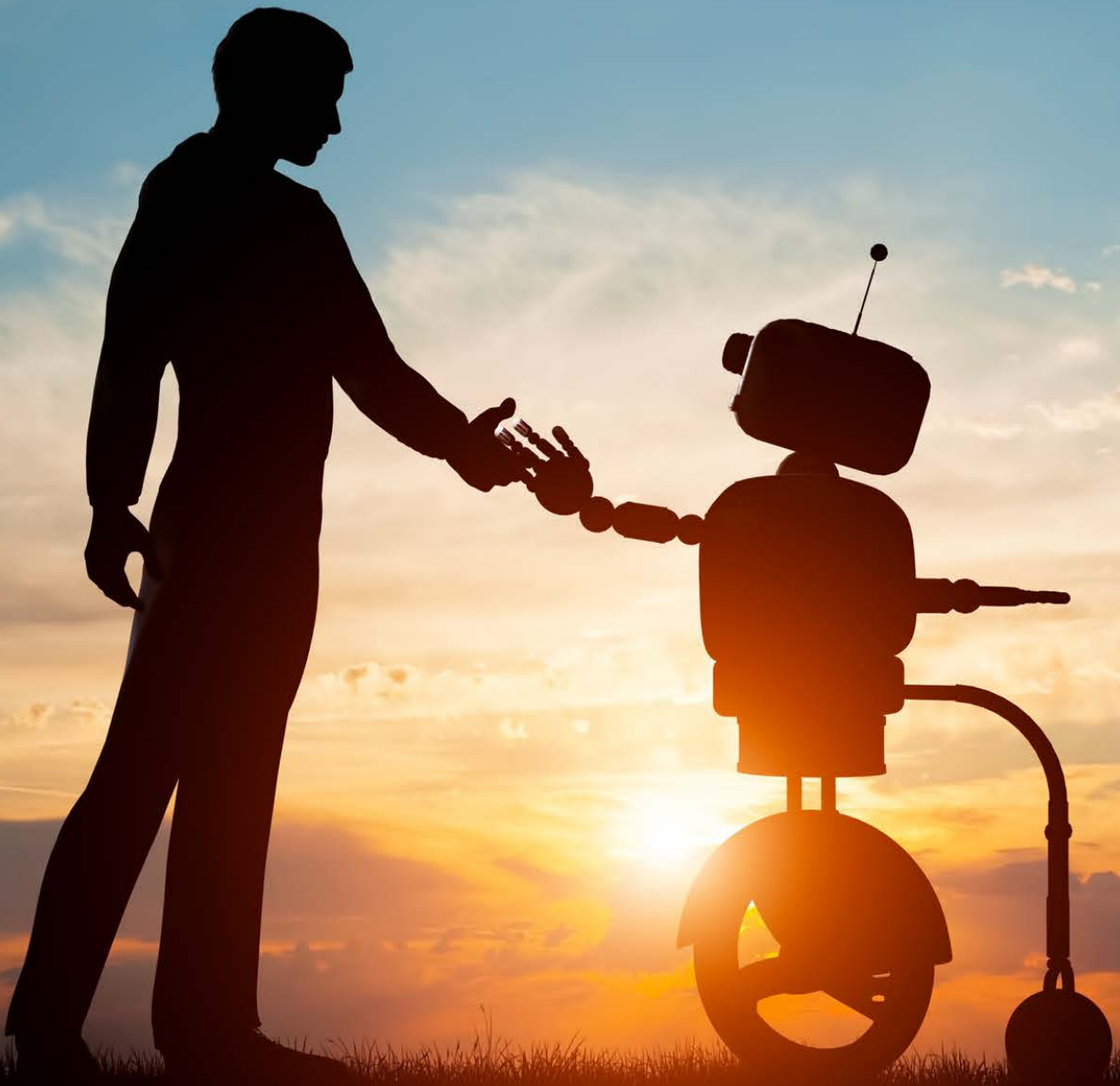# TERRA COGNITO

Prepared for The Calgary Foundation,

By the Institute for Community Prosperity, Mount Royal University

2018 | environmental scan

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Prepared by James Stauch & Anna Johnson,
Institute for Community Prosperity
December 2017

Foreward: Terra Cognito

We acknowledge that we are situated on the traditional lands of the Niitsitapi (Blackfoot) and the Treaty 7 Nations, which include the Siksika, the Piikani, the Kainai, the Tsuut'ina and the Iyarhe Nakoda. The City of Calgary is also home to Métis Nation of Alberta, Region III.

