



College Sustainability: Signal Data

Harvey P. Weingarten, Amy Kaufman, Linda Jonker & Martin Hicks
Higher Education Quality Council of Ontario
April 18, 2017



Higher Education
Quality Council
of Ontario

Published by

The Higher Education Quality Council of Ontario

1 Yonge Street, Suite 2402
Toronto, ON Canada, M5E 1E5

Phone: (416) 212-3893
Fax: (416) 212-3899
Web: www.heqco.ca
E-mail: info@heqco.ca

Cite this publication in the following format:

Weingarten, H.P., Kaufman, A., Jonker, L., Hicks, M. (2017) *College Sustainability: Signal Data*
Toronto: Higher Education Quality Council of Ontario.



The opinions expressed in this research document are those of the authors and do not necessarily represent the views or official policies of the Higher Education Quality Council of Ontario or other agencies or organizations that may have provided support, financial or otherwise, for this project. © Queens Printer for Ontario, 2017

Background

In July 2016, the Higher Education Quality Council of Ontario (HEQCO) published *Understanding the Sustainability of the Ontario Postsecondary System and its Institutions: A Framework* (Weingarten, Hicks & Moran, 2016). The paper proposed a conceptual framework for examining the sustainability of Ontario's public postsecondary education system. It discussed the components of sustainability and identified a series of tools and strategies to measure it. The report outlined three key principles of sustainability:

1. Sustainability is about more than just money. In addition to financial health, sustainability encompasses the quality of education and the academic experience institutions can offer.
2. The best sustainability systems are those that look forward and are designed to predict future challenges. Based in evidence, sustainability is essentially an ongoing risk management exercise.
3. Overcoming sustainability challenges requires collaboration between government and individual institutions. The tools and levers available to address sustainability within the Ontario postsecondary sector are intensely interconnected; enrolment planning, tuition policy, funding formulae, differentiation and institutional autonomy are all components of the sustainability picture.

The report concluded that more data were required to inform discussion on system — and institutional — sustainability. Presented here is a first iteration of such a sustainability analysis for Ontario's college sector. This report focuses on the 24 public colleges of applied arts and technology (CAATs) in Ontario. A companion report published in January 2017, *University Sustainability: Signal Data*, provides an analysis of the 20 public universities in the province (Weingarten, Hicks, Jonker & Moran, 2017). Together, they are a first step toward a system-wide, sector-sensitive look at postsecondary sustainability in Ontario. Readers can expect future papers that delve more deeply into some of the issues presented here.

Introduction

The timing is right for a sustainability dialogue in Ontario. The Ontario Ministry of Advanced Education and Skills Development (MAESD) has been working on a trifecta of key postsecondary policy levers for which institutional and system sustainability are an essential consideration. These include the next round of Strategic Mandate Agreement negotiations, a funding formula review and the recently announced tuition fee framework. We can — and should — use these tools to mitigate sustainability risk moving forward.

More generally, demographic projections through to at least 2030 will affect the ability of some colleges to maintain, much less grow, enrolment¹ (a strategy which has been widely used in recent years to increase funding) and the current fiscal reality of the provincial government is such that it is unlikely to increase operating funding at the same rate as in the past (an average of 3% per year over the past 10

¹ College enrolment has increased 38% over the past decade from 2005–06 to 2015–16. Data are based on full-time equivalent (FTE) students for funded students and full-time headcounts for international students. Data from MAESD.

years)². It is also time for Ontario to review sustainability at the institutional level to take into account the distinctive identities and geographic realities of individual colleges. There is no one-size-fits-all solution, and we need to be sensitive to the unique needs of individual institutions to ensure the ongoing health of the system and the province.

Finally, sustainability is fundamentally about quality and access. In the case of academic quality, ensuring the quality of programming and the overall student experience is an essential, shared priority of government and institutions as well as students and their families. So, too, is the long-cherished principle of equity of access to postsecondary education and training. Ontario colleges are uniquely situated at the intersection of these long-held ideals and provincial policy priorities. They have demonstrated great resilience and skill at balancing expenditures against revenues within their unique context, and it is important to consider the potential risk that either or both academic quality and equity of access could become vulnerable.

The financial health component of a sustainability analysis is the easy part. Much more difficult to isolate and measure are the non-financial indicators of academic quality and access, as well as student experience and community impact. We must get to the point where these indicators are as significant — and as rigorously measured — as financial ones. For now, we will measure what we have. It is important that MAESD has a deep understanding of the realities facing individual colleges, which may affect its short- or long-term viability to develop policies and funding structures that will meet their needs.

This is not an institutional accountability report card. As indicated, there are many contributing variables to a thorough sustainability outlook, many of which the colleges themselves do not control. Governments can regulate tuition policy and funding formulae, for example, just as prospective and current students have influence through their application and enrolment decisions and factors such as demographics are external to all of the players. This report is designed to develop a better understanding of the sustainability challenges facing Ontario colleges and to support government and institutions in addressing them.

College Context

Ontario's public colleges were originally developed to serve the needs of their local communities and largely still fill this important role by providing access to postsecondary education “for full-time and part-time students, in day and evening courses to meet the relevant needs of all adults within a community, at all socio-economic levels” (Ontario Department of Education, 1967). While the system has matured and expanded dramatically in its 50 years (offering degrees, post-graduate training, employment services and conducting research), the original vision was for colleges to function as access institutions serving — and building — their local communities. As we will examine in detail, when considering college enrolment for students from Ontario, the majority of first-year students come from the immediate geographic region, or catchment area. For some institutions, the number is in excess of 90%. For this reason, in part, colleges are particularly vulnerable to regional demographic decline.

² Colleges Ontario (2016). Environmental Scan 2016. The average increase in operating grants is based on data from 2005–06 to 2015–16.

In considering the various components and indicators of college sector sustainability, we posit that traditional indicators of demand — and the associated perception of competition — hold little relevance to understanding sustainability in the sector. Given their regional focus, the majority of Ontario’s 24 CAATs experience relatively little competition from other colleges.³ Enrolment draws heavily from the local community, and colleges are predicated on the principles of industry connectedness and community engagement — both concepts that require localized attention and focus. In addition, Ontario colleges take seriously the principle of ensuring access to postsecondary education; they enrol and provide high quality programming to students who may not otherwise attend postsecondary. Within this context, traditional indicators of student demand may be less relevant than we might initially think. The grade point average of college applicants, for example, may indicate readiness for postsecondary and suggest a likelihood of success, but perhaps tell us less about student demand — in the selective sense — than it might in a system less focused on access. This does not mean that colleges are not offering quality academic programming in high-demand areas of study. Indeed, Ontario colleges are offering unique and innovative programs in state-of-the-art learning environments. Some programs are oversubscribed and attract extremely high-performing applicants. At the same time, the system is committed to making postsecondary education and training accessible to those who have traditionally been underrepresented in higher education. This includes Aboriginal students (especially those from remote communities), first-generation scholars and newcomers to Canada.

Access plays into the sustainability dialogue in a unique way.⁴ Colleges are fundamentally integrated into their local communities and economies, serving as the (sometimes only) local destination for postsecondary education and training within the context of the access mandate and commitment of the provincial government. With connections to both industry and the community, colleges are providing vital opportunities for students who may never have envisioned a postsecondary career. The importance of these features must play into local dialogue related to institutional sustainability and challenge assumptions of inter-institutional competition in terms of program offerings or study opportunities. These ideas will be explored in future HEQCO research on differentiation within the college sector.

As stated, the intent of this report is to inform institution-specific and system-wide dialogue. We do not rank colleges, nor do we attempt to assign accountability for the realities revealed by the data. We ourselves do not draw conclusions from the data, and we encourage readers, institutions and governments to use this as a foundation to ask more questions and engage more deeply in discussion around sustainability in Ontario’s colleges.

³ The exception to this general statement would, of course, be for institutions congregated in one geographic region. The six colleges serving the Greater Toronto Area, for example, would have a more competitive relationship than institutions with fewer local postsecondary options.

⁴ Analysis of Youth in Transition Survey (YITS) data in *Performance Indicators: A report on where we are and where we are going* (HEQCO, 2013) demonstrates that colleges are more likely to enrol students from less traditional groups such as disabled, rural and Aboriginal students, as well as those whose parents have no postsecondary education.

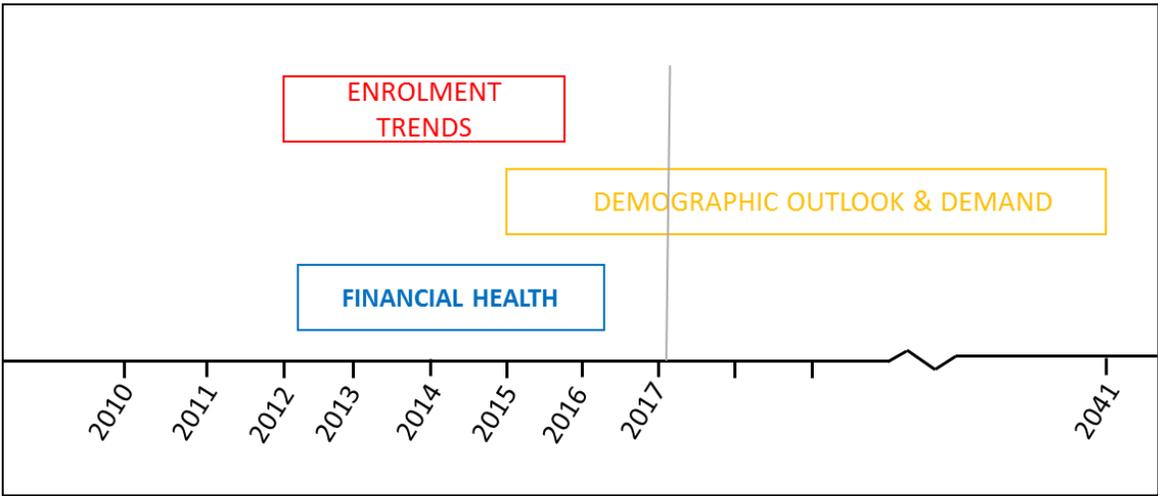
The Signal Indicators

In the pages that follow, we articulate three sets of “signal indicators” that reveal potential areas of vulnerability or strength for individual institutions. We believe that these indicators require further investigation and engagement by government and the college sector to develop a comprehensive view of the sustainability issues facing the system. They include:

- **Enrolment trends** over the past five years: within the current funding framework, increasing enrolment has been the best tool institutions have had to address revenue shortfall. In financial terms, not all enrolments are equal; this section also looks at trends in international enrolment over the past decade.
- **Demographic outlook and demand**: regional demographic outlooks for 18-to-25 year-olds via population projections and their impact on the ability of institutions to attract students.
- **Financial health** metrics: drawn from a set of common indicators assembled collaboratively by the sector and MAESD, these data are key financial ratios that can signal the onset of difficulties for institutions or the system as a whole.

These signal indicators span a range of time periods, both backward and forward looking, as illustrated in Figure 1.

Figure 1: Timeframes for Signal Indicators in this Report



At the conclusion of the paper, we present a Summary Table that presents an easy overview of key elements drawn from the three indicator areas.

Signal Indicator: Enrolment Change Over the Past Five Years

Within the structure of the current funding formula for colleges, there is a limited number of ways for institutions to increase revenues. Ancillary operations at colleges are expected to pay for themselves but do not typically contribute to the bottom line. There have been a handful of small, special purpose grants or funding pots to support key government priorities — the self-explanatory Small, Northern and Rural Grant and other special purpose grants such as the Summer Experience Program, Performance Funding, Women’s Campus Safety and Credit Transfer — but otherwise colleges are funded on the basis of enrolment. The ability to recruit, enrol and retain students is a fundamental contributor to institutional sustainability.

