors on her Ontario-based team.
- City of Greens, a one- to five-acre, diversified, agro-ecological market garden and urban farm enterprise
 started by a graduate of DC's Horticulture Food and Farming program and a FastStartDC participant. City of
 Greens strives to provide high-quality, fresh, local vegetables in an urban farm setting using regenerative
 and agriculturally efficient farm practices with a mission to provide nutritionally dense food; create valuable
 customer experiences; build a local field-to-fork food network in the community; and inspire a new
 generation of farmers.
- Allan Pens, a Wood Works Company that creates handmade wood products, that was started by a DC Mechanical Engineering Technician student and FastStartDC participant.
- Real African Native Attire (RANA), an e-commerce company that creates custom-made, afro-centric clothing and accessories with authentic African fabrics, patterns and designs, that was founded by a DC photography student. RANA's goal is to give back and support entrepreneurs in Western Africa by buying their fabrics, selling their products and featuring them through meet the artist stories on its e-commerce platform. RANA currently works with designers in Western Africa to source its products but is committed to expanding this concept to support more entrepreneurs and employ single mothers in Nigeria, women who have been ousted from their communities and are living with their children as outcasts at risk of prostitution, rape and starvation. Through the development of a partnership with DC's International Education department as well as EnactusDC, in 2018 RANA will travel abroad to establish the exciting first phase of its co-operative for women in need.
- RÜTS Cosmetics, an indie cosmetics brand that launched through FastStartDC in early 2017 and hit the
 international marketplace right away, that was founded by a DC Marketing student. RÜTS was selected by
 the Etsy Canada jury to take part in Toronto's fourth annual Etsy: Made in Canada show, a highly
 competitive showcase opportunity for Canadian businesses.

School of Business, IT and Management (BITM)

Students from the IT cluster housed within BITM, are very involved with the Abilities Centre in Whitby, with faculty and students providing tech support, hosting learning seminars for the community and holding an annual IT Expo. Students display their year-end projects and industry is invited to judge their work and interact with students with the event also providing an opportunity for students to network with prospective employees. Faculty garner industry donations to fund the expo and once costs are covered, all proceeds are donated back to the Abilities Centre. \$2,600 was donated to the centre on behalf of DC students during the 2016-2017 academic year.

48-hour film challenge Students and faculty from the School of Media, Art and Design (MAD) host a 48-hour film challenge that is open to the community and sees about 500 DC students divided into groups of 11, with two students from each MAD program in each group. Groups are assigned a genre of film, a prop, a character and a piece of dialogue. They are then required to create a two-minute film in only 48 hours with students tested to see how creative they can be with what they are given, while working with people they have never met before.

International Education (IE)

IE facilitates partnerships with global partners to deliver training and education experiences in such countries as Vietnam (food science), Guyana (automotive), Peru (culinary) and Kenya (agriculture). Partnerships in Ireland, the Netherlands, Germany and China are designed to support education abroad, joint program development, faculty development and joint applied research activities.

The School of Justice and Emergency Services (JES)

Each February, JES partners with local school boards for an annual one-day Law Enforcement Symposium, which is delivered by faculty to between 90 and 130 high school students. The event offers four concurrent sessions focused on mental health awareness, fitness for law enforcement, forensic demonstration and diversity profiling in policing. The event is supported by Police Foundations student volunteers who escort groups of students from one workshop to another. In addition, 140 Police Foundations students from JES also volunteer at high-risk schools to mentor and assist.

Corporate Training Services

DC's Corporate Training Services (CTS) division, which has been providing innovative training solutions to organizations for more than 30 years, offers customized training to meet the unique strategies, challenges and business models of companies in Durham Region, provincially and nationally. An integrated approach, which sees CTS leaders work with key decision makers and senior level staff, enables the creation of tailored programs designed to help companies achieve their operational and strategic objectives with approximately 270 sessions currently delivered each year.

