

TORONTO ELECTION 2010:

Discussion Paper #4 — September 2010

Toronto in the Creative Age





TORONTO IN THE CREATIVE AGE

In February 2009, Roger Martin and Richard Florida released Ontario in the Creative Age in response to a request made by Premier Dalton McGuinty. Together with a team of over twenty researchers, the two academics undertook a study of the changing composition of Ontario's economy to provide recommendations on how to remain prosperous and globally competitive.

True to its name, this document aims to do something similar for the city of Toronto. Toronto in the Creative Age is a more modest enterprise, building on data collected for the larger project and adapting some of its recommendations to a local context. While Toronto has been less affected than other Great Lakes cities by recent years of economic upheaval, the upcoming municipal election makes this an important moment to consider the city's economic past and present, and to discuss what path it should take toward building a stronger future for Torontonians.

TORONTO'S ECONOMIC HISTORY

What were Toronto's origins?

Toronto today is a very different city from decades ago, but its present-day economy rests on a foundation constructed over more than two centuries.

The rise of Toronto is the story of how a few hundred years of hard work, skilled people and smart decision-making can transform a small trading outpost into one of the world's most admired cities. For centuries the site of a few small aboriginal villages, the first major wave of expansion came with the establishment of several fur trading outposts by European settlers. York was selected as capital of Upper Canada (present-day Ontario) in 1797 for its geographic assets: its safe distance from a then-unfriendly United States, its well-protected harbour, and its substantial stock of open space for development. A military garrison called Fort York was constructed, and an influx of government officials and soldiers provided the initial stimulus for the settlement's growth. Land and water transportation links improved, encouraging trade. By the time of the city's incorporation in 1834 under a new name reflecting its aboriginal origins—Toronto—it had emerged as a market centre.

How did the city's economy develop?

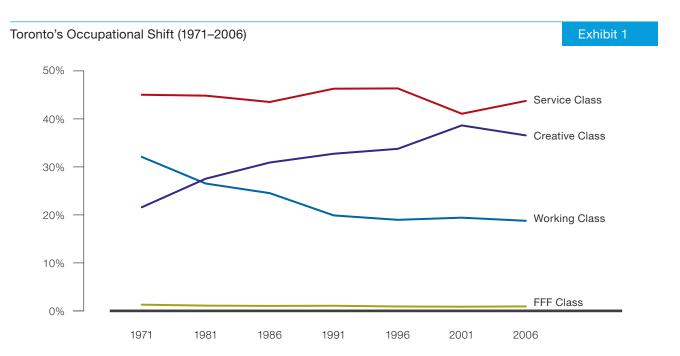
When government policy encouraged more immigration in the early 1800s, the new arrivals largely pursued agriculture and forestry. The consumer demands of a growing population led to growth in imports and exports, and infrastructure improvements in the form of the roads, ports, and canals. Early stages of industrialization and urbanization spurred growth in Toronto's retail trade and larger, more distinguished buildings began to dot the city's streets. Toronto was well-positioned to benefit from the growth of industries to the north (mining, pulp and paper) and the west (agriculture), providing them with business and professional services via the Toronto Stock Exchange (founded 1852) and the Bank of Toronto (chartered 1855). As bartering gave way to the cash economy, Timothy Eaton opened Toronto's first department store in 1869, and competitors soon followed. To manage all this growth, city government implemented what were effectively—although not in name—the first zoning by-laws by the 1860s.

Toronto was instrumental to the Canadian economic boom of the early twentieth century. The spread of agriculture across the prairies fueled growth in metals and manufacturing as Toronto supplied the West with farm equipment, clothing and processed food. As the city's commercial prominence rose, the head offices of many businesses migrated to Toronto's central business district along King Street. Just north of King, department stores like Eaton's and Simpsons grew. By the end of the depression, housing and sanitation standards had improved significantly and Toronto increasingly took on the character of a large, "modern" city.

What made the Toronto we see today?

After World War II, mortgage guarantees and massive infrastructure spending fueled suburban development. Toronto gained a controlled-access highway system, a small airstrip was expanded into an international airport, and its first subway line was constructed then quickly expanded into a nearly city-wide system. Between 1963 and 1991, Greater Toronto's population grew by 132.2%, to 4.2 million people. Toronto's demographics were also changing. By the 1980s, 71% of immigrants were arriving from non-European countries. In 1998, the central city amalgamated with its inner suburbs and chose a new motto: "Diversity our Strength".