Government grants and tuition revenue make up 80% of college operating revenues.⁵ Since the launch of *Reaching Higher* in 2005, the provincial government has fully funded enrolment growth across the province in tandem with modest annual tuition increases. Following a tuition freeze in 2004–05 and 2005–06, the province instituted a Tuition Fee Framework which has limited maximum annual fee increases to between 3-5% per year.^{6, 7} Notably, tuition fees for international students have not been capped, a policy decision that has benefitted institutions that have chosen to increase their international student population.⁸ The current funding formula is based on historical enrolment trends to provide stability but, essentially, colleges that need more revenues have had little choice but to enrol more students.

According to the colleges themselves, revenue per student has been outpaced by general inflation while labour costs continue to grow. Salaries, benefits, pensions and the like make up 65% of college budgets (PricewaterhouseCoopers for Colleges Ontario, 2017).⁹ Quite simply, institutions that have been able to increase their enrolment have likewise been able to increase their revenues in order to keep up with expenditures. As such, enrolment — and the funding that is attached — is a key indicator of financial sustainability for Ontario colleges.

Measuring enrolment is more complex than one might expect. Headcount represents funded and unfunded students studying full-time but has only included part-time students since 2012.¹⁰ Given that part-time students represent almost 30% of headcount at Ontario colleges, leaving them out of the enrolment analysis would be misleading.¹¹ Full-time equivalents (FTEs) are another mechanism used to report enrolment. FTEs include part-time and full-time enrolment, but only for students in funded

⁵ MAESD (2016). College Funding Model Consultation Paper. Based on college financial information from 2014–15.

⁶ MAESD (2013). Minister’s Binding Policy Directive: Tuition and Ancillary Fees. Colleges of Applied Arts and Technology Policy Framework. Rev. December 2013. Accessed November 3, 2016: <http://www.tcu.gov.on.ca/pepg/documents/TuitionandAncillaryFees.pdf>

⁷ The province has recognized that high demand programs can accommodate higher fees and allowed for greater annual fee increases for some programs. See Minister’s Binding Policy Directive Tuition and Ancillary Fees Reporting. Revised September 1, 2012. Accessed March 7, 2017. <http://www.tcu.gov.on.ca/pepg/documents/TuitionandAncillaryFeesReporting2012.pdf>

⁸ International student tuition has not been capped, but in 2013 the provincial government did institute an International Student Recovery scheme whereby the province collects \$750 in tuition fees for all non-PhD international students. See *International Student Recovery Reporting Guidelines and Principles* (MAESD, 2015).

⁹ Between 2008–09 and 2014–15, overall revenue per student was outpaced by general inflation (12%) and inflation in services (14%); revenue per student increased by 6% during the same period. (PricewaterhouseCoopers for Colleges Ontario. *Fiscal Sustainability at Ontario Colleges*. January 2017).

¹⁰ Part-time students are those who are taking less than 66 2/3% of a course load or less than 70% of contact hours in a program.

¹¹ Based on headcount enrolments from 2015–16 from MAESD.

postsecondary programs, excluding international students who make up 13% of total enrolment.¹² Some public colleges have expanded heavily into international markets in recent years (international students represent more than 30% of enrolment at some institutions). For these colleges, leaving international students out of a discussion of enrolment within the context of sustainability would be negligent.

For the purposes of this analysis, we have decided to use a combination of headcount and FTE to pull together the most comprehensive picture of college enrolment trends possible. We have added full-time headcount international students to domestic FTEs — treating each as one FTE — to develop trends in enrolment over time for students who are funded and unfunded, part-time and international. We acknowledge that others might make different choices, but this approach — while admittedly not typical — is methodologically sound and enables a thorough analysis not otherwise possible.

In Table 1, headcount and FTE data were used to compare institutional change in overall enrolment over the past three, five and 10 years. We consider the three-year percentage change in enrolment (from 2012 to 2015) to be an indicator of an institution's sustainability risk. This indicator is rolled up into the summary table at the end of the report. For additional breakdown of enrolment data, see Appendix A.

¹² Based on headcount enrolments from 2015–16 from MAESD.

Table 1: Full-Time Equivalent Enrolments and Trends over Time

	<u>Enrolments</u>				<u>% Change in Enrolment</u>		
	2005-06	2010-11	2012-13	2015-16	10 years	5 years	3 years
Algonquin	14,736	17,046	19,572	20,855	42%	22%	7%
Boréal	1,388	1,521	1,711	1,601	15%	5%	-6%
Cambrian	3,815	3,515	4,215	5,247	38%	49%	24%
Canadore	2,970	3,084	2,774	2,922	-2%	-5%	5%
Centennial	10,572	14,095	14,476	16,027	52%	14%	11%
Conestoga	6,772	9,566	11,062	12,078	78%	26%	9%
Confederation	3,198	3,183	3,214	3,412	7%	7%	6%
Durham	6,945	8,448	9,935	11,562	66%	37%	16%
Fanshawe	12,854	14,588	14,748	15,649	22%	7%	6%
Fleming	6,100	6,716	6,832	6,993	15%	4%	2%
George Brown	15,928	19,937	20,873	24,545	54%	23%	18%
Georgian	7,088	9,608	10,690	10,620	50%	11%	-1%
Humber	16,778	22,217	24,714	25,688	53%	16%	4%
La Cité	3,400	4,596	4,887	4,692	38%	2%	-4%
Lambton	2,306	2,877	3,221	3,160	37%	10%	-2%
Loyalist	3,175	3,475	3,326	3,295	4%	-5%	-1%
Mohawk	10,840	12,117	12,624	14,067	30%	16%	11%
Niagara	7,049	8,394	9,388	9,883	40%	18%	5%
Northern	1,229	1,325	1,178	1,134	-8%	-14%	-4%
Sault	2,030	2,214	2,295	2,254	11%	2%	-2%
Seneca	20,551	23,233	23,825	25,655	25%	10%	8%
Sheridan	14,114	18,224	19,145	20,381	44%	12%	6%
St. Clair	7,059	8,783	8,427	8,949	27%	2%	6%
St. Lawrence	5,146	5,558	5,514	6,118	19%	10%	11%
System	186,043	224,319	238,647	256,787	38%	14%	8%

↑
Included in Summary

Source: MAESD. Enrolments include full-time and part-time FTEs for funded students and full-time headcounts for international students.

In recent years some colleges have increased the number of international students to maintain or grow enrolment. This strategy, while initially good for the balance sheet, is not without risk. International students bring in much-needed revenue and are an important and valuable addition to college campuses. They also require specific supports and tools to help them be successful during their studies, however, and come with higher recruitment costs. Moreover, institutions that rely heavily upon international markets to increase enrolment could find themselves vulnerable to global socio-political developments over which they have no control.

In Table 2, headcount and FTE data were used to compare the change in the percentage of international student enrolment over the past three, five and 10 years by institution, between 2005 and 2015. Given the lack of control that institutions have over the economies and postsecondary climate of source countries for international students — and the degree to which some institutions are relying on international tuition fees — we feel it is important to consider the current share of overall enrolment represented by international students. We have included this indicator in the summary table at the end of the report.

Not all Ontario colleges have an equal ability to increase enrolment. As we will examine in the next section of this report, regional demographic trends will play an important role in shaping enrolment patterns.

Table 2: International Students as a % of Total Enrolment

	% International			
	2005-06	2010-11	2012-13	2015-16
Algonquin	3%	5%	4%	6%
Boréal	1%	1%	1%	2%
Cambrian	0%	2%	16%	33%
Canadore	2%	4%	4%	13%
Centennial	6%	22%	24%	33%
Conestoga	4%	6%	7%	8%
Confederation	0%	1%	3%	11%
Durham	1%	1%	3%	4%
Fanshawe	2%	3%	7%	10%
Fleming	1%	0%	3%	6%
George Brown	6%	9%	9%	12%
Georgian	3%	4%	4%	8%
Humber	3%	10%	12%	12%
La Cité	1%	1%	2%	4%
Lambton	1%	7%	10%	18%
Loyalist	1%	1%	2%	2%
Mohawk	2%	6%	7%	10%
Niagara	4%	6%	11%	17%
Northern	0%	0%	0%	2%
Sault	0%	0%	0%	3%
Seneca	7%	11%	11%	18%
Sheridan	2%	7%	12%	19%
St. Clair	2%	2%	3%	8%
St. Lawrence	2%	2%	2%	12%
System	3%	7%	9%	13%


Included in Summary

Source: MAESD. Enrolments are based on full-time and part-time FTEs for funded students and full-time headcounts for international students.

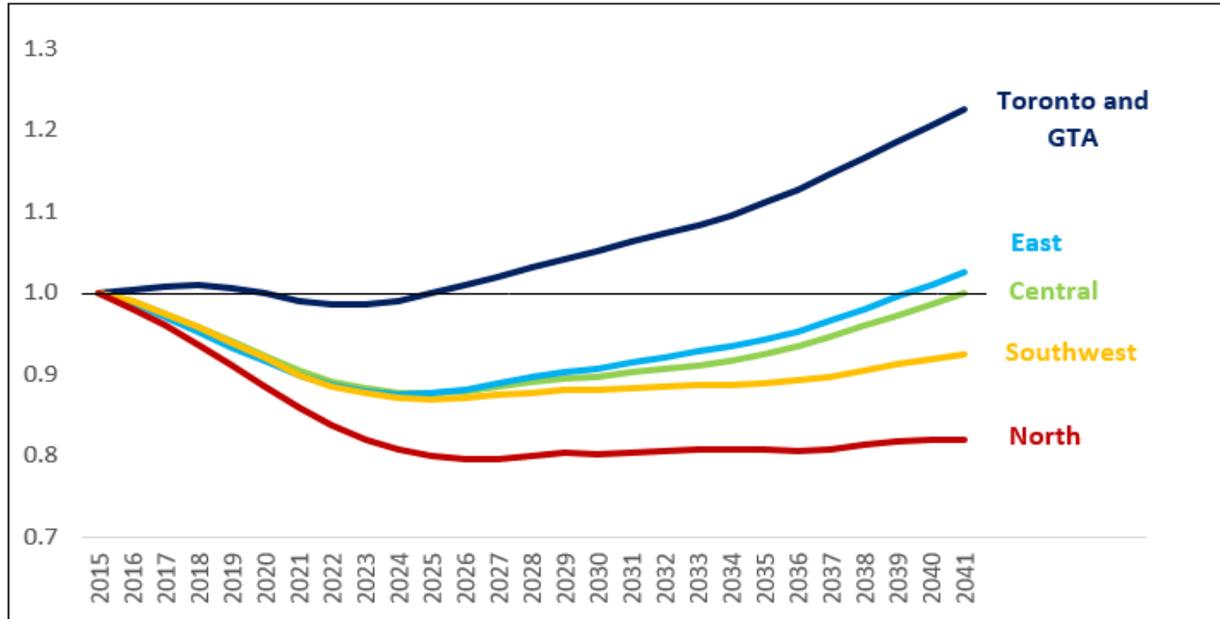
Signal Indicator: Regional Demographics and Demand

Enrolment is neither a static nor standalone indicator. Trends in enrolment are shaped by demographics as well as student choice. Whereas demographics dictate the size of the pool of potential applicants, student choice is influenced by a series of factors ranging from program choice to location to personal situation. For the college sector, these factors are situated within the context of fundamental, sector-wide commitments to access, regional development and industry connectedness.

The average Ontario college applicant is 23.5 years old, and approximately 65% of applicants to Ontario's colleges do not apply directly from high school. Forty percent of college students are less than 21 years of age; 39% are between the ages of 21 and 25.¹³ Knowing these facts, let us consider demographics. The Ontario Ministry of Finance projects the number of Ontarians aged 18-to-25 years old — the cohort traditionally considered likely applicants to college — to drop from about 1.54 million in 2015 to 1.43 million in 2024, a reduction of 7%. Population levels for this group will not recover to 2015 levels until 2035. Province-wide, for the next two decades, demographics will not contribute to enrolment growth.

Demographic trends vary sharply across the province. The Greater Toronto Area (GTA) will experience a minor and short-lived contraction in the postsecondary-aged population before continuing to grow at a modest pace. At the other extreme, the student pool in northern Ontario will decline sharply and will not recover. Figure 2 shows Ontario's 18-to-25 year-old population projections at the regional level, disaggregated into the five regions tracked by the Ministry of Finance.