With this acknowledgement, and others like it, we express an awareness. An awareness of history, land, and peoples. Although there is a yawning gap between language and actual reconciliation on the ground, awareness is a critical first step.

As Cora Voyageur, Laura Brearley and Brian Calliou write in their book *Restorying Indigenous Leadership,* effective community leadership requires "retrospective awareness, the recognition of current capacities, and the capacity to imagine future possibilities." **Leaders are "deeply awake to our present moment as well as our responsibility to the future."[1]** The Black Lives Matter movement, drawing attention to issues of mortal racism in US policing, have inserted the similar notion of "woke" into the popular lexicon.

This 2018 Environmental Scan plays on the term ***terra incognita,*** first employed by the Greco-Roman geographer Ptolemy to refer to regions that have not been mapped or documented. It is an apt phrase to describe the Twenty-first Century, and particularly this past year: The theme of last year's Scan, written on the heels of the Trump presidential victory, was *Into the Unknown*. Some of the earliest cartographers illustrated the terra incognita regions with fierce, serpentine mythological figures. "Here be dragons" is how many, many people see not merely the future, but the present. Climate change has pushed Earth into "uncharted territory", opines one recent article, terrifyingly called *Terrifying Climate Change Facts.[2]*

While this Scan does not dwell on certain trends and signposts that border on the apocalyptic – there is widespread scientific consensus that the planet is in the midst of its sixth mass species extinction event[3], while The Bulletin of Atomic Scientists have pushed the Doomsday Clock to 2 ½ minutes to midnight, the closest since 1953[4], as two examples - There is no doubt that certainty about the future is elusive, and that many citizens feel less and less in control.

Yet, paradoxically, we are also more aware. The Latin word for "aware" is *cognito*. We have access to more information, more readily, that at any point in human history. We face complex challenges, with uncertain responses, yet the tools, lessons and research at our disposal are unprecedented in their availability and sophistication. **As such, we are challenged, looking out through 2018, to embrace the known.**

Singularity University and X-Prize founder Peter Diamandis, entreats us to embrace this acceleration in data, technology and awareness, noting – for example – that the plight of the poorest of the world's poor has substantially improved, despite deepening extremes of inequality.[5] Such optimists do not see dragons, but rather emerald utopias and quantum pots of gold.   But even Diamandis acknowledges that the pace of technological change is exponentially outpacing the rate of human change.

Our intellectual, emotional and moral capacities can be stubbornly Cro-Magnon – as the hashtag "MeToo" has laid bare – and our institutions, including the very notion of nation states and western liberal democracy, are showing their age. Some even posit that our lateral, borderless connections collectively represent a shift in power and institutional collapse and re-alignment as significant as the Enlightenment or Industrial Revolution.[6] **The jockeying of states and municipalities to be belle of the ball, currying favour with charming Prince Amazon, is one small symptom of this shift.**

Many of the themes covered in this year's Scan cover aspects of awareness, from the machine-based algorithmic, immutable awareness of blockchain, to civic journalism as a response to the frightening erosion of trust in media, to shifts in how we

understand community impact, to the insights to be gleaned from investments in social research and development (or, social R&D).   All of this on a bedrock of understanding the facts of our history and territory.

> How can we leverage these tools and knowledge to help address social and environmental challenges? How do we better access and mobilize existing research, data, and networks, as well as learning from, and with, Indigenous knowledge keepers?