The nature of the city's economic focus began to shift in time with post-war deindustrialization. Mirroring the inexorable shift occurring across all developed economies, Toronto's occupational mix shifted sharply from working class jobs (which draw on physical labour and produce physical goods) to jobs that are—in the broadest sense—creative, rewarding workers for their cognitive skills and problem-solving abilities. Working class jobs still play a prominent role in manufacturing-driven suburbs of the Greater Toronto Area like Oshawa and Brampton, but they make up a much smaller share of the Toronto economy than they did in the mid-1900s.



Source: Statistics Canada. 1971- 2006. 1971-2006 Census of Canada (Master Files). Statistics Canada (producer). Using Statistics Canada Head Office (distributor). Spring 2009. Analysis by Karen King.

For full definitions of each class see: martinprosperity.org/terminology

Quebec's Quiet Revolution and other factors spurred banks to shift their executive functions from Montreal to Toronto in the 1960s and 70s, and the city's traditionally strong financial services industry become even more dominant. Rapid growth of the Canadian media and television industries was heavily concentrated in Toronto, and the film industry also grew as the city stood in for other, more expensive locations like New York and Chicago. Information technology and communications firms also began to multiply during the 1990s. Between 1991 and 2004, creative occupations grew at more than three times the rate of the total Toronto-area labour force, at a compound annual growth rate of 6 percent.

ANALYZING TORONTO: A THREE Ts APPROACH

The three Ts approach to regional development finds that the presence of three factors—technology, talent, and tolerance – drives economic growth in contemporary cities. A city with substantial and balanced performance across all three measures is likely to experience prosperity. Poor performance on any one of the three Ts hinders a city and its surrounding region, as all three are important conditions for growth in the developed world.

In this section, Toronto's performance on the three Ts is compared with 10 peer cities in the United States and Canada. Peer cities were chosen based on population size, geographic location, and importance to the North American economic system. Each peer is a global city-region, and defined by its entire metropolitan area of integrated economic activity rather than just the core city. Each overall ranking is calculated based on rank score within the full set of 374 Canadian and US cities. For an expanded version of this analysis, see Toronto's Performance on the Three Ts of Economic Development.

Talent

Talent—in the form of skilled and educated workers—is essential to building a productive and innovative economy. Evidenced-based work from economists like Jacob Mincer, Gary Becker and Edward Glaeser shows that returns to higher education are substantial and increasing in the modern economy, and that places with significant concentrations of highly educated people tend to attract even more educated people, creating a virtuous circle of skills and learning. Richard Florida and Kevin Stolarick's creative class approach looks past credentials to measure what people do instead of what they are taught, but it also finds a powerful connection between cognitive and creative skills and wage growth.

There is evidence of growing demand for greater education and skills in the labour market as well: in his 2005 report Ontario: A Leader in Learning, Bob Rae predicts that "up to 70 percent of future jobs created in Canada will require some post-secondary education".

Toronto places third in the overall talent ranking, led by its strength in creative class share. In fact, creative class share was the sole factor used to compute the overall talent ranking here, due to its high

Exhibit 2 Talent Ranking

Overall Talent Ranking		Creative Class	Bachelor's Degrees	Graduate Degrees	Talent Index	Brain Drain/ Brain Gain
1	Boston, MA	40.6%	23.0%	17.6%	40.6%	1.35
2	New York, NY	34.5%	20.4%	14.1%	34.5%	1.40
3	Toronto, ON	34.3%	18.4%	11.6%	29.9%	2.20
4	Seattle, WA	33.6%	23.5%	12.6%	36.1%	1.69
5	Vancouver, BC	33.1%	17.3%	10.3%	27.4%	1.69
6	Atlanta, GA	33.1%	22.2%	11.1%	33.3%	1.73
7	Los Angeles, CA	32.8%	19.4%	10.0%	29.3%	1.15
8	Montréal, QC	32.8%	14.6%	8.8%	23.2%	1.16
9	Chicago, IL	31.9%	19.7%	12.0%	31.6%	1.36
10	Dallas, TX	31.8%	20.1%	9.3%	29.4%	1.59
11	Detroit, MI	30.4%	16.3%	9.9%	26.3%	1.10

Source: Toronto's Performance on the Three Ts of Economic Development, Martin Prosperity Institute.

correlation with the other listed measures. Placing behind only Boston, a global centre for higher education, and New York, the headquarters of the American finance, media, and apparel industries, is a good showing for a city that only became a major North American centre in the post-war period.