Figure 2: Ontario Regional Population Projections, 18–25 Year-olds



Source: Ontario Ministry of Finance

¹³ Colleges Ontario. (2016). *Student and Graduate Profiles: Environmental Scan 2016*.

College students are older than the traditional, direct-entry, high school graduate and they are very likely to live in the surrounding community. Ontarians represent 81% of full-time students in the college sector, the vast majority of whom come from the immediate geographic region.¹⁴ For this reason, understanding and accommodating the implications of regional demographics is essential for college sustainability.

Using first-year headcount enrolment data from MAESD, Table 3 shows that just over 80% of first-year Ontario students live in the same provincial region as their college campus, with nearly half from the same municipality as the campus they are attending. At some institutions, in excess of 90% of first-year Ontario students are from their home region. These colleges are filling an important role, providing access to public postsecondary education and training within the region. This is linked directly to the government's access priority, but poses a potential sustainability risk, particularly in regions with declining demographics. Colleges in geographic areas with more robust demographic projections — the GTA, for example — will have an advantage over those in areas with a diminished population outlook.

¹⁴ Data are from MAESD. Enrolments are based on full-time headcounts for domestic and international students. Algonquin, Canadore, Lambton, Mohawk, and Sault did not report complete enrolments by province to MAESD and are therefore not included in the system total.

Table 3: First-Year Students from Ontario: Percentage from Home Region

	% Local (Same Municipality)	% Non-Local (Same Region)	% Home Region
Algonquin	64%	19%	83%
Boréal	58%	18%	76%
Cambrian	48%	19%	67%
Canadore	50%	22%	71%
Centennial	70%	26%	96%
Conestoga	29%	47%	76%
Confederation	67%	24%	91%
Durham	16%	65%	81%
Fanshawe	42%	24%	66%
Fleming	18%	27%	45%
George Brown	57%	33%	90%
Georgian	23%	40%	63%
Humber	41%	48%	88%
La Cité	76%	17%	93%
Lambton	64%	28%	92%
Loyalist	47%	23%	70%
Mohawk	57%	20%	76%
Northern	37%	30%	67%
Sault	50%	21%	72%
Seneca	37%	53%	90%
Sheridan	31%	27%	58%
St. Clair	61%	30%	91%
St. Lawrence	37%	38%	75%
System	46%	35%	81%

↑
Included in Summary

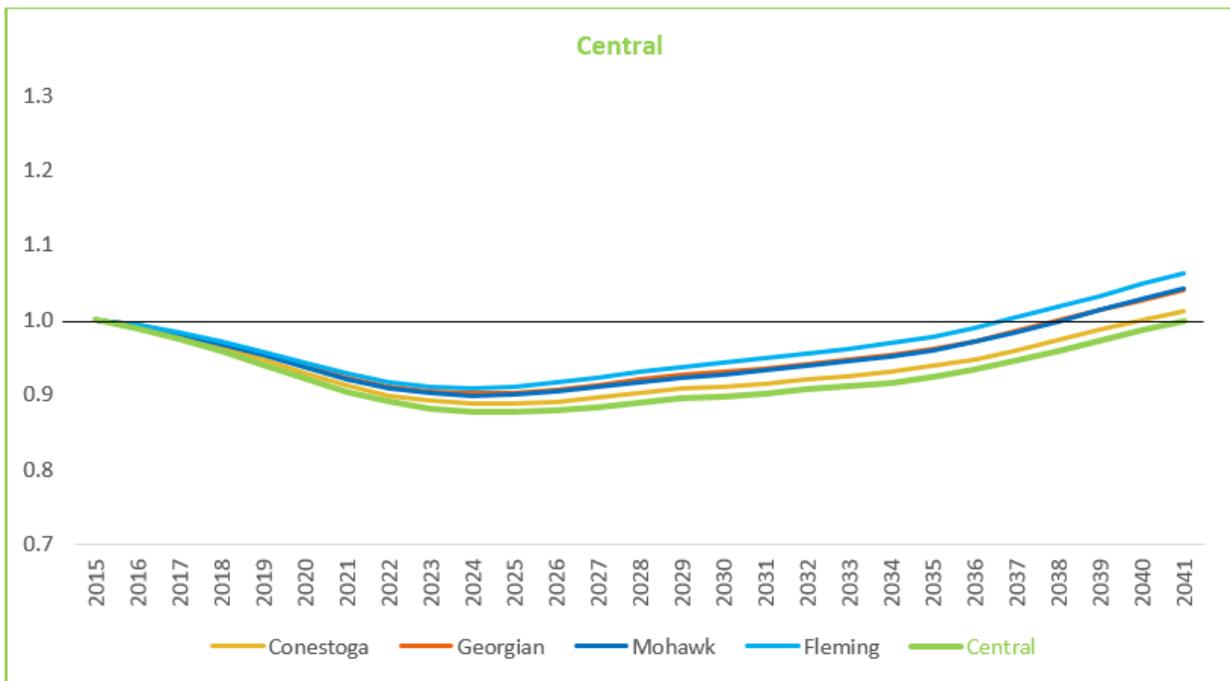
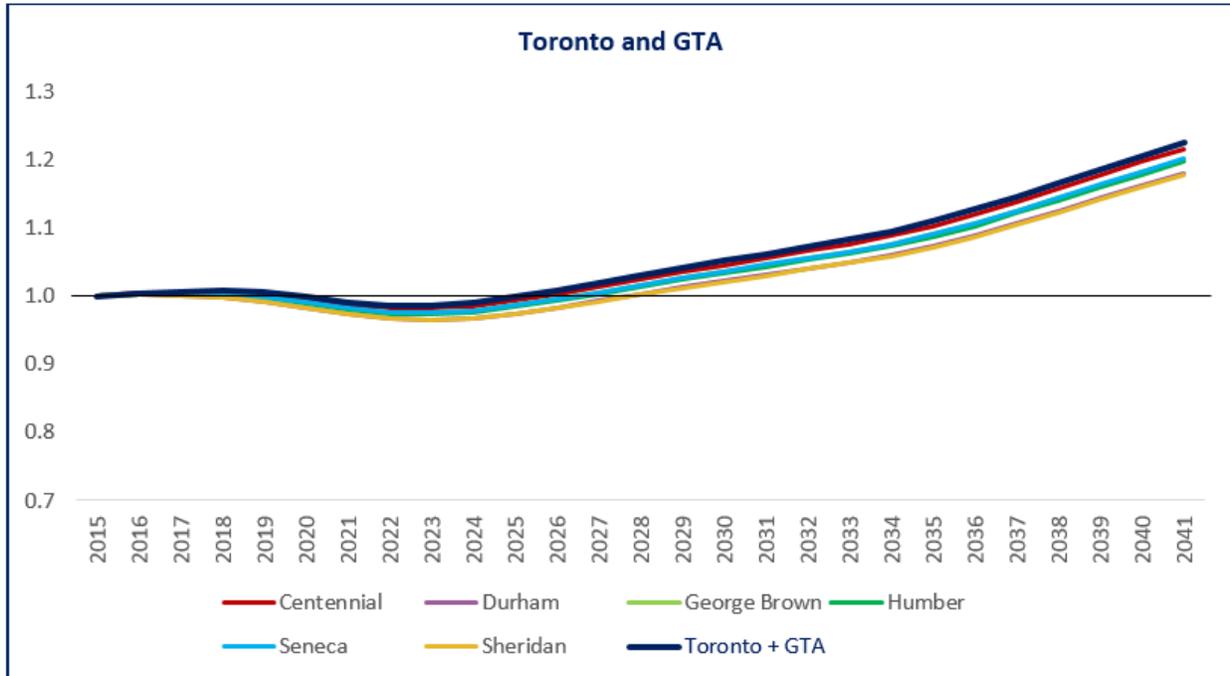
Source: MAESD. **% Local** includes students who are from the same census subdivision (i.e. municipality) as the college campus they are attending and **% Non-Local** includes students who are from a different census subdivision but belong to the same region.

Note: Niagara did not report complete Forward Sortation Area (FSA) records to MAESD and is therefore not included in the above table.

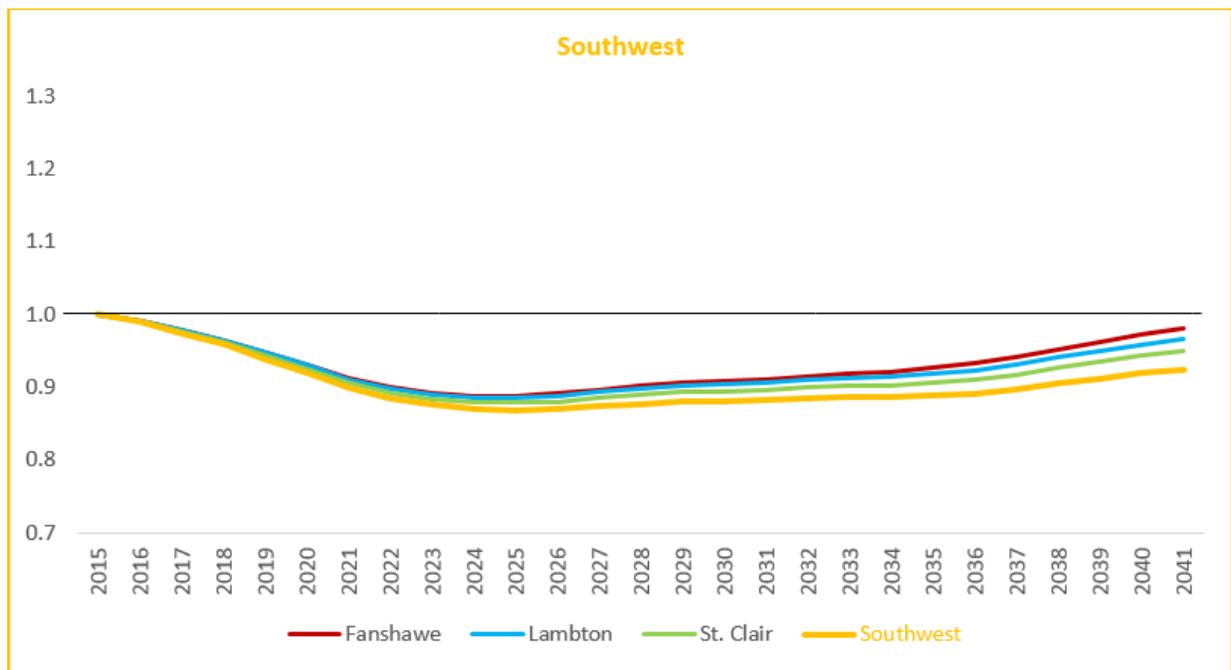
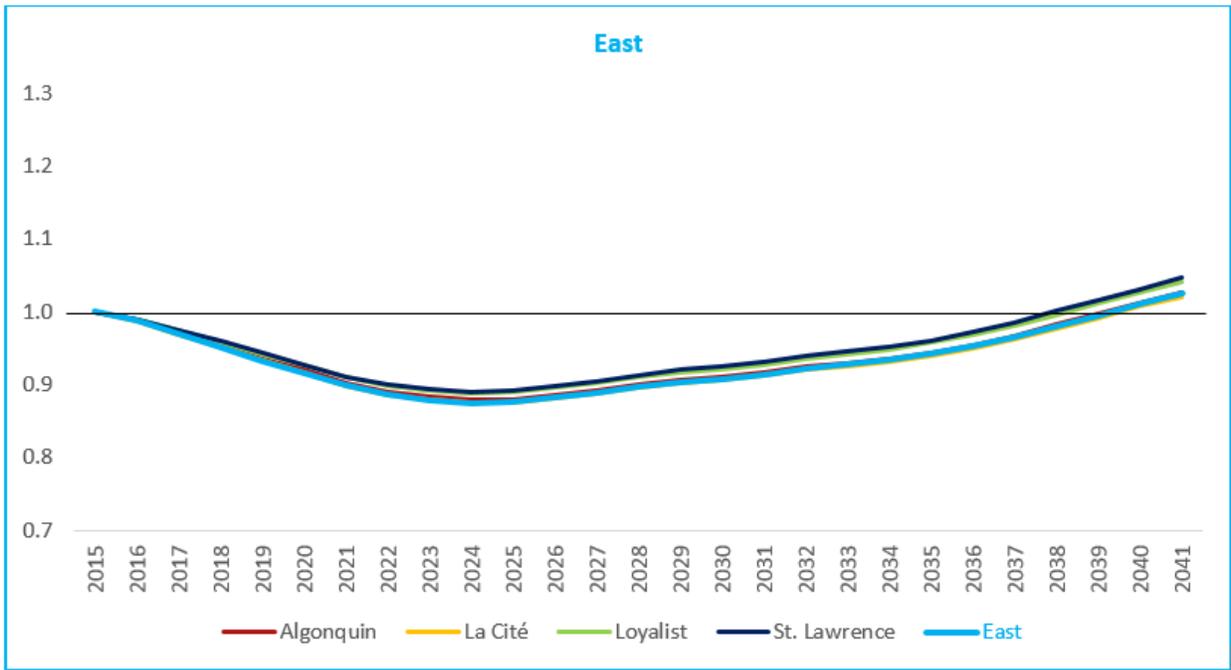
To better understand the potential impact of demographics on individual institutions, we have developed a demographic forecast for each college using regional population projections of 18-to-25 year-olds mapped to each institution’s geographic distribution of incoming students from Ontario.