In a banner year for neo-fascism, we have paradoxically witnessed a renaissance of mainstream attention to matters of diversity, inclusion and social justice. We know from the science of ecology that diversity is necessary for resilience and adaptation. Ilsa Treurnicht, CEO of the MaRS Discovery District, Canada's leading innovation hub, and Neil Turok, Director of the Perimeter Institute in Theoretical Physics at Waterloo, both note that diversity is the most important ingredient to innovation, in all sectors.[7] In Deloitte's *Human Capital Trends* survey, CEOs are now ranking inclusion as a top priority, a transformational shift from just a couple of years back.[8] With respect to social justice, some of the quantum cultural shifts we are seeing are making it more difficult for powerful men to exploit without repercussions.

> **2018 will be a year where awareness and ignorance fight it out in an epic battle on the grand stage of our societies, communities and in the electronic ether to which we are now tethered, for good and for ill.**
>
> We will be challenged to be more effective, inclusive and accessible with respect to how knowledge is transmitted, whose knowledge is validated, and how we all work together to build the society we want.

Last year's Scan predicted that "we can expect the global and Canadian conversations in 2017 to turn from polite feminism to something more urgent, challenging and brazen." The #MeToo online social movement is melting the facades of a wide swath of the cultural, entertainment, media and political elite.

On a more sour social justice note, **Canada is performing poorly as measured against the UN Sustainable Development Goals (SDG's)**, backsliding in all metrics across the categories of food security and sustainable cities and communities, and in the provision of affordable housing (which may be about to change).[9]

As the Calgary Chamber of Voluntary Organization's new report on adaptive capacity in the non-profit sector notes: *"A systems thinking lens will be key to enhancing resiliency and strengthening the sector's ability to navigate the uncertain political and economic future, as well as the rapidly changing social and technological world."* [10]

As we slide inexorably into what the World Economic Forum describe as the "Fourth Industrial Revolution[11]", where machine awareness will greatly outpace human awareness, it will be imperative to ensure the best of human values – **inclusion, compassion, participation, openness, equity** – will undergird this awareness. This year, we acknowledge not just the land we all live on, but we also acknowledge that we are aware:

TERRA COGNITO

Scanning the Horizon

In March of 2015, at the request of The Calgary Foundation, the Institute provided a scan of major current socio-economic trends and developments, at local, provincial, national and international scales, relevant to the work of the Foundation. The Scan was then updated for 2016. Then, an entirely new scan was prepared in November 2016 looking into 2017.

This 2018 Scan, is similarly entirely new.   Most of the trends covered previous scans are still very much in play. But rather than belabour these, we have surfaced a series of new themes.   Like the previous scans, it is selective and 'curated' – it is far from a comprehensive analysis of all trends in all sectors.

The Scan is organized under a set of themes, each of which uses multiple lenses – **social, cultural, political, economic, environmental and technological:**

- ❖ After NAFTA? Is the Recovering Economy About to Hit the Skids?
- ❖ Dawn of the DAOs: Blockchain and Internet 2.0
- ❖ From Impact to Learning: Trends in Philanthropic Evaluation
- ❖ From Big Data to Collective Intelligence: The rise of social R&D
- ❖ From "Charitable Sector" to "Social Infrastructure"
- ❖ Dwelling Affordably, and in New WaysThe Future of Food
- ❖ Let's Text: Youth and Mental Health
- ❖ Access, Equity and 21st Century Disruptions in Education
- ❖ #WelcomeToCanada
- ❖ From Land Acknowledgement to Acknowledgement on the Land
- ❖ Cannabis, Carbon and the Conservative Identity Crisis
- ❖ Red Pill Citizenship

We have attempted to make this scan particularly relevant and useful to the five Vital Priorities identified in The Calgary Foundation's current Strategic Plan: **Living standards, arts, environment, community connections and wellness.** It focuses on phenomena that directly impact the Foundation's interests in stewarding its financial and community investments and in nurturing a community where all belong. Information in this scan is derived from several sources, including news stories, op-eds, policy reports and academic literature.