But one trait of the most socioeconomically successful cities is that they are always hungry to improve, so the next section will focus on one of Toronto's lowest scores. Toronto ranked sixth on the Talent Index, with only 29.9% of its population over 25 years old possessing a bachelor's or graduate degree. This is an interesting contrast with Toronto's first-place ranking on the Brain Drain/Gain Index. The BGDI is calculated by dividing the percent of the population age 25 and over with bachelor's degree or above by the percent of the population ages 18-34 currently in college or university. Toronto's high score means that while the region is doing a better job than competitors at attracting university-educated people, its total stock of degree holders is just average.

These measures suggest that Toronto attracts more talent than it develops. This is not necessarily a bad thing: a city's ability to attract highly skilled people from around the world is clearly a strength. Toronto's high score on the BGDI is likely also related to the ring of universities that surrounds the Greater Toronto Area, from Brock to McMaster to Waterloo to Trent to Queen's (with several more in between). They produce graduates who move to the big city for its culture, amenities, and high-paying jobs, leading to a brain gain for Toronto. But educating more students right here in Toronto would increase the likelihood that they develop connections to the city and stay.

The city of Toronto itself houses four major universities: the University of Toronto (including its Scarborough campus), York University, Ryerson University and OCAD University. The latter three all attained university status only in the post-war period, and all four have seen significant growth in recent decades. Each one now offers not only undergraduate degrees, but also more specialized graduate programs that allow students to work closely with professors on advanced research and projects. The broader GTA also houses two additional university campuses (U of T's Mississauga campus and the University of Ontario Institute of Technology) and six publicly-funded community colleges.

Post-secondary education is largely a provincial matter in Canada, with additional funding coming from the federal government. But while the city of Toronto will never be a major funder of education, it does play a role in cultivating an environment that encourages education and skills upgrading and the attraction of talent from elsewhere. Toronto's Agenda for Prosperity (2008), the city's key economic vision document, includes "educational attainment and post-secondary education enrolment" as one of its pillars of prosperity. But while university and college officials do advise the city on various matters, there is no advisory body or committee that directly connects city officials to the heads of its top academic and research institutions.

Even city decisions that appear to have little to do with higher education can have significant impacts. For example, the decision to extend the Spadina subway branch northward will, in late 2015, create a direct rapid link between all four of Toronto's universities. While the subway connection is unlikely to have a transformative effect, it will make it incrementally easier for students to mix and match classes across schools, for professors to balance joint appointments, and for researchers to share ideas and collaborate face-to-face.

Technology

Technology is an impetus for productivity improvements and a large industry unto itself. Technologically advanced cities are more likely to experience sustained economic growth.

Toronto ranks last (11th overall) on the Overall Technology Ranking, largely due to the city's extremely low scores on patent-related measures. Toronto's poor performance in patent growth is particularly worrying, as it suggests Toronto is falling even further behind its peers.

Of course, patent growth isn't everything. Toronto excels in many industries and occupations that are not patent-intensive. Food processing and film, television and new media production are all industries where Toronto's economy is strongly represented and patenting is not a common way of protecting intellectual property.

But patenting is important in many high-productivity, high-growth and high-wage industries like information and communication technologies (ICT) and pharma/biotech. Toronto's fourthplace ranking on the North American Tech-Pole Index—which measures concentration of high-tech employment—suggests it is underperforming in patents relative to its high-tech job share.

Exhibit 3 **Technology Ranking**

Overall Technology Ranking		North American Tech-Pole	Patent Count	Patent Growth
1	Seattle, WA	4.44	1,713	5.5%
2	Los Angeles, CA	8.53	5,298	0.4%
3	Vancouver, BC	1.47	418	0.8%
4	Atlanta, GA	1.23	993	-0.4%
5	Boston, MA	3.45	2,711	-1.1%
6	Detroit, MI	1.20	2,022	-0.9%
7	Montréal, QC	3.28	378	-1.5%
8	Dallas, TX	2.61	1,710	-4.1%
9	Chicago, IL	1.28	2,267	-6.1%
10	New York, NY	4.99	4,062	-6.9%
11	Toronto, ON	3.70	555	-8.3%

Source: Toronto's Performance on the Three Ts of Economic Development, Martin Prosperity Institute.