5.3 Metrics and Targets

| System-wide Metrics | 2019-20 Target Range |
|---|-------------------------|
| Number of active Program Advisory Committees (PACs) | 75-90 |
| Number of employers engaged in PACs | 690-720 |
| Graduate employment rates | 83.2-85.5% |
| Employer satisfaction rates | 87.8-94.5% |
| Proportion of Graduates employed full-time | 54.1-62% |
| Proportion of Graduates employed full-time in a related job | 35.9-45.0% |

| Institution specific Matrice | 2019-20 | |
|--|--------------|--|
| Institution-specific Metrics | Target Range | |
| Number of startup companies | 30-45 | |
| Number of students/graduates involved in startup companies | 120-180 | |
| Number of customized corporate training sessions | 390-452 | |

Enrolment Strategy, Program Direction, Sustainability and Partnerships

6.0 Enrolment Strategy and Program Direction

Enrolment Plan

The purpose of this section is to identify institutional enrolment plans and aspirations. The enrolment projections are based on Durham's plans and assumptions for the coming years.

As stated in the College Funding Formula Technical Manual, the introductory corridor midpoint in 2019-20 will be calculated based on the "three-year average, two-year slip", the average of three years of enrolment two years prior to the funding year.

6.1 Domestic Projected Funding Eligible Enrolment

Projected Eligible Full-Time Head Count

| Level | Actuals 2015-16 | Actuals 2016-17 | Projected 2017-18 | Projected 2018-19 | Projected 2019-20 |
|----------------------------|-----------------|-----------------|-------------------|-------------------|-------------------|
| Ontario College | 1,528 | 1,498 | 1,455 | 1,387 | 1,310 |
| Certificate | | | | | |
| Ontario College | | | | | |
| Diploma/Advanced | 7,333 | 7,339 | 7,566 | 7,580 | 7,536 |
| Diploma | | | | | |
| Ontario College | 537 | 550 | 540 | 584 | 640 |
| Graduate Certificate | | | | | |
| Baccalaureate Degree in | 0 | 0 | 0 | 40 | 105 |
| Applied Area of Study | | | | | |
| All other funding activity | | | | | |
| in full-time equivalent | | | | | |
| (FTE); Part-time, Tuition | 807 | 787 | 761 | 734 | 708 |
| short, Prior Learning and | 807 | 707 | 701 | 734 | 708 |
| Assessment Recognition | | | | | |
| (PLAR) | | | | | |

6.2 International Projected Funding-Eligible Enrolment

Projected Eligible Full-Time Head Count

| Level | Actuals 2015-16 | Actuals 2016-17 | Projected 2017-18 | Projected 2018-19 | Projected 2019-20 |
|--|-----------------|-----------------|----------------------|----------------------|----------------------|
| Ontario College Certificate | 28 | 29 | 32 | 37 | 40 |
| Ontario College Diploma/Advanced Diploma | 401 | 487 | 653 | 894 | 909 |
| Ontario College Graduate Certificate | 68 | 85 | 109 | 155 | 197 |
| Baccalaureate Degree in Applied Area of Study | 0 | 0 | 0 | 3 | 9 |

6.3 International Strategy and Collaboration

To support the diversification and internationalization of DC and the Region of Durham, the college's international goals, approved by DC's Academic Council and Leadership Team and presented to the Board of Governors, include:

- Growing the number of countries represented on campus by international students (currently 64 countries).
- Continuing to enhance international student support programming, including partnering with community organizations to support students and graduates in their short- and long-term experiences in the region.
 Continuing to export the DC education value proposition and support Canadian values through international projects with established and new partnerships. Examples include: delivering educational leadership in Barbados; supporting the culinary and tourism industries in Peru; delivering automotive electronics training in Guyana; offering food science training in Vietnam; and supporting the socio-economic development of educational leadership, curriculum development, pedagogical systems and education/industry linkages (e.g., Kenya and renewable energy).
- Expanding global education activities for DC students, enabling them to gain international experience during their studies.
- Deepening cross-global learning experiences through the DC-based Global Classroom, which spans topics of
 global interest, including global food systems, xenophobia, restorative justice and cultural intelligence. The
 Global Classroom provides the technology and support required for students, faculty and guest speakers to
 converge with more than 50 international institutions in an interactive learning setting.
- Building DC capacity in reaching its international goals with the Leave for Change Program, which offers
 faculty and staff the opportunity for personal and professional development through participation in a
 short-term, international volunteer assignment facilitated by Uniterra, a World University Service of
 Canada/Centre for International Studies and Co-operation program.
- Continuing to work with UOIT to provide a dual offer of admission to international students, with the college and university offering pathways and continuously assessing capacity and regional opportunities (e.g., China, India, South America, Caribbean, Pacific Asia), as well as risk controls.
- Conducting risk management for international initiatives, with the college applying risk controls in planning through to the implementation of international programs. This includes international recruitment and projects facilitated through DC's established governance structure.