After NAFTA: Is the Recovering Economy About to Hit the Skids?

NAFTA as an Economic Concern

The largest economic concern in Canada looming on the horizon is the status of the North American Free Trade Agreement (NAFTA), currently being re-negotiated with the US and Mexico, and which President Trump has vowed to eliminate or replace. Canada exports over $400 billion to the US per year, which comprises one fifth of all economic activity in this country.[11] While it is possible that NAFTA could simply revert to the pre-NAFTA Canada-US trade pact (called at the time, the "FTA"), not even this outcome is certain. The alternative would see the reintroduction of pre-FTA tariffs, although industry pressure will ensure that they likely remain low, and we would continue to enjoy World Trade Organization "Most-Favoured Nation" trading partner status.[12]

NAFTA and the Canadian Economy

Most economists seem to agree that the elimination of NAFTA would be bad for the Canadian economy, but far from devastating.[13] RBC and Scotia Bank, for example, predict the hit on Canada's economy to be, at most, 0.2% per annum. And while one trade goes sour, another – the TPP11 (Trans-Pacific Partnership) – seems poised to be signed in 2018, assuming Canada's new

asks regarding gender equity and Indigenous rights provisions are accepted by the 10 other nations.[14] **That said, the elimination of NAFTA could spell disaster for certain industries,** such as auto manufacturing in Ontario (although even this point is disputed by *Unifor*, the auto workers union).

More immediately, Alberta's beef producers would suffer from high tariffs. Canadian Cattlemen's Association executive John Masswohl, has suggested cattle farmers running the numbers could just decide to give up and retire, creating a "mass liquidation of cattle herds."[16]

Global growth is expected to be at about 3% through 2018-19, slightly outpacing North America, with India and China pulling up the average, at well over 6%.[16] It is the first time since the global financial crisis that all 45 states in the Organization for Economic Co-operation and Development (OECD) will have positive growth.

Despite its recent growth, there are signs that the US economy will weaken again, with the Canadian dollar appreciating in relative value, already up 10% from the previous year. Interest rate hikes in Canada can also be expected to nudge up again.[17]

Meanwhile, geopolitical risks - notably North Korea and the simmering Saudi-Iranian conflict - could be very de-stabilizing.

Canadian Oil and Gas Production

Canada continues to grapple with the challenge of increasing oil and gas production while living up to our global commitments to reduce carbon emissions. Oil prices are modestly improving and long-term demand for the resource is strong, despite the forecasted exponential growth of the electric vehicle market.[18] But profitability will remain tight, due to production costs.

Despite a predicted increase in oil sands production and rebuilding efforts, a number of larger players in the oil sands have downscaled or sold off their assets, including ConocoPhillips, Royal Dutch Shell and Statoil.[19] This surfaces interesting questions about the portability of global capital, where oil patch decision-making is based outside of Canada.

Contrast this with Calgary-based Suncor Energy, which has not only stayed put, but has expanded its holdings. Calgary-based Canadian Natural Resources Limited (CNRL) has also recently announced an expansion to its Horizon oil sands mine.

As an interesting side note, the Suncor Energy Foundation has only marginally changed its level of community investment, while many other players have radically downsized their giving and, in some cases, eliminated their community investment staff capacity altogether.[21]

Alberta's Economy

Alberta's economy has been steadily recovering since the end of 2016. Alberta's GDP is forecast to grow by 4% in 2017 (4.6% in Calgary), before slowing in 2018.[21]

Unemployment is easing to about 7%, which is still above the national average, although notably the poverty rate in Alberta is actually the lowest in the country, at just over 10%.[22]

On the other hand, income inequality in Alberta, measured by the Gini co-efficient, is the most pronounced of all provinces in Canada.[23] Alberta saw its credit rating downgraded in 2017, as the net public debt is forecast to exceed

$20 billion this year, and $40 billion by 2019.