Projections are shown by region in Figures 3.1 to 3.5. Satellite campuses are included in the analysis. Please refer to Appendix B for more information about the methodology for calculating the institutional demographic projections.

Figure 3.1 to 3.5: Institutional Demographic Projections by Region



Note: Niagara did not report complete FSA records to MAESD and is therefore not included in the Central region analysis.



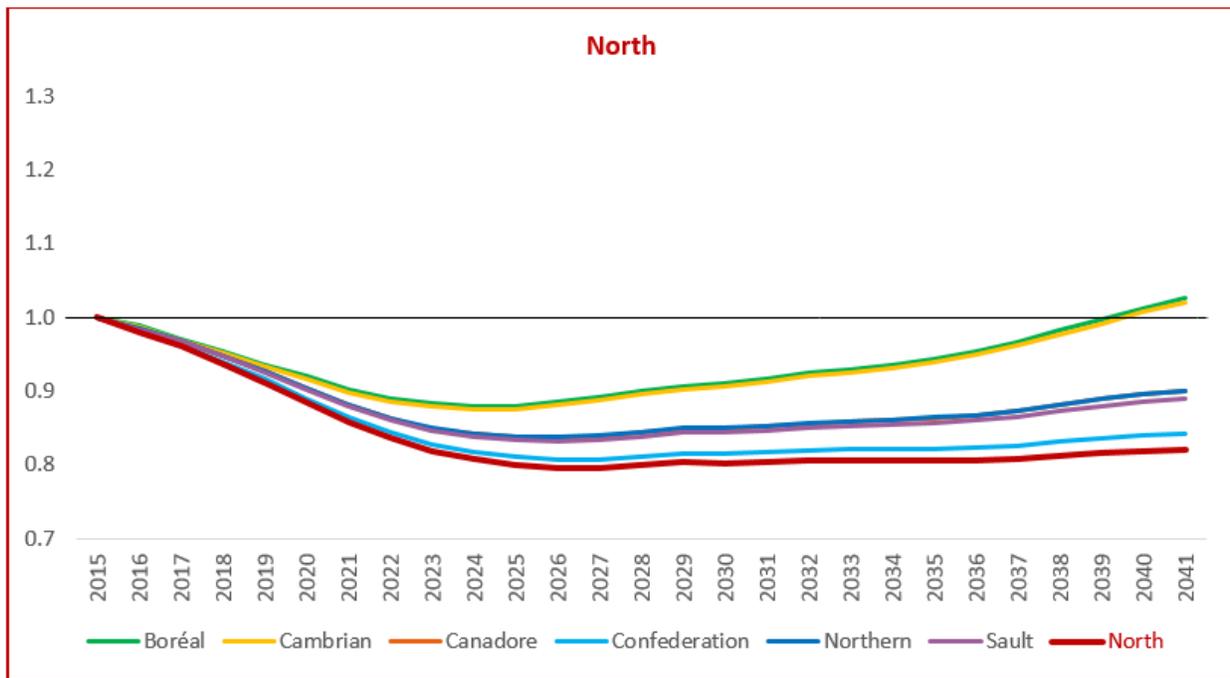


Table 4 shows the modelled percentage change in demographic projections by institution from 2015 to:

- 2024 — when Ontario 18-to-25 year old population projections are at their lowest
- 2035 — when the 18-to-25 year old population is expected to recover at the provincial level (included in the summary table at the end of the report)
- 2041 — the final year in the Ministry of Finance’s population projection forecast

Table 4: Percentage Change in Demographic Projections from 2015 to:

	2024	2035	2041
Algonquin	-12%	-6%	3%
Boréal	-12%	-6%	3%
Cambrian	-13%	-6%	2%
Canadore	-16%	-14%	-10%
Centennial	-2%	10%	22%
Conestoga	-11%	-6%	1%
Confederation	-18%	-18%	-16%
Durham	-3%	7%	18%
Fanshawe	-11%	-7%	-2%
Fleming	-9%	-2%	6%
George Brown	-2%	9%	20%
Georgian	-10%	-4%	4%
Humber	-2%	9%	20%
La Cité	-13%	-6%	2%
Lambton	-11%	-8%	-3%
Loyalist	-11%	-4%	4%
Mohawk	-10%	-4%	4%
Northern	-16%	-14%	-10%
Sault	-16%	-14%	-11%
Seneca	-2%	9%	20%
Sheridan	-3%	7%	18%
St. Clair	-12%	-9%	-5%
St. Lawrence	-11%	-4%	5%


Included in Summary

Source: Ministry of Finance and MAESD.

Note: Niagara did not report complete FSA records to MAESD and is therefore not included in the above table.

Colleges in geographic regions that will see the greatest decline in 18-to-25 year-olds will be forced to compete with their university colleagues for a waning pool of potential students. This is buoyed by previous HEQCO research on demand trends for Ontario universities. In *University Sustainability: Signal Data* (Weingarten, Hicks, Jonker & Moran, 2017) the authors unpack a series of demand indicators relevant to the university sector, including high-school grade point average (GPA). For each Ontario college, the ratio of applicants to registrants (for Fall 2015) is shown in Table 5.¹⁵ In most cases, the ratio

¹⁵ What this data does not tell us is the reason that applicants did not register, and there is double-counting among the institutions. For example, a student may have applied to multiple institutions and received multiple offers, but chose to attend only one. Likewise, the institution could have received an application but not extended an offer.

is fairly snug and this is, no doubt, due in part to the access principle. If local universities lower their incoming GPA thresholds for admission to meet enrolment targets, it is possible that colleges will see a group of applicants who may otherwise have attended college head to university instead.

Table 5: Applicant to Registrant Ratio

	A:R Ratio
Algonquin	2:1
Boréal	2:1
Cambrian	3:1
Canadore	2:1
Centennial	4:1
Conestoga	3:1
Confederation	2:1
Durham	2:1
Fanshawe	2:1
Fleming	3:1
George Brown	3:1
Georgian	3:1
Humber	3:1
La Cité	2:1
Lambton	3:1
Loyalist	3:1
Mohawk	3:1
Niagara	3:1
Northern	3:1
Sault	2:1
Seneca	3:1
Sheridan	3:1
St. Clair	2:1
St. Lawrence	3:1
	 Included in Summary

Source: OCAS. Based on first-year funded students, November 2015.

Thus, demographics have an impact on demand for colleges in a way that could threaten their financial sustainability through reduced enrolment. The college — by nature of its local focus, traditionally local student body and commitment to access — is positioned to be particularly vulnerable from a sustainability perspective. This is an example of the importance of taking a holistic look at sustainability.

Signal Indicator: Financial Health Metrics

MAESD worked with the Colleges Financial Management Working Group in 2009 to develop a set of financial metrics as a means to provide a logical and graduated approach to college financial health analysis. Seven indicators were developed collaboratively within the context of legislation that requires colleges to balance their annual budgets and were published in March 2015.¹⁶ Not only did the working group identify pertinent indicators, it also used historical trend analysis to identify benchmarks by which college financial performance can be measured. These indicators are a valuable tool that allow the sector and the government to consider the financial stability and sustainability of individual colleges, as well as of the system as a whole.

Five of the seven financial health indicators are ratios while the remaining two indicators refer to the institution's surplus/deficit position. As a further check to ensure long-term sustainability, projection of both an annual deficit and an accumulated deficit will trigger a risk assessment and mitigation process for that institution. The college must then seek ministerial approval of the annual budget and provide an appropriate recovery plan.¹⁷

See Table 6 for a description of each indicator, its methodology and related benchmark.

¹⁶ MAESD (2015). Financial Sustainability Metrics: Per College Strategic Mandate Agreements 2014-17.

¹⁷ Minister's Binding Policy Directive: Business Plan Operating Procedure. Rev. September 2009. Accessed January 20, 2017: <http://www.tcu.gov.on.ca/pepg/documents/BusinessPlanRevised2009September.pdf>

Table 6: Overview of College Financial Health Indicators

	Indicator	Calculation	What Does it Measure?	Benchmark	Rationale
Ratios	Quick Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	The ratio is a measure of liquidity. It measures the college's ability to pay its short-term maturing obligations.	A ratio of 1:1 or higher.	A ratio of 1:1 is a typical business standard. Less than 1 may indicate that a college is not able to meet its short-term obligations.
	Debt to Assets	$\frac{\text{Debt}}{\text{Assets} - \text{Equity Adjust}}$	This ratio measures the proportion of college assets that are financed by debt or other liabilities. A high or increasing value may be predictive of future liquidity problems or a reduced ability to borrow money in the future.	Trend analysis of college performances and a review of other postsecondary institutions has led to a benchmark of 35% or lower.	A high debt burden may indicate that the institution is vulnerable to its creditors, or will have reduced liquidity or a reduced ability to borrow in the future.
	Debt Servicing Ratio	$\frac{\text{Interest Expense} + \text{Principal Payments}}{\text{Revenue}}$	The percentage of annual revenues that is used to make debt and interest payments.	A ratio of 3% or lower has been chosen based on historical trend analysis.	A ratio of 3% may indicate a reduced or restricted cash flow as the college is spending less than 97% of revenues on core services.
	Net Assets to Expense	$\frac{\text{Net Assets}}{\text{Expenses}}$	This ratio measures the ability of a college to continue operations in the event of a delay in revenue streams.	A benchmark of 60% or higher was chosen based on historical trend analysis.	A net asset balance that is less than 60% of annual expenses may indicate a lower tolerance for variable or volatile revenues.
	Net Income to Revenue Ratio	$\frac{\text{Revenue} - \text{Expenses}}{\text{Revenue}}$	This ratio measures the return an institution generates on each dollar of revenue.	A ratio of 1.5% or higher has been determined based on historical trend analysis.	A surplus representing less than 1.5% of revenues indicates that small changes in expenses or revenues may result in annual deficits for the institution.
Triggers	Annual Surplus (Deficit)	Revenue - Expenses	Measures the excess of revenues over expenses in a given fiscal year.	Must be greater than \$0.	An annual deficit or declining surplus may indicate a decline in an institution's financial health.
	Accumulated Surplus (Deficit)	Unrestricted Net Assets + Investments in Capital	Represents the cumulative wealth that an institution has under its own control to assist with ongoing operations.	Must be greater than \$0.	An accumulated deficit indicates that the college may have borrowed to support its past operations and will have to make up this difference in the future.