6.4 Strategic Areas of Program Strength and Expansion

Program Areas of Strength

- 1. Health miscellaneous/health technology
- 2. Nursing related
- 3. Business Computer
- 4. Culinary arts
- 5. Marketing/retail sales
- 6. Horticulture
- 7. Social services
- 8. Chemical/biological
- 9. Civil
- 10. Technology miscellaneous

Program Areas of Expansion

- 1. Business computer
- 2. Marketing/retail sales
- 3. Social services
- 4. Chemical/biological/civil
- 5. Technology miscellaneous

6.5 Apprenticeship

DC anchors its School of Skilled Trades, Apprenticeship and Renewable Technology (START) at the Whitby campus. Through START, DC provides the in-school training portion of the apprenticeship program in Automotive Service Technician, Child Development Practitioner, Cook, Electrician – Construction, Maintenance/Electrician – Industrial, Elevating Devices Mechanic, Industrial Mechanic Millwright, Plumber, Welder and Mobile Crane Operator (339A). DC is currently awaiting Training Delivery Agent approval for Tower Crane Operator (339B).

DC plans to maintain its existing delivery capacity and seize opportunities to grow when MAESD introduces opportunities to do so. For example, DC completed the successful Elevating Device Mechanic pre-apprenticeship program in 2015-2016. Although it re-applied to host the program again in 2016-2017 and was not selected, the college will continue to submit pre-apprenticeship proposals when there are calls for proposals from MAESD. The goal is to serve and attract traditionally underrepresented groups to the trades, with a primary focus on people with disabilities, Aboriginals, visible minorities and women. DC is also working with other agencies to explore other creative ways to serve and attract these constituencies into the trades.

6.6 Financial Sustainability

The Ministry and Durham recognize that financial sustainability and accountability are critical to achieving institutional mandates and realizing Ontario's vision for the postsecondary education system. To this end, it is agreed that:

It is the responsibility of the Board of Governors and senior administrators of the College to identify, track, and address financial pressures and sustainability issues. At the same time, the Ministry has a financial stewardship role. The Ministry and the College agree to work collaboratively to achieve the common goal of financial sustainability and to ensure that Ontarians have access to a full range of affordable, high-quality postsecondary education options, now and in the future.

The College remains accountable to the Ministry with respect to effective and efficient use of provincial government resources and student resources covered by policy directives of the Ministry, or decisions impacting upon these, to maximize the value and impact of investments made in the postsecondary education system.

| System-wide Metrics | Benchmark | 2015-16 Actuals | 2016-17 Actuals | 2017-18 Projections |
|--------------------------------|-----------|--------------------|--------------------|------------------------|
| Annual Surplus (Deficit) | >0 | \$5,791,500.63 | \$6,946,094 | \$500,000 |
| Accumulated Surplus (Deficit) | >0 | \$6,482,402.63 | \$13,428,497 | \$13,920,092 |
| Net Income to Revenue Ratio | >1.5% | 3.53% | 3.99% | 0.29 |
| Net Assets to Expense Ratio | >60% | 64.50% | 74.95% | 80.21% |
| Quick Ratio | >1 | 0.30 | 0.64 | 0.53 |
| Debt Servicing Ratio | <3% | 3.90% | 3.31% | 2.56% |
| Total Debt to Assets Ratio | <35% | 44.20% | 40.1% | 37.0% |

7.0 Institutional Collaborations and Partnerships

The calibre of DC's institutional collaborations and partnerships in academic programming; student services; applied research and entrepreneurship; capital development; and innovation planning, enable it to deliver a substantial economic impact in Durham Region in addition to an economic and societal impact that extends well beyond the region.

DC's institutional collaborations and partnerships allow for:

- An expanded Centre for Success program, which enables at-risk high school students to earn college credits while completing their OSSD.
- Substantial capital investments, such as the Centre for Collaborative Education (all levels of government and community partners have supported the \$40 million build) and the W. Galen Centre for Food (CFF), funded without any government capital investments.
- The sharing of DC's campus with UOIT and providing facility and IT services for the university.
- A joint learning site with Centennial College in Pickering.
- Enhancement and recognition of academic programming reputation, such as the naming of the CFF.
- Enhancements in experiential learning (e.g., Biomedical Technology program students use dialysis machines donated by Lakeridge Health and OTA/PTA students benefit from placements with community partners such as Grandview Children's Centre, the Village of Taunton Mills and Nova's Ark).
- Student service supports such as the Ontario Shores Centre for Mental Health Sciences and the Ontario Psychotherapy and Counselling Network.
- Opportunities to study articulation agreements with DC-awarded funds from ONCAT for several years in order to conduct research involving various credit transfer processes.