Retail Gap

One potentially troubling trend to watch in Calgary is consumer spending.

Alberta's "retail gap", which represents the difference between the growth trajectory it was previously on, and what consumers have actually spent, is $39 billion over the last few years.[24] This means there has been pent-up consumer demand, such that the current modest uptick in the economy has resulted in an out-of-proportion 9% increase in retail sales.[25] These numbers suggest that Calgarians may be over-leveraging their wealth again.

From "Charitable Sector" to "Social Infrastructure"

> *"Donations, government grants and contributions will not keep pace with increasing demand for services. This will result in a social deficit that will manifest as unmet needs in the community. There is a need to re-examine administrative relationships, regulatory regimes, and how we work together for the common good."*[27]
>
> – Brian Emmett, Chief Economist for Canada's Charitable and Non-profit Sector

At 2017's Calgary Chamber of Voluntary Organizations (CCVO) Connections conference, keynote speaker and McConnell Foundation CEO, Stephen Huddart, spoke about the notion of Canada needing a stronger "social infrastructure."[27] Social infrastructure differs from "public infrastructure", which generally refers to hard structures and systems, like roads, rail, energy transmission and water supply. This year's federal budget included mention of "$21.9 billion in new investments over 11 years to support social infrastructure in Canadian communities,"[28] by which they include investments in early learning and childcare, home care, cultural and recreational infrastructure, Indigenous community development and affordable housing. The latter of these topics is discussed in more detail in a later section.

Modernizing and Marshalling

The subtext underlying some of the discussion of a "social infrastructure" appears to be a tacit recognition that the charitable sector acting alone cannot address the most difficult and intractable challenges in Canada. This is also an emerging theme underscoring the work of the recently struck *Social Innovation and Social Finance Steering Group*, which in the early stages of developing policy measures to advance social innovation and social finance in Canada.[29]

Certainly, Canada already rates well from the perspective of financing social innovation, ranking number one globally in a new index developed by the Economist[30].

At the same time, the government is signalling its interest in "modernizing" charitable sector policy and regulation. **But whether this is root and branch radical reform or incremental tinkering, as was the case with the Voluntary Sector Initiative, which ended over a decade ago, remains to be seen.** Almost certainly, there will be changes to the regulations regarding permissible political activity.

As Stephen Huddart puts it, *"There is growing consensus that government should audit foundations and charities for financial integrity, and not for activities undertaken in pursuit of their missions."[31]* There may also be changes to reflect society's changing attitudes toward the function of the charitable sector, and the way in which they interact with it.[32]

There is an increasingly "blurred line" when it comes to how Canadians define and engage with charity, sometimes acting with a 'consumer' hat, as with any other business, and at other times with a 'philanthropic' hat.[33] Add to this the fact that charitable donations are stagnating, donations in upper income brackets are not rising as quickly as

income, and that overall receipted revenue for charities in Canada is exceeded now – for the first time - by earned revenue.[34]

The Department of Finance will be keeping a close check on any changes that open up the definition of charitable activity, and we are unlikely to see the provinces clamouring to take on charitable regulation and administration, even though constitutionally this is their purview.[35] **But the potential of repurposing portions of the $300 billion public annual spending on social services is powerful to contemplate**. Add to this the fact that foundations hold $75 billion in endowed assets, and – as Huddart puts it, *"should we not be talking about what is possible when social sector creativity, civic energy — and capital — are applied to solving complex challenges?"[36]* He advocates for a social infrastructure bank, and argues in particular that it should be based in Alberta.

In any case, there is growing recognition that a large-scale cross-sectoral approach is needed, an unavoidably large part of which involves substantial public expenditure. **In essence, a renewed social contract.**

Universal Basic Income

To illustrate, and as previous Scans have alluded, there is growing momentum and public interest around the notion of a universal basic minimum income, or "mincome".