While much of the work of encouraging technology-related enterprise is the responsibility of the provincial and national governments, there is evidence that city government activity can make a difference to the location of high-tech industries as well.

Marketing initiatives like Business Connect and Invest Toronto are good vehicles for promoting the breadth of economic development programs the city has to offer. Initiatives like the City of Toronto's Imagination, Manufacturing, Innovation, Technology (IMIT) grants benefit larger companies with the resources to construct their own buildings. The city has less to offer to early-stage start-ups—the smart, driven dreamers with big ideas but less money in the bank—although citysupported initiative like MaRS help to fill this gap. The ICT Toronto report (2006) points out that because Toronto investment firms tend to be large, start-up entrepreneurs seeking smaller levels of financing are often ignored by firms looking for larger-scale deals in more established industries.

Innovation happens in networks—of individuals, of institutions and of companies—and these networks do not end at the municipal boundaries. The Toronto Region Research Alliance is assigned the task of strengthening these connections across the Greater Toronto Area and beyond. This is a worthwhile pursuit, although it is worth noting that in the late 1970s competition between Boston's Route 128 and Silicon Valley, the formation of a regional body—the Massachusetts High Technology Council failed to spur Boston to leapfrog the decentralized but more culturally-driven Silicon Valley model.

Jurisdictions worldwide compete fiercely to develop technology clusters, and any progress Toronto makes will be incremental and hard-won. Maintaining the status quo would only mean falling behind.

Tolerance

Working with a large dataset, a Martin Prosperity Institute team using an advanced statistical model found that across seven major factors, the greatest impact on regional economic development comes from two: tolerance and talent. With greater diversity and openness—or tolerance, as we call it—a city is more likely to attract talented individuals from elsewhere. A diverse population acts as a signal of the ability of a region to attract and retain the immigrants who expand its talent pool. It also leads to a broader range of skills, creative ideas and approaches to problem solving. Dispersing and integrating various ethnic groups across different neighbourhoods to a certain degree is a good way to encourage the flow of ideas between them.

Exhibit 4 **Tolerance Ranking**

Over Tole	rall rance Ranking	Mosaic Index	Integration Index	Bohemian Index	Gay and Lesbian Index
1	Seattle, WA	15.8%	0.72	1.35	1.53
2	Montréal, QC	20.4%	0.68	1.54	1.79
3	Vancouver, BC	39.3%	0.49	1.82	1.64
4	Boston, MA	15.8%	0.63	1.28	1.24
5	Toronto, ON	45.4%	0.43	1.75	1.42
6	Los Angeles, CA	34.2%	0.29	1.81	1.33
7	New York, NY	28.2%	0.23	1.75	1.24
8	Atlanta, GA	13.0%	0.38	0.94	1.38
9	Dallas, TX	18.0%	0.43	0.79	1.17
10	Chicago, IL	17.8%	0.25	0.93	0.99
11	Detroit, MI	8.5%	0.34	0.80	0.71

Source: Toronto's Performance on the Three Ts of Economic Development, Martin Prosperity Institute.

Not surprisingly, Toronto is one of the top performers on the overall tolerance ranking. Ranked 1st on the Mosaic Index, Toronto also has the second-highest proportion of visible minorities, after Los Angeles.

Of all the tolerance measures, Toronto's lowest ranking is on the Integration Index, which measures the evenness of the distribution of ethnic groups across a city. Its score of 0.43 suggests that ethnic groups in Toronto are integrating adequately compared to the broader set of peer cities. But it is worth noting that Vancouver and Montreal—Toronto's two Canadian immigrant gateway peers—were found to have more integrated neighbourhoods.

The City of Toronto's official plan (2009) encourages diversity and equity across all neighbourhoods. It aims for "housing choices that are available for all people in their communities at all stages of their lives". It requires that "new neighbourhoods have a housing mix that contributes to the full range of housing". And it recognizes that one of the foundations of economic competitiveness is "safe, cohesive and inclusive neighbourhoods".

But there is strong evidence that long-term trends are making Toronto neighbourhoods less ethnically and socioeconomically diverse. David Hulchanski and his team's The Three Cities within Toronto report finds that between 1970 and 2000, the number of middle-income neighbourhoods in Toronto shrunk. The small cohort of the wealthiest neighbourhoods increased, as did the proportion of lowand very low-income neighbourhoods, which rose from 19% to 50% of the city. Increased ethnic polarization has accompanied this trend: the census tracts where income increased by 20% or more between 1970 and 2000 are 84% white, while the census tracts where income decreased by 20% or more are 60% visible minority.