Source: MAESD

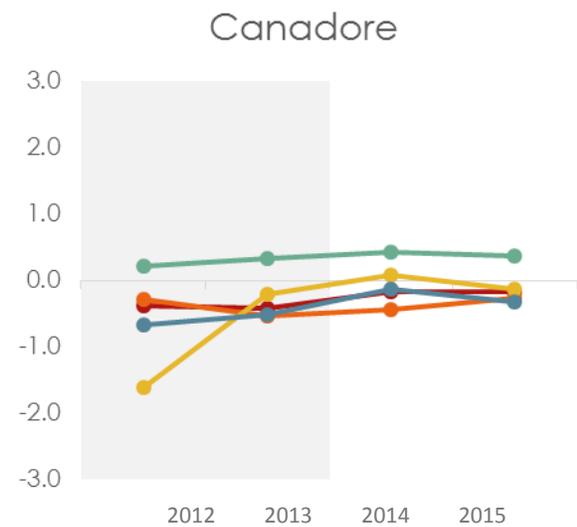
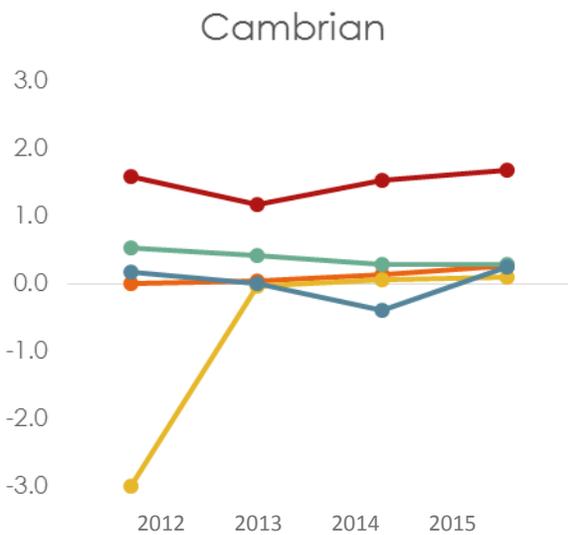
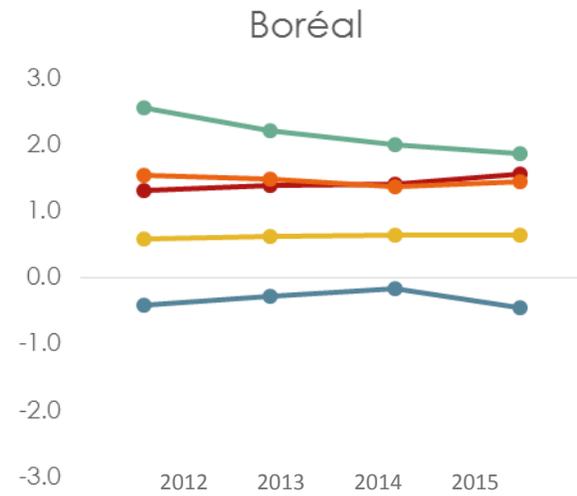
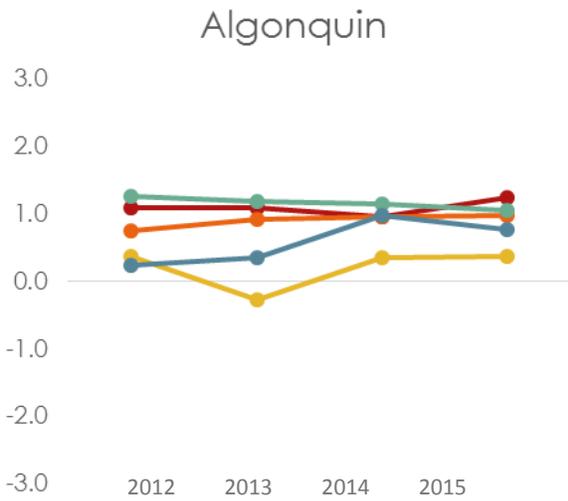
MAESD and the college sector deserve credit for doing the work to identify metrics and appropriate benchmarks and for including these in the institutional Strategic Mandate Agreements. Our examination suggests that, overall, the college system is performing above these benchmarks as it enters the upcoming period of restricted growth. While we are not attempting to rank institutions by their financial health, understanding the relative picture is not only instructive for college administrators and boards in determining local priorities and processes, but contributes to our overall understanding of the financial sustainability of the sector as a whole.

For a college-by-college look at the financial health metrics identified above, we have positioned each on a graph where 0 represents the relevant benchmark identified by the MAESD working group. In order to visually overlay the indicators, in Figures 4.1 through 4.24, each of the five ratios have been standardized and transformed so that a score of 0 represents the relevant benchmark across all four years. A score above 0 reflects performance above the benchmark identified by the sector, while a score below 0 reflects performance below the benchmark. The Y-axis scale represents units of standard deviation. The remaining two indicators — accumulated surplus and annual surplus — could not be standardized because they are expressed as a dollar amount rather than a ratio. To incorporate this trigger into the graphs below, we highlight in grey the years in which an institution reported BOTH an accumulated deficit and annual deficit.

Figures 4.1 to 4.24 - Trends in Financial Health Metrics 2012–13 to 2015–16

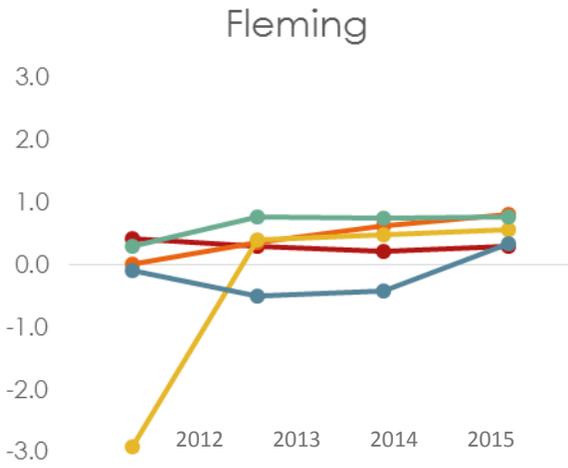
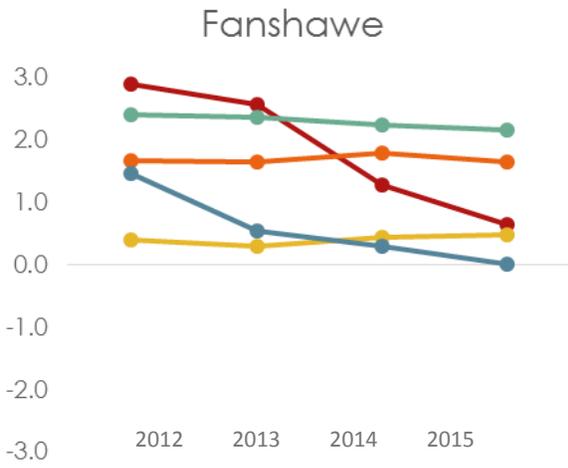
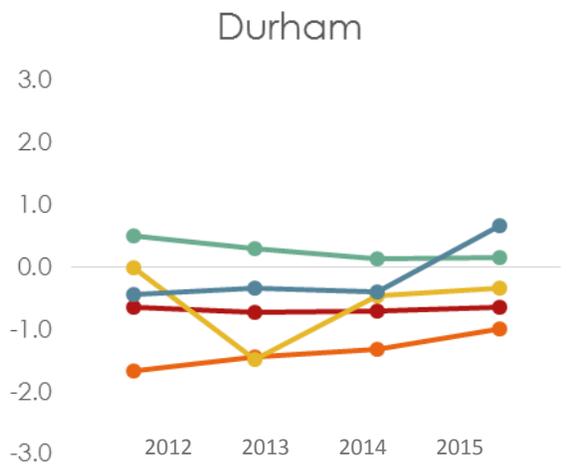
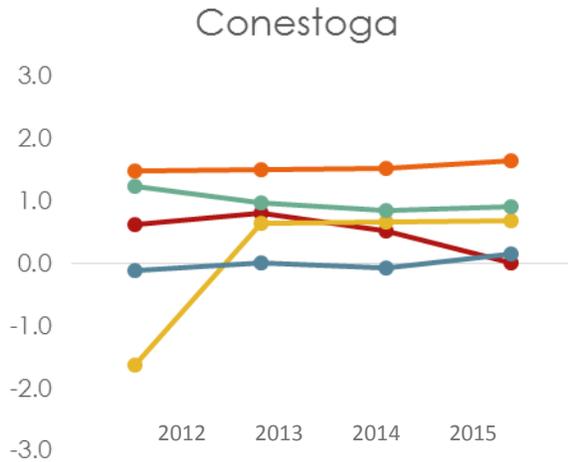
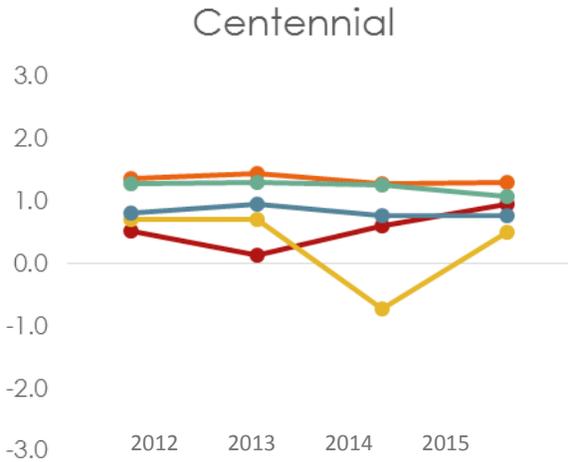
Legend:

- Quick Ratio
- Debt to Assets Ratio
- Debt Servicing Ratio
- Net Assets to Expense Ratio
- Net Income to Revenues Ratio
- Benchmark
- Accumulated Surplus (Deficit) & Annual Surplus (Deficit) both below \$0