The university-based Canada-wide research consortium *PROOF* (discussed in more detail in a later section) concluded that, overall, conventional charitable or social enterprise interventions like food banks, community food centres, community gardens and collective kitchens, had a negligible overall effect on the food security of Canadians.[37]

> *In fact, the only factor that appears to have a significant effect was when citizens crossed the age threshold for when Old Age Security (OAS) takes effect. OAS is, in effect, a basic income for those over 65. This is nearly as close as social research gets to a "smoking gun".*

As such, an essential part of the social infrastructure conversation is bound to be about implementation of a universal basic income. The Mowat Centre, Metcalf Foundation, and Caledon

Institute, for example, have all recently released studies or discussion papers on the topic, with varying views on the efficacy and cost of the concept.[38] The Mowat study, co-authored with the Centre for Social Innovation and the Northern Policy Institute, looks at the potential effect of a basic income on supporting social entrepreneurship, arguing that it would reduce barriers to entry, allow for more diversity, permit improved skill sets and reduce illness, stress and anxiety. Ashoka Fellow Shawn Loney makes a similar point, arguing that basic income would unleash entrepreneurship, by providing a stable minimum income platform.[39]

The Dauphin Mincome experiment[40] in the 1970s saw a spike in small business licences as one impact, and basic income's biggest champions have

historically also been free-market devotees, most famously Milton Friedman.[41]

Former Senator Hugh Segal is Canada's leading expert and champion on the topic, and it has been debated at federal Conservative party conventions in the distant past.   Alberta Finance Minister Joe Ceci is one of a growing number of champions on the left. **However, the political space does not yet exist to see a basic income emerge as a safe or inevitable choice for a government at any level in Canada to implement.   Nor has there been a torrent of support from the charitable/non-profit sector, although this may be changing.**

Social Procurement

Social procurement is another major shift on the horizon, which will help open up the 'market' space for social enterprise to flourish far more than it does now.   The largely untapped (to date) power of anchor institutions like municipalities, universities, and hospitals to apply social screens to their purchases of goods and services is a major part of a renewed social infrastructure.

As social innovation guru Geoff Mulgan observes,"

Coro Strandberg, an expert on transformational business practices, **highlights the potential power of**

"the vast majority of funds for innovation or enterprise are still captured by more traditional organizations and methods. One major part of this is the failure of public sectors... to open up to purchasing and commissioning from social innovators, which has greatly slowed down the pace of change in developing new models of care, learning or welfare."[43]

universities, in particular, in mobilizing social infrastructure.[43]   From their physical and real estate assets, to alumni networks, to their respected research and convening abilities, universities are uniquely situated to play a potentially transformative role.   Whether they will seize this opportunity remains to be seen.

Understanding Impact

A final area where social infrastructure makes sense is in the previously mentioned realm of understanding impact. **It is an inefficient allocation of resources to put the burden of impact measurement on individual non-profit**

organizations, unless they are created expressly to undertake this work.

> *The scales at which collective outcomes become meaningful, as well as the need to compare 'apples to apples' – i.e. symmetry in data collection, joint sharing protocols and so-on – speak to independent third-party entities with a range of quantitative and qualitative analytical capacities.*

The next two sections of this Scan dive into the rapidly evolving world of social impact and outcomes.

Scaling Impact

The Barcelona-based organization *Up Social*, which supports the adaptation, replication and scaling of proven innovations, undertakes an 18-month challenge and vetting process whereby three criteria are applied to looking at hundreds of potential innovations in a given realm of intervention – based on a) evidence of impact; b) potential scale of implementation; and c) degree of innovation (incremental vs. disruptive). The chosen 'winning' interventions are then applied at scale.

The Canadian-based *Jump Math* program, for example, was awarded a contract through this process to be delivered in 121 schools, which have now shown a 20% increase in math scores, benchmarked against the Spanish average.[44]

Closer to home we are seeing collective initiatives that could be considered part of a newly emerging social infrastructure, such as Vibrant Communities Calgary's "community hubs" concept, accelerators such as *EmergeHUB* in Forest Lawn and RBC's *Social Enterprise Accelerator*, and innovation spaces such as the Alberta Government's *CoLab*, The City of Calgary's *Civic Innovation YYC* and MRU's *Trico Changemakers Studio*.