Building healthy neighbourhoods where new immigrants live and work alongside a diverse range of Canadian-born residents is not an impossible task, and they are still a very real daily experience for many Torontonians. But the notion that the communities of Toronto have built a global champion of diversity and can rest on their laurels is a false one. Building a city of diverse, inclusive neighbourhoods takes a concerted effort and there are trends working against this goal. It is achievable, but it will be a challenge.

POLICY IDEAS

This brief has pointed to some of Toronto's strengths and weaknesses across education and skills, patents and innovation, and diversity and integration. The following ideas are some potential policy responses. As with the previous sections, they build on ideas found in *Ontario in the Creative Age*.

Thinking beyond Toronto: the region matters

Economic growth and prosperity don't occur within neatly defined boundaries. Wealth is generated across municipal boundaries and Toronto must recognize that it is part of a greater regional economic system that grows together. When Mississauga succeeds at founding and attracting new businesses and investment, Toronto firms gain a new potential customer. If job opportunities open up within commuting distance of Toronto, these vacancies may be filled by Torontonians. The reverse, of course, is also true. Business attraction is not a zero-sum game—when one city grows, every part of the region benefits from the accompanying greater talent pool, thicker labour market, heightened competition, improved productivity, and the greater scale and scope of skills and business ideas.

Given this reality, the implications for regional development soon become apparent. How is the region connected via its transportation infrastructure, what amenities do its cities possess, and does the region offer a diverse array of residential and commercial areas that offer a high quality of life? These are all important questions to ask when looking at the metropolitan area as a whole. Enhancing interaction between the region's municipalities should lead to a more competitive regional economy, and the benefits will trickle down to all cities, including Toronto. To achieve this, the City of Toronto must forge deep working relationships with partner governments and take a regional perspective that puts petty competition behind and focuses on common goals. The new mantra must be "what benefits my neighbour will also benefit me."

Do a better job of capitalizing on Toronto's diversity

Toronto is one of the most multicultural and immigrant-friendly cities in the world. In 2006, immigrants represented 46 percent of the city's population, and as the largest gateway for immigrants to Canada, the city's proportion of foreign-born population is growing. But Toronto must move beyond patting itself on the back for building a place that is so welcoming to the world.

Despite higher education rates than the Canadian-born population, issues such as lack of recognition of foreign credentials and experience mean that immigrants are increasingly falling behind economically compared to the rest of the Canadian population. Despite recent immigrants being better-educated than previous waves, their income differential with Canadian-born workers has actually increased over time. Poor cultural integration of immigrants in Toronto may also affect their ability to earn returns to their skills in the Canadian economy, as well as their ability to gain new skills.

The historic signing of the Canada-Ontario Immigration Agreement in 2005 has engaged the City of Toronto more actively in immigration and settlement issues with the provincial and the federal government. Having been given this greater voice, the city should play a more prominent role in providing and advocating for services that enable immigrants to utilize their full range of skills and integrate into the local labour market.

The *Agenda for Prosperity* sets out the goal of establishing a credential assessment and recognition system for the top 10 countries of origin for immigration to Canada. Having set a productive goal, the next step should be to execute and to publicize the results.

Unlock Toronto's creative infrastructure

The industrial age was accompanied by a set of infrastructure pieces that improved productivity and quality of life: the railway moved goods, the streetcar moved workers, and the public school educated students with the skills they'd need to work in urban factories. The post-war suburban era also grew in tandem with its own set of infrastructure: the highway moved goods, the airport moved workers,

and the university prepared students for the more advanced requirements of the jobs of the era. There is no question that we now live in the age of the knowledge economy, when economic growth is more likely to emerge in places with the infrastructure that makes development, sharing and commercialization of creative ideas faster and more productive.

A talented and diverse citizenry requires physical spaces that encourage the kinds of interactions that lead to learning and development of new ideas. The role of Toronto's substantial stock of libraries, community centres and schools as places to meet and do work could be enhanced to facilitate discussion and interaction, both for workers looking to upgrade their skills and for entrepreneurs looking to tap into the community's talent pool. Making these meeting places more active and engaging over longer hours would also help the city better integrate new arrivals. Simple improvements like a centralized online booking system for public meeting rooms would make it easier for residents to access the full menu of city services. Toronto is already making progress here with its Bizpal licensing tool and substantial improvements to the Toronto Public Library website. There is evidence that one of the only sure-fire ways to encourage entrepreneurship is to make the processes involved in starting and running a business as simple and painless as possible, so the city should continue on this path towards improving ease-of-use and ease of access across all its interactions with residents.