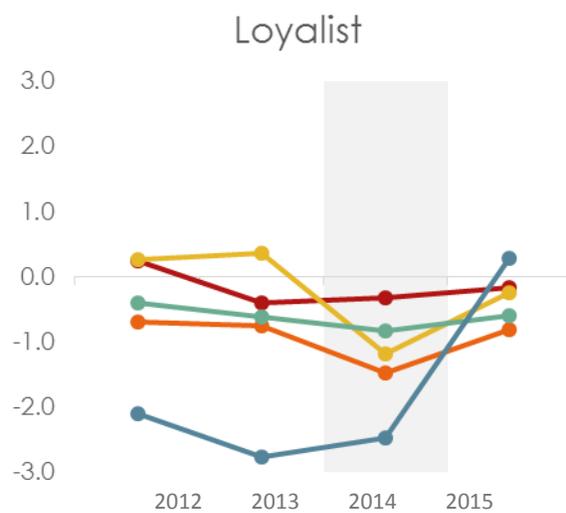
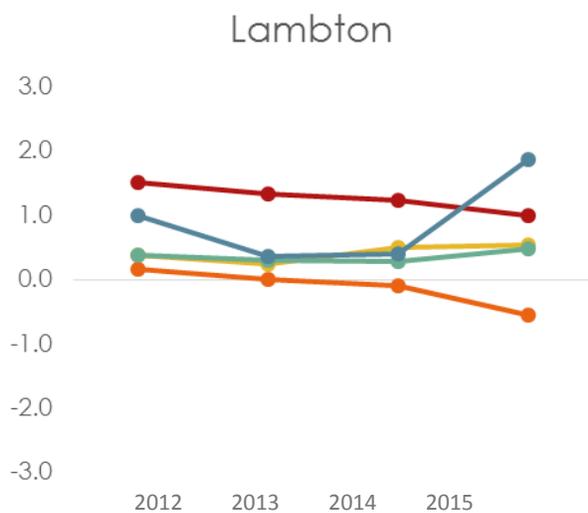
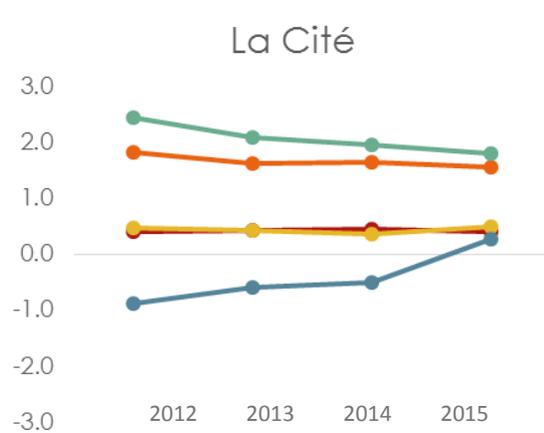
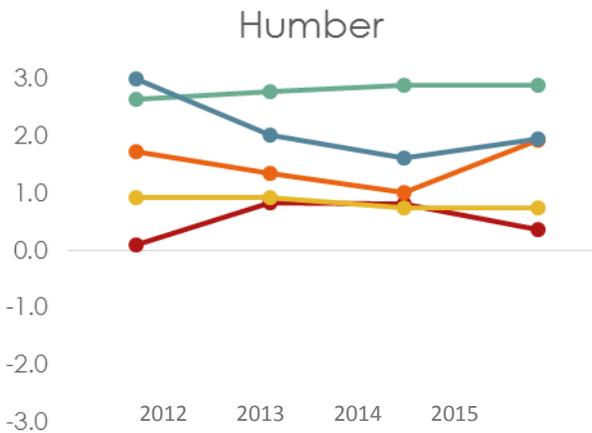
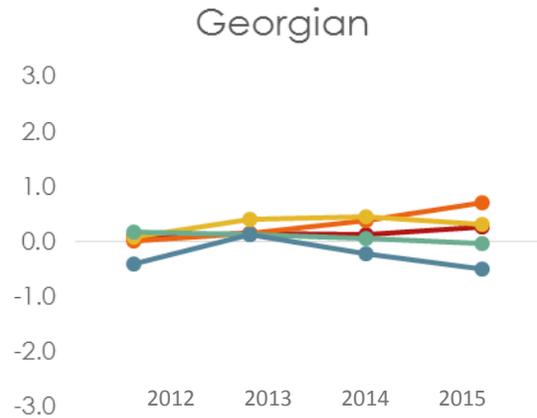
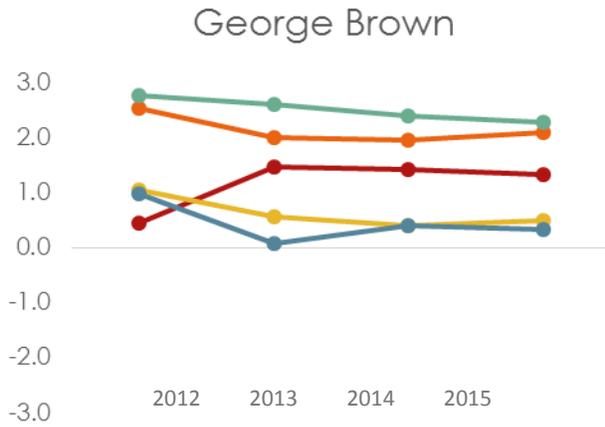
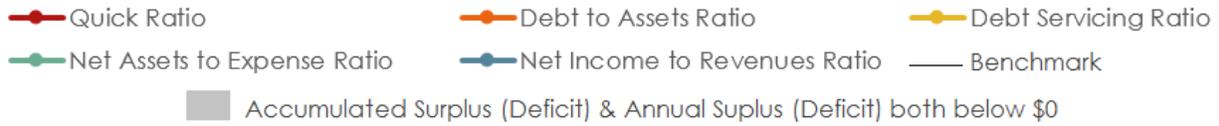


Legend:

- Quick Ratio
- Debt to Assets Ratio
- Debt Servicing Ratio
- Net Assets to Expense Ratio
- Net Income to Revenues Ratio
- Benchmark
- Accumulated Surplus (Deficit) & Annual Surplus (Deficit) both below \$0

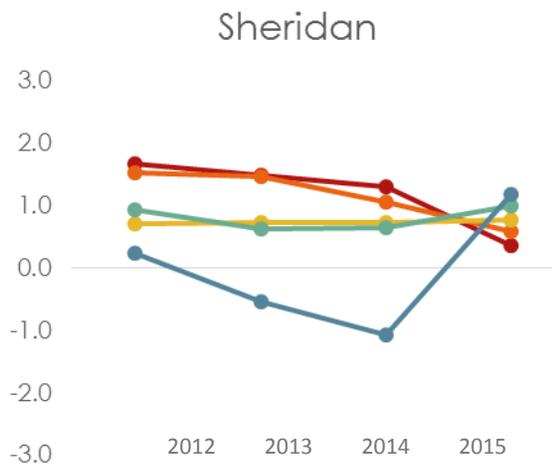
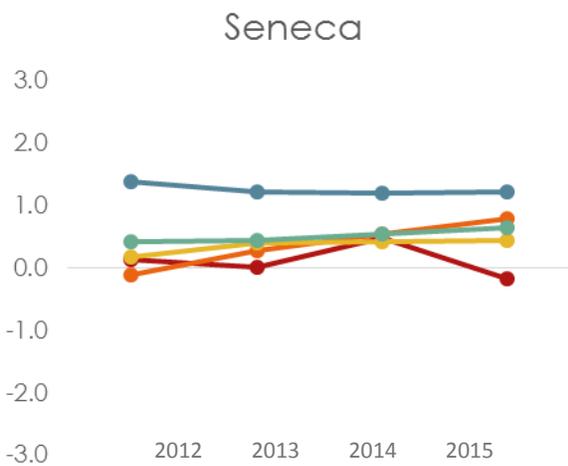
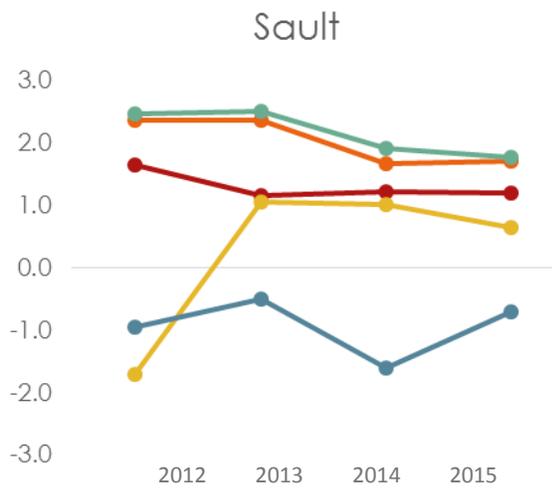
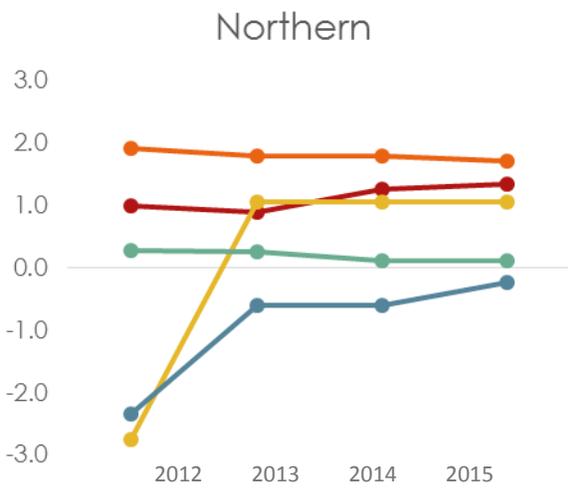
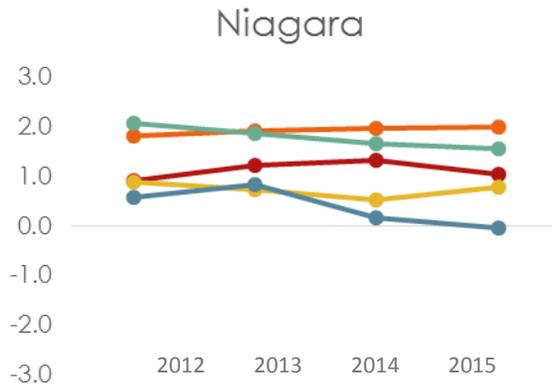
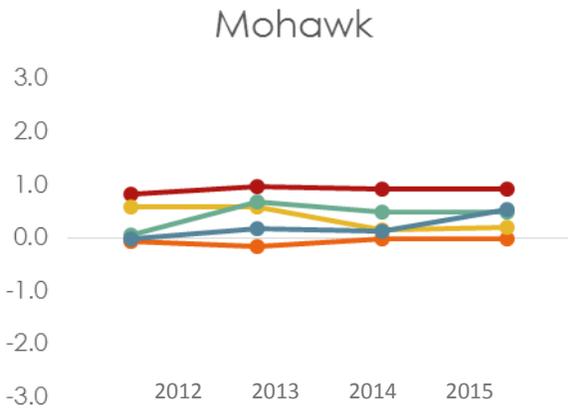


Legend:

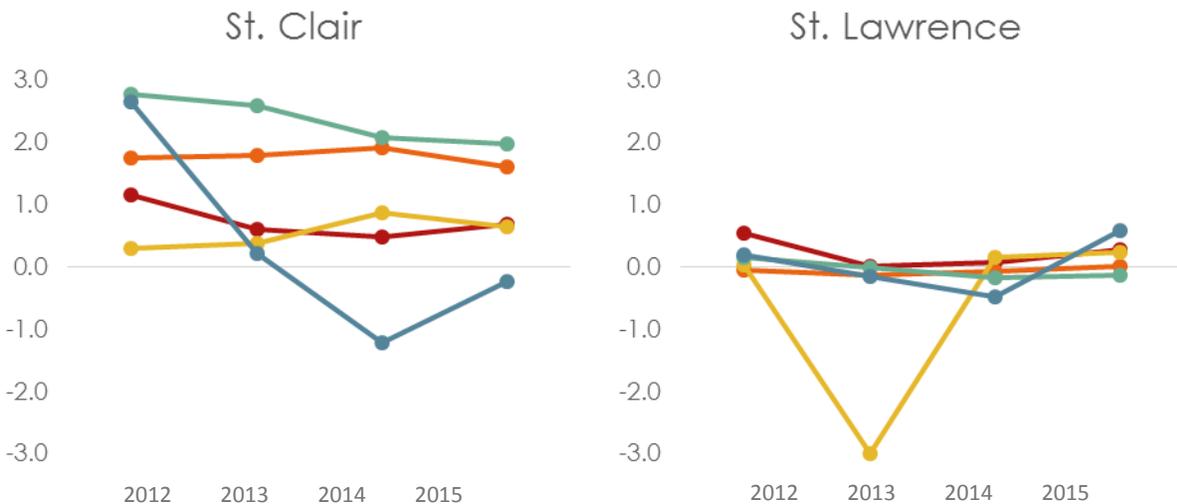
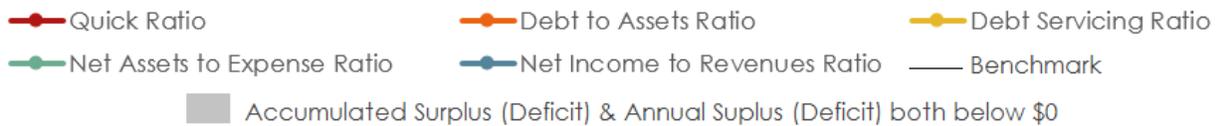


Legend:

- Quick Ratio
- Debt to Assets Ratio
- Debt Servicing Ratio
- Net Assets to Expense Ratio
- Net Income to Revenues Ratio
- Benchmark
- Accumulated Surplus (Deficit) & Annual Surplus (Deficit) both below \$0



Legend:



Source: MAESD; HEQCO analysis

Additional Notes:

To visually overlay the indicators, five of the financial health ratios (quick ratio, debt to assets ratio, debt servicing ratio, net assets to expense ratio and net income to revenues ratio) have been standardized to have a mean of 0, representing the sector average, and a standard deviation of 1. The values were then adjusted linearly so that the benchmark for each indicator is represented by the 0 line.