Student experience

- The DC Alumni Association, which cultivates a sense of community among alumni, informing them of college
 and alumni news and advocating on their behalf, encourages attendance at social and professional
 development activities, alumni events taking place in the community and initiatives geared toward students
 and graduates (e.g., Backpack to Briefcase and Etiquette Dinners).
- DC Corporate Training Services, which provides innovative training solutions to businesses in Durham Region
 and beyond, has a unique, first-hand perspective on the skills and expertise required by the local workforce.
 This includes emerging trends and possible employment and placement opportunities for students and
 alumni, knowledge it then shares with DC though initiatives such as Corporate Council.
- Relationships with the World University Service of Canada, which works with DC to help equip young people
 with the skills and opportunities they need to succeed, and Colleges and Institutes Canada, which works
 with the college to champion employment-focused postsecondary education that benefits learners and
 contributes to growing and prosperous communities.
- Corporate Council, which brings together experts from across the college to offer a range of results-driven services to businesses to help them reach their goals via a network of service area professionals that work seamlessly with clients to provide innovative support, customized solutions, expertise and training that aligns with specific needs.

- FastStartDC, a free, extra-curricular program available to DC students and youth from the community who
 are under 29 years of age, that helps entrepreneurial-minded students and youth develop and launch their
 own businesses with the overall FastStart initiative a partnership between DC, UOIT, Fleming College, Trent
 University, Spark Centre and the Greater Peterborough Innovation Cluster.
- Career services, offered through the Career Development office, which helps connect the right students with the right industry partners and offers a range of supports (e.g., recruitment fairs on campus where more than 70 employers engage with students from all programs) including work-integrated learning programs designed to help students successfully enter the job market (e.g., students maintaining and harvesting the growing fields on campus for food-related programs and Bistro '67).
- Support for the transition of international students, including: airport pick up; First Night, which engages
 international students on their first night at DC; a two-day orientation for living and studying in Canada; and
 a full program of activities over the course of their study to support community integration and
 involvement.

Innovation in teaching and learning excellence

- A new, functioning, stand-alone Steam Plant was recently added to the Power Engineering program as the
 result of a \$1.5-million-dollar investment by OPG and DC; students operate a real power plant and receive
 900 hours of steam time credit toward their Technical Standards and Safety Authority fourth-class operating
 engineer designation.
- Student success in applied research, with students acquiring research experience via ORSIE as they earn their credentials and SMEs gaining access to a resource that can help them solve their challenges through collaboration designed to address real-world problems and solutions.
- The Practical Nursing (PN) program, which applies theory to practice in health-care settings and is enhanced with the integration of high-fidelity simulators for an experiential learning opportunity in a safe environment. In addition, PN students partner with students in other health-care disciplines/programs to gain a realistic perception of working with other professionals in their fields.
- The Business Administration Marketing program, which sees students prepare digital marketing plans for real companies. Clients present students with a business challenge and students prepare and present their marketing plans for feedback.
- The Computer Programmer Analyst program, which includes a capstone course that asks students to research their own interests related to their program. The course culminates in a project and demonstration that utilizes the skills and abilities students develop over the entirety of their program including a presentation of their research to an audience of industry experts.
- A new Pre-Health Sciences pathway to certificates and diplomas, launched in a fully online format as a pilot
 project in the fall of 2017, is designed for individuals interested in pursuing a health sciences career through
 preparation for admission to certificate and diploma health sciences programs, as well as further academic
 studies in other science-related programs at the college level.
- The CFF, which anchors Durham Region's first-ever postsecondary presence focused on the field-to-fork concept, offers students and faculty an interdisciplinary learning continuum centred on the harvesting, storing, processing, packaging, sale and consumption of local food

Access and equity

 DC joined the executive membership team of the Canadian Association for the Prevention of Discrimination and Harassment in Higher Education and the National Association for Community and Restorative Justice Canada in 2017 and continues to pilot a restorative justice program as a method of mediation employing the Indigenous Circle Process methodology.