While these proposals to better utilize the city's existing assets may appear to be fairly minor, they are also far less expensive and time-consuming than most proposals for transportation and utility infrastructure improvements. Unlocking Toronto's existing creative infrastructure via thousands of smaller incremental improvements could prove to be the difference-maker in tapping the unrealized potential of many Torontonians. Smaller-scale projects also mean an opportunity to try out some riskier ideas. While some will fail and be cancelled, other risky ideas may generate much greater benefits than safer, more conventional reforms.

Prioritize early childhood development

While the creative age offers more opportunities than ever before to do work that is passion-inducing and intellectually challenging, it also presents new challenges. An economy that awards greater returns to those with cognitive and social skills over those who are willing to work long hours at physical labour is a dramatic shift from the model of previous eras. And it makes it increasingly difficult to give those with lower socioeconomic backgrounds an equal opportunity from the start, as the foundations for skills like symbol recognition, language acquisition and problem solving are laid in some of the earliest years of life.

That is why, while we found that Toronto's performance on post-secondary graduates was middling, we focus this policy idea on an area that city government is heavily involved in: child care. Improving early childhood education is the highest-return investment we can make in our long-run prosperity. Nobel Laureate James Heckman's work finds that early and later childhood environments are critical determinants of lifetime skills development. In fact, his cost-benefit analysis shows that returns to skills development investment decline continuously through the aging process. Investments in early childhood have a dramatically higher return than re-training later in life, and they even the playing field of opportunities for all Torontonians to a much greater extent than direct investments in higher education. While Toronto does a good job of attracting skilled and educated people from elsewhere, improvements to early childhood education would help grow a more skilled and educated Toronto workforce from within.

Attitudes and skills developed in early childhood are truly lifelong skills that are critical for successfully competing in the creative age. Services should be seen not just as childcare, but as nurturing the next generation of talent. The City of Toronto is responsible for a licensed child care/learning program that maintains over 56,000 spaces. Available funding currently subsidizes 24,000 spaces, and in June 2010, there were over 17,800 children on the waiting list for a fee subsidy.

Continued support for these services is crucial, and the city should look for creative ways to increase the number of licensed, affordable child care spaces and improve the quality of early childhood education. Increasing the number of subsidized spots will reduce the long waiting list. Better-trained staff will improve the foundational skills accessible to all of Toronto's youngest citizens. And tapping into the growing senior population presents an interesting opportunity—not just to take advantage of the free time of seniors who are willing to volunteer or work, but also to improve connections between the wisdom of older generations and the eagerness of Toronto's youngest talent.

SOME KEY QUESTIONS ON TORONTO'S ECONOMY IN THE CREATIVE AGE:

How Toronto responds to the shifting nature of economic competition leads to some important questions. In particular, candidates in the upcoming municipal election need to address questions such as:

What can Toronto do to better earn its reputation as a creative city?

How would you maintain and improve early childhood education in Toronto?

What opportunities do you see to cooperate with other regional governments and entities to enhance the region's competitiveness?

What can the city do to attract more talented, high-achieving individuals to Toronto and help them settle into jobs?

How can the city make it easier for new arrivals to start new companies?

How can Toronto improve its settlement services across areas like education, employment, and housing?

How can Toronto make better use of existing assets to help Toronto residents meet their potential?

For further analysis and recommendations, see the two companion reports that influenced this election-focused piece:

Ontario in the Creative Age

available at: martinprosperity.org/ontario

Toronto's Performance on the Three Ts of Economic Development report available at: martinprosperity.org/media/pdfs/Toronto-Paper.pdf

ACKNOWLEDGMENTS

OUR TEAM

Authors

Iris Lee Tom Robertson Ian Swain

WEBSITES

martinprosperity.org www.citiescentre.utoronto.ca

CONTACT US

Phone: (416) 673-8580 Fax: (416) 673-8599

Email: info@martinprosperity.org

Martin Prosperity Institute Joseph L. Rotman School of Management University of Toronto MaRS Centre, Heritage Building 101 College Street, Suite 420 Toronto, Ontario, Canada M5G 1L7

Richard Florida, Director Kevin Stolarick, Research Director