The standardized scores reflect the number of standard deviations each institution is above (if positive) or below (if negative) the sector benchmark. Two financial health ratios — the debt to assets ratio and the debt servicing ratio — have been inverted to be consistent with the other ratios so that a higher value reflects better financial health.

For all five indicators, a score above 0 reflects good financial health while a score below 0 reflects poor financial health based on the benchmarks identified by the sector.

Data for scores above or below 3 have been capped. This includes the following:

- Cambrian – the debt servicing ratio for 2012
- Fanshawe – the quick ratio for 2012
- Fleming – the debt servicing ratio for 2012
- Humber – the net assets to expense ratio for 2014 and 2015 and the net income to revenues ratio for 2012
- St. Lawrence – the debt servicing ratio for 2013

The remaining two indicators (accumulated surplus and annual surplus) could not be standardized since they are expressed as a dollar amount rather than a ratio. If a college reports an annual deficit AND an accumulated deficit it must provide the ministry with a recovery plan and seek the minister’s approval of its budget. To incorporate this trigger into our above graphs, we highlighted in grey the years in which an institution reported an accumulated deficit AND annual deficit.

Financial Health Indicators Summary

For our summary table we simplify the data presented above by the following two measures. The number of financial health ratios (out of five) that:

- (1) Were above the sector benchmark.
- (2) Show an improvement over the four year period from 2012–13 to 2015–16.

We highlight the years for which an institution reported an accumulated deficit AND an annual deficit.

Table 7: Summary of Financial Health Ratios – Number of Ratios (out of 5) that:

	Are above the sector benchmark in				Have improved from 2012 to 2015
	2012-13	2013-14	2014-15	2015-16	
Algonquin	5	4	5	5	3
Boréal	4	4	4	4	2
Cambrian	4	4	4	5	4
Canadore	1	1	2	1	5
Centennial	5	5	4	5	1
Conestoga	3	5	4	5	3
Confederation	3	4	3	3	2
Durham	1	1	1	2	3
Fanshawe	5	5	5	5	1
Fleming	3	4	4	5	4
George Brown	5	5	5	5	1
Georgian	4	5	4	3	3
Humber	5	5	5	5	3
La Cité	4	4	4	5	3
Lambton	5	5	4	4	3
Loyalist	2	1	0	1	1
Mohawk	3	4	4	4	4
Niagara	5	5	5	4	2
Northern	3	4	4	4	3
Sault	3	4	4	4	2
Seneca	4	5	5	4	3
Sheridan	5	4	4	5	3
St. Clair	5	5	4	4	1
St. Lawrence	4	1	2	4	3


 Included in Summary

Summary Table

Enrolment Trends:

- **3 Year % Change in Enrolment:** This signal indicator demonstrates the percentage change in overall enrolment between 2010 and 2015. The larger the number, the more revenue generating enrolment growth took place during those three years.
- **% of International Students in 2015:** This metric indicates the overall percentage of international enrolment at each Ontario college in 2015. The larger the percentage, the more reliant the institution is upon the revenues that accompany international students.

Demographics and Demand:

- **% from Home Region:** Demonstrates the institution's reliance on local enrolment. Some sense of local context is necessary to interpret these values. For example, two colleges could draw the same percentage of enrolment locally but the one situated in a region with a projected population increase would find itself at an advantage to the one located in a region with less robust demographic projections.
- **Regional Demographic Outlook:** Using projections from the Ministry of Finance, these signal indicators show the projected percentage change in the number of 18-to-25 year-olds by college. Negative numbers in this column indicate a negative demographic outlook.
- **Applicant to Registrant Ratio:** This indicator shows the percentage of applicants that enrolled as a ratio. The higher the ratio, the more applicants there were per seat filled — this could mean that students selected away from the college or that the college had more demand than it could accommodate.

Financial Health:

- Using a series of financial health indicators and thresholds developed collaboratively between the ministry and the colleges, these metrics indicate the number of financial health ratios that have improved over the past four years and the number of ratios that exceeded the relevant college sector benchmark in 2015–16.

Summary Table: Signals of Enrolment Demand, Financial Sustainability and Expenditure Challenge

	<u>Enrolment Trends</u>		<u>Demographics & Demand</u>			<u>Financial Health</u> (out of 5)	
	3 year % change in enrolment	% International in 2015	% Ontarians from home region	Projected demographic change to 2035	A:R Ratio	# above relevant benchmark	# show an improvement over 4 years
Algonquin	7%	6%	83%	-6%	2:1	5	3
Boréal	-6%	2%	76%	-6%	2:1	4	2
Cambrian	24%	33%	67%	-6%	3:1	5	4
Canadore	5%	13%	71%	-14%	2:1	1	5
Centennial	11%	33%	96%	10%	4:1	5	1
Conestoga	9%	8%	76%	-6%	3:1	5	3
Confederation	6%	11%	91%	-18%	2:1	3	2
Durham	16%	4%	81%	7%	2:1	2	3
Fanshawe	6%	10%	66%	-7%	2:1	5	1
Fleming	2%	6%	45%	-2%	3:1	5	4
George Brown	18%	12%	90%	9%	3:1	5	1
Georgian	-1%	8%	63%	-4%	3:1	3	3
Humber	4%	12%	88%	9%	3:1	5	3
La Cité	-4%	4%	93%	-6%	2:1	5	3
Lambton	-2%	18%	92%	-8%	3:1	4	3
Loyalist	-1%	2%	70%	-4%	3:1	1	1
Mohawk	11%	10%	76%	-4%	3:1	4	4
Niagara	5%	17%	n/a	n/a	3:1	4	2
Northern	-4%	2%	67%	-14%	3:1	4	3
Sault	-2%	3%	72%	-14%	2:1	4	2
Seneca	8%	18%	90%	9%	3:1	4	3
Sheridan	6%	19%	58%	7%	3:1	5	3
St. Clair	6%	8%	91%	-9%	2:1	4	1
St. Lawrence	11%	12%	75%	-4%	3:1	4	3

Next Steps

As indicated in the introduction, we have undertaken this exercise to provide the government and Ontario colleges with a series of indicators — we believe they are drivers, not just descriptors — of sustainability. It is not our role to rank or label individual colleges and we urge readers to refrain from using this analysis to do so. Our responsibility, as we see it, is to respond to the shared sense of threat and challenge throughout the postsecondary education system about not only financial sustainability, but the impact on academic quality and the student experience. The sector itself is highly motivated to be part of the dialogue. A report by PwC developed in collaboration with Colleges Ontario presents a series of models that project the future position of Ontario’s public colleges in terms of financial sustainability. *Fiscal Sustainability of Ontario Colleges* (PwC, 2017) raises warnings about revenues, which are increasing slower than inflation, and a substantial backlog of deferred maintenance. As we have discussed here, financial sustainability is an essential component, but only part of the picture.

Our goal in pulling together these signal indicators on sustainability is to kick off and inform a conversation with colleges and government about the pressures institutions face, the strategies they are using to meet them and the tools they need from government to do so.

References

Colleges Ontario. (2016). *Student and Graduate Profiles: Environmental Scan 2016*. Retrieved from http://www.collegesontario.org/research/2016_Environmental_Scan/CO_EnvScan_2016_PROFILES_WEB.pdf

Government of Ontario. (2002). *Ontario Colleges of Applied Arts and Technology Act 2002, S.O. 2002*. Retrieved from <https://www.ontario.ca/laws/statute/02o08f>

Higher Education Quality Council of Ontario. (2013). *Performance Indicators: A report on where we are and where we are going*. Toronto: Higher Education Quality Council of Ontario. Retrieved from http://www.heqco.ca/SiteCollectionDocuments/Performance_Indicators_ENG.PDF

Ontario Ministry of Advanced Education and Skills Development. (2003). *Minister's Binding Policy Directive: Tuition and Ancillary Fees*. Colleges of Applied Arts and Technology Policy Framework. Rev. December 2013. Retrieved from <http://www.tcu.gov.on.ca/pepg/documents/TuitionandAncillaryFees.pdf>

Ontario Ministry of Advanced Education and Skills Development (2003). *Minister's Binding Policy Directive: Tuition and Ancillary Fees Reporting*. Colleges of Applied Arts and Technology Policy Framework. Rev. September 1, 2012. Retrieved from <http://www.tcu.gov.on.ca/pepg/documents/TuitionandAncillaryFeesReporting2012.pdf>

Ontario Ministry of Advanced Education and Skills Development. (2015). *College Financial Sustainability Metrics*.

Ontario Ministry of Advanced Education and Skills Development. (2015). *International Student Recovery Reporting Guidelines and Principles*.

Ontario Ministry of Advanced Education and Skills Development. (2016) *College Funding Model Consultation Paper*. Retrieved from http://www.tcu.gov.on.ca/pepg/audiences/colleges/cff/college_funding_model_consultation_en.pdf

Pricewaterhouse Coopers. (2017). *Fiscal Sustainability of Ontario Colleges*. Retrieved from <http://collegesontario.org/policy-positions/position-papers/Fiscal%20Sustainability%20of%20Ontario%20Colleges%20Final%2004.01.16.pdf>

Weingarten, H.P., Hicks, M., Jonker, L., and Moran, G. (2017). *University Sustainability: Signal Data*. Toronto: Higher Education Quality Council of Ontario. <http://www.heqco.ca/SiteCollectionDocuments/University%20Sustainability%20FINAL.pdf>

Weingarten, H. P., Hicks, M. & Moran, G. (2016). *Understanding the Sustainability of the Ontario Postsecondary System and its Institutions: A Framework*. Toronto: Higher Education Quality Council of Ontario. <http://www.heqco.ca/SiteCollectionDocuments/Report%20-%20Understanding%20the%20Sustainability%20of%20the%20Ontario%20Postsecondary%20System.pdf>

APPENDIX A: Three Year Enrolment Trends – Additional Detail

Table A1 shows a breakdown of the overall three year enrolment trends shown in Table 1 for domestic and international students. The totals shown in Table A1 are the same as the total enrolments shown in Table 1.

Table A1: Domestic vs. International FTE Enrolment Trends from 2012-13 to 2015-16

	<u>Domestic</u>			<u>International</u>			<u>Total</u>		
	2012-13	2015-16	3 year % change	2012-13	2015-16	3 year % change	2012-13	2015-16	3 year % change
Algonquin	18,783	19,573	4%	789	1,282	62%	19,572	20,855	7%
Boréal	1,696	1,573	-7%	15	28	87%	1,711	1,601	-6%
Cambrian	3,522	3,528	0%	693	1,719	148%	4,215	5,247	24%
Canadore	2,656	2,545	-4%	118	377	219%	2,774	2,922	5%
Centennial	11,032	10,731	-3%	3,444	5,296	54%	14,476	16,027	11%
Conestoga	10,279	11,145	8%	783	933	19%	11,062	12,078	9%
Confederation	3,121	3,050	-2%	93	362	289%	3,214	3,412	6%
Durham	9,638	11,065	15%	297	497	67%	9,935	11,562	16%
Fanshawe	13,726	14,030	2%	1,022	1,619	58%	14,748	15,649	6%
Fleming	6,621	6,558	-1%	211	435	106%	6,832	6,993	2%
George Brown	18,928	21,503	14%	1,945	3,042	56%	20,873	24,545	18%
Georgian	10,249	9,805	-4%	441	815	85%	10,690	10,620	-1%
Humber	21,735	22,491	3%	2,979	3,197	7%	24,714	25,688	4%
La Cité	4,809	4,491	-7%	78	201	158%	4,887	4,692	-4%
Lambton	2,901	2,604	-10%	320	556	74%	3,221	3,160	-2%
Loyalist	3,253	3,225	-1%	73	70	-4%	3,326	3,295	-1%
Mohawk	11,692	12,676	8%	932	1,391	49%	12,624	14,067	11%
Niagara	8,401	8,156	-3%	987	1,727	75%	9,388	9,883	5%
Northern	1,173	1,110	-5%	5	24	380%	1,178	1,134	-4%
Sault	2,288	2,191	-4%	7	63	800%	2,295	2,254	-2%
Seneca	21,262	21,109	-1%	2,563	4,546	77%	23,825	25,655	8%
Sheridan	16,871	16,453	-2%	2,274	3,928	73%	19,145	20,381	6%
St. Clair	8,198	8,265	1%	229	684	199%	8,427	8,949	6%
St. Lawrence	5,394	5,384	0%	120	734	512%	5,514	6,118	11%
System	218,229	223,261	2%	20,418	33,526	64%	238,647	256,787	8%

Source: MAESD. Enrolments include full-time and part-time FTEs for funded students and full-time headcounts for international students

APPENDIX B: Demographic Outlook – Additional Detail

The following table presents an overview of the five geographic regions presented in Figure 2 of this report. It shows the colleges that are located (main campus) within each region and the counties that make up each region.