- The Office of Student Diversity, Inclusion and Transitions offers online sexual violence training modules for staff and students; the online Diversity Awareness Certificate, which is aimed at promoting self-esteem, respect and inclusivity; bystander training and safe campus strategies; and has partnered with Pride at Work Toronto to provide access to online LGBTQ+ training for staff and students, followed by a gap analysis to be completed by the end of 2017.
- DC delivers a college-wide approach to supporting accessibility and Accessibility for Ontarians with Disabilities Act compliance, such as the Accessibility Coordinating Committee.

Research excellence and impact and innovation

- DC celebrates its research successes at Research Day, which is held each year in the spring. The event attracts more than 100 members of the pubic, with community and industry organizations, students and employees gaining awareness of the value of applied research, learning about projects underway and gaining insight into how DC supports the local economy through applied research.
- The Fitness and Health Promotion program has submitted grant proposals for an NSERC Applied Research
 Tools and Instruments Grant and an Ontario Ministry of Labour Evidence for Practice Grant with future grant
 submissions including the SSHRC Community and College Social Innovation Fund, the Ontario Ministry of
 Labour Occupational Health and Safety grant and the NSERC Engage grant.

Economic development and community engagement

DC's Community Integration through Co-operative Education program gives individuals with intellectual
disabilities or significant learning challenges the opportunity to enhance their academic and vocational skills
with modified programming through a variety of courses and the college works with community partners
such as Community Living organizations, Abilities Centre, WindReach, the Ontario Disability Support
Program and social services to provide supports and programs/services for students while they are enrolled
in the program and after its completion.

Ministry/Government Commitments

- The SMA2 process has focused on implementing the first stages of the new funding model and
 demonstrating the ongoing commitment by all colleges and universities to student success. Future growth
 will only be funded through negotiated changes to an institution's funded enrolment corridor
 Through the SMA2 cycle, the ministry will continue to work closely with institutions to ensure all dimensions
 of the funding model are implemented.
- In a memo to colleges and universities dated March 7, 2017, the ministry committed to using the SMA2 (2017-20) process as a transitional phase to commence the collaborative and joint development of performance metrics and targets, tied to funding, for SMA3 (2020-23). The ministry reiterates this commitment and reaffirms that metrics and targets included in SMA2 are not tied to funding at this time and are a beginning point for further discussions with the sector prior to their application in SMA3. Colleges and universities will have the opportunity to reset and realign metrics prior to the application of metrics in SMA3. The ministry will also engage other stakeholders as part of discussions on a broad metrics strategy.
 - The ministry commits to establishing a joint working group with each of the sectors and to begin detailed discussions in fall 2017 on metrics/targets and to seek input on the performance measurement methodology for SMA3.
- Colleges, universities and the ministry all benefit from processes that are transparent and non-duplicative.
 The ministry commits to work with colleges and universities to continue to streamline processes and seek opportunities to further reduce red tape (in part through increased access to other tools), including reducing or eliminating duplicated reporting requirements.
- Through SMA2 discussions, the ministry has heard concerns about the challenges of delivering breadth in
 programming for Francophone and Francophile students, including the cost and funding of such delivery.
 Starting in fall 2017, the ministry commits to consulting institutions who have a formal mandate for bilingual
 and/or French-language delivery to review the delivery of French-Language programming and consider these
 concerns.
- In 2016, an extension of the existing tuition policy framework was announced to support a major reform in OSAP. The ministry will engage with both the college and university sectors around the next tuition policy framework, including examining the issue of tuition anomalies in certain professional programs as a result of past changes to tuition policy, and, for colleges, examining tuition levels relative to competitive college tuition frameworks in Canada.
- In recent years and during the SMA process, there has been an increased interest in the creation of a new polytechnic designation in the Ontario postsecondary education system. Starting in fall 2017, the ministry commits to undertake a review that examines whether improved benefits for students and employers are sufficient to make such a change. The ministry commits to working collaboratively with institutions across the sectors on this review.
- The ministry acknowledges a request by Ontario's colleges to explore how to support more flexible delivery of
 programming, including reviewing part-time funding levels. The ministry commits to working collaboratively
 with colleges to review this issue, including identifying implications for credentials.
- The ministry commits to continue to work collaboratively with colleges to review the eligibility criteria and allocation method for the Small, Northern and Rural Grant to help target funding to best meet sustainability challenges.