Table B1: Overview of Ontario’s Regions

Region	Toronto + GTA	Central	East	Southwest	North
Colleges	Centennial	Conestoga	Algonquin	Fanshawe	Boréal
	Durham	Georgian	La Cité	Lambton	Cambrian
	George Brown	Mohawk	Loyalist	St. Clair	Canadore
	Humber	Niagara	St. Lawrence		Confederation
	Seneca	Fleming			Northern
	Sheridan				Sault
Counties	Toronto	Brant	Ottawa	Bruce	Algoma
	Durham	Dufferin	Frontenac	Elgin	Cochrane
	Halton	Haldimand-Norfolk	Hastings	Essex	Kenora
	Peel	Haliburton	Lanark	Grey	Manitoulin
	York	Hamilton	Leeds and Greenville	Huron	Nipissing
		Muskoka	Lennox and Addington	Chatham-Kent	Parry Sound
		Niagara	Prescott and Russell	Lambton	Rainy River
		Northumberland	Prince Edward	Middlesex	Greater Sudbury
		Peterborough	Renfrew	Oxford	Sudbury
		Simcoe	Stormont, Dundas and Glengarry	Perth	Thunder Bay
		Kawartha Lakes			Timiskaming
		Waterloo			
		Wellington			

To derive the institution-specific demographic projections shown in Figures 3.1 to 3.24 we first calculated the year-to-year growth rate for each of the five regions identified from the Ministry of Finance’s population projections for 18-to-25 year-olds. These growth rates by region were then applied to first-year enrolment counts at each college, in proportion to the percentage of incoming students by region of origin. The projected counts were then aggregated for each year for each institution.

Colleges routinely collect and report postal code information as part of their enrolment reporting to MAESD. The region a student comes from was established by matching the first three characters of their postal code (known as the Forward Sortation Area, FSA) to Statistics Canada’s National Household Survey

(NHS). There is a small percentage of Ontario students for whom the FSA was either not formatted properly or not found in Statistics Canada’s NHS. They represent just over 3% of Ontario first-year college students (with the majority, 97%, from Niagara). These students were excluded from the analysis.

The results are based on student headcounts for the fall term only for 2015–16. College satellite campuses and affiliates are included.

Table B2 shows the distribution of Ontario first-year undergraduate students at each college, by region of origin.

Table B2: Percentage of Ontario First-Year College Students by Region, 2015–16

	Demographic Region in Ontario				
	Toronto + GTA	Central	Eastern	South-west	North
Algonquin	5%	6%	83%	2%	3%
Boréal	15%	5%	14%	5%	62%
Cambrian	27%	7%	3%	4%	59%
Canadore	10%	12%	8%	4%	67%
Centennial	96%	2%	1%	0%	0%
Conestoga	10%	76%	1%	11%	1%
Confederation	3%	3%	1%	1%	91%
Durham	81%	11%	5%	2%	1%
Fanshawe	15%	16%	1%	66%	2%
Fleming	31%	45%	14%	6%	4%
George Brown	90%	6%	1%	2%	0%
Georgian	24%	58%	3%	12%	3%
Humber	88%	8%	2%	2%	1%
La Cité	1%	1%	93%	1%	3%
Lambton	13%	4%	1%	82%	0%
Loyalist	12%	14%	71%	2%	1%
Mohawk	20%	76%	0%	3%	1%
Northern	11%	11%	5%	7%	67%
Sault	10%	11%	2%	5%	72%
Seneca	90%	6%	1%	2%	1%
Sheridan	80%	15%	2%	3%	0%
St. Clair	8%	3%	1%	87%	1%
St. Lawrence	14%	7%	75%	2%	1%

Source: MAESD.

Note: Niagara did not report complete FSA records to MAESD and is therefore not included in the above table.

APPENDIX C: Financial Health Indicators — Additional Detail

The following table presents the four years of financial health indicators data that were used to construct Figures 4.1 to 4.24. Indicators that are below the sector benchmark have been highlighted. For most of the indicators (with the exception of the debt to assets ratio and debt servicing ratio) a higher ratio indicates a higher level of financial health.

Table C1: Financial Health Indicators from 2012–13 to 2015–16

	Quick Ratio				Debt to Assets				Debt Servicing				Net Assets to Expense			
	12-13	13-14	14-15	15-16	12-13	13-14	14-15	15-16	12-13	13-14	14-15	15-16	12-13	13-14	14-15	15-16
Algonquin	2.21	2.21	2.08	2.39	28%	26%	26%	26%	2%	4%	2%	2%	94%	92%	91%	88%
Boreal	2.47	2.56	2.57	2.74	21%	21%	22%	21%	1%	1%	1%	1%	129%	120%	114%	110%
Cambrian	2.77	2.31	2.71	2.87	35%	35%	34%	33%	12%	3%	3%	3%	74%	71%	68%	68%
Canadore	0.57	0.53	0.81	0.80	38%	40%	39%	38%	8%	4%	3%	3%	66%	69%	72%	70%
Centennial	1.58	1.16	1.67	2.08	22%	21%	23%	23%	1%	1%	5%	2%	95%	95%	94%	89%
Conestoga	1.71	1.92	1.60	1.02	21%	21%	21%	19%	8%	1%	1%	1%	94%	86%	83%	85%
Confederation	2.19	1.76	1.82	1.76	19%	22%	21%	24%	5%	1%	1%	1%	63%	67%	58%	59%
Durham	0.29	0.21	0.23	0.30	50%	48%	47%	44%	3%	7%	4%	4%	74%	68%	64%	65%
Fanshawe	4.60	3.87	2.43	1.72	19%	19%	18%	19%	2%	2%	2%	2%	125%	124%	120%	118%
Fleming	1.47	1.35	1.25	1.34	35%	32%	29%	27%	18%	2%	2%	1%	68%	81%	80%	81%
G. Brown	1.50	2.64	2.57	2.46	11%	16%	17%	15%	0%	1%	2%	2%	134%	130%	124%	121%
Georgian	1.10	1.17	1.16	1.30	35%	34%	31%	28%	3%	2%	2%	2%	65%	64%	62%	59%
Humber	1.12	1.93	1.90	1.41	19%	22%	26%	17%	0%	0%	1%	1%	131%	135%	149%	151%
La Cite	1.45	1.48	1.50	1.45	18%	20%	20%	20%	2%	2%	2%	2%	125%	116%	112%	108%
Lambton	2.67	2.47	2.37	2.10	33%	35%	36%	40%	2%	2%	2%	1%	70%	68%	67%	73%
Loyalist	1.28	0.57	0.64	0.81	41%	42%	49%	42%	2%	2%	6%	4%	49%	44%	38%	44%
Mohawk	1.92	2.07	2.02	2.02	36%	37%	35%	35%	1%	1%	3%	2%	61%	78%	73%	73%
Niagara	2.04	2.36	2.47	2.16	18%	17%	17%	16%	0%	1%	1%	1%	116%	110%	104%	102%
Northern	2.12	1.99	2.40	2.51	17%	18%	18%	19%	11%	0%	0%	0%	68%	67%	63%	63%
Sault	2.84	2.30	2.36	2.34	13%	13%	19%	19%	8%	0%	0%	1%	127%	127%	112%	108%
Seneca	1.16	1.03	1.55	0.82	36%	32%	30%	28%	2%	2%	2%	2%	72%	72%	75%	78%
Sheridan	2.86	2.67	2.46	1.40	21%	21%	25%	30%	1%	1%	1%	1%	85%	77%	78%	87%
St. Clair	2.29	1.69	1.55	1.77	19%	18%	17%	20%	2%	2%	1%	1%	134%	130%	116%	113%
Lawrence	1.61	1.02	1.10	1.31	35%	36%	36%	35%	3%	12%	3%	2%	64%	60%	56%	57%
Benchmark	> 1.0				< 35%				< 3%				> 60%			

Table C1 (Continued): Financial Health Indicators from 2012–13 to 2015–16

	Net Income to Revenues				Accumulated Surplus (\$millions)				Annual Surplus (\$millions)			
	12-13	13-14	14-15	15-16	12-13	13-14	14-15	15-16	12-13	13-14	14-15	15-16
Algonquin	2%	3%	4%	4%	82.7	89.9	103.0	114.7	6.1	7.2	13.1	11.7
Boréal	0%	1%	1%	0%	22.3	22.8	22.8	22.8	0.2	0.5	0.8	0.1
Cambrian	2%	2%	0%	2%	12.3	13.5	13.5	15.1	1.6	1.2	0.3	1.8
Canadore	0%	0%	1%	1%	-3.9	-2.8	-2.2	-1.9	-0.3	0.0	0.6	0.3
Centennial	4%	4%	4%	4%	61.6	71.8	81.1	91.0	8.9	10.2	9.2	9.9
Conestoga	1%	2%	1%	2%	23.0	25.8	28.3	32.2	2.0	2.7	2.5	4.0
Confederation	-5%	0%	-2%	1%	4.8	5.2	3.9	5.3	-3.8	-0.3	-1.3	1.0
Durham	0%	1%	0%	4%	-0.6	0.2	0.7	6.5	0.3	0.8	0.5	5.8
Fanshawe	6%	3%	2%	2%	114.6	121.5	126.9	130.6	12.5	6.8	5.4	3.7
Fleming	1%	0%	0%	3%	4.6	4.7	5.0	7.7	1.2	0.1	0.3	2.7
George Brown	4%	2%	3%	2%	159.6	164.8	173.4	181.7	12.8	5.2	8.6	8.3
Georgian	0%	2%	1%	0%	3.0	6.4	8.0	8.0	0.6	3.5	1.6	0.2
Humber	12%	8%	6%	7%	297.3	326.2	350.7	380.4	43.6	28.9	24.5	29.7
La Cité	-1%	0%	0%	2%	21.2	20.9	21.0	23.2	-1.0	-0.2	0.0	2.2
Lambton	4%	3%	3%	7%	14.4	16.1	17.9	23.1	2.9	1.7	1.8	5.2
Loyalist	-5%	-7%	-6%	2%	2.5	0.0	-4.1	-2.7	-2.9	-4.1	-3.6	1.4
Mohawk	1%	2%	2%	3%	27.8	31.6	35.3	41.7	2.6	3.8	3.7	6.3
Niagara	3%	4%	2%	1%	38.2	43.9	46.8	49.0	4.3	5.7	2.9	2.2
Northern	-5%	0%	0%	1%	4.7	4.6	4.3	4.4	-2.3	-0.1	-0.1	0.3
Sault	-1%	0%	-3%	-1%	15.7	14.0	12.1	11.6	-0.7	0.0	-1.8	-0.3
Seneca	6%	5%	5%	5%	119.8	141.3	159.6	178.6	18.8	18.2	18.2	19.1
Sheridan	2%	0%	-2%	5%	107.1	106.9	102.2	118.0	5.6	-0.2	-4.7	15.7
St. Clair	9%	2%	-2%	1%	30.3	33.0	30.3	30.9	11.6	2.6	-2.6	1.0
St. Lawrence	2%	1%	0%	3%	15.8	17.0	17.0	20.5	2.1	1.1	0.1	3.4
Benchmark	> 1.5%				> \$0				> \$0			