From "Impact" to Learning:
Trends in Philanthropic Evaluation

The next decade will be marked by major advancements in how we discover, try, test, and scale approaches – old and new – to addressing social and environmental challenges. But, there remains a divide in how we approach, understand and incorporate evaluation.

The Monitor Institute, a project of Deloitte, frames this divide well:

> *Philanthropic leaders these days can be of two minds when it comes to monitoring, evaluation, and learning. For some, there's tremendous excitement about the blossoming potential of new developments in data accessibility, methods, tools, and analytics. For others, there's a palpable confusion about the complexities of measuring social impact and real frustration as individual evaluation "bright spots" in the field multiply but don't necessarily sum to clear answers. Many in the field simply find themselves at a loss for how to move forward.* [45]

Impact Measurement

In the former camp – those who are tremendously excited about new developments in impact measurement – are people like *CKX Canadian Philanthropy Fellow* Michael Alberg Seberich, who runs a Berlin-based philanthropic consultancy. Noting the emergence of tools like the *Social Impact Navigator* and the *Social Reporting Standard Initiative*, both developed by consortia of foundations and German universities, he says Canada is among the leaders in developing useful indices for benchmarking success, such as the *Composite Learning Index* in education and the *Canadian Index of Well-Being*.[46] The number of resources available to

understand social impact is indeed blossoming. For example, both Simon Fraser University and Mount Royal University have recently created new learning opportunities for practitioners measuring social impacts.[47]

> Still, social, environmental and cultural programs and interventions happen in complex, uncertain and dynamic contexts. It is no news to anyone working in the community sector that social impacts are challenging to measure, multi-layered, and difficult to attribute.

There is also an inevitable trade-off between relevance (which requires flexibility) and comparability (which requires uniformity).[48] As *InWithForward's* Sarah Schulman reminds us, *innovation is born of compassion, deep listening, and imagination – not rigorous evidence.*[49]

In fact, the reason evaluation guru Michael Quinn Patton, developed the technique of *Developmental Evaluation* was **based on the recognition that standard models of impact measurement have a tendency to stifle innovation.**[50]

After two decades of hand-wringing in philanthropy over the challenge of understanding impact, more and more foundations are embracing a key insight:

The UK-based Lankelly Chase Foundation, for example, has moved away from asking grantees to describe their impact, and instead is asking them to describe what they learned.[51]

Ask *not:* "What impact are we having?"
Ask i*nstead:* "What are we learning?"

The former approach incentivizes 'gaming' or 'cooking' the results, even where there are standardized logic models and other tools at play. It sacrifices trust and genuine learning in favour of an illusion of accountability.

The latter approach allows an open, trust-based conversation to inquire into what's working, what's not, and what are the broader impediments in the system that the funder can help advocate for.

Reimagining Measurement

The *Reimagining Measurement* initiative is a year-long research project from the Monitor Institute by Deloitte, supported by the David and Lucile Packard, James Irvine, Robert Wood Johnson, S.D. Bechtel Jr., W.K. Kellogg, and Wallace foundations. It looks at how organizations in the social sector can more effectively use data and other information outputs in the service of monitoring, evaluation, and learning.[52]

This initiative re-situates impact measurement from an 'impact' focus to a 'learning' focus, where "continuous learning becomes a core management tool; where foundations, as commentator Van Jones once put it, *'stop giving grants and start funding experiments'*; where foundations and grantees share data, learning, and knowledge openly and widely; and where constituent feedback about what is needed and what success looks like is central to strategy development and review."[53]

Importantly, the Reimagining Measurement initiative challenges organizations to "let go" of approaches they may be holding onto, when the evidence suggests a new approach may be required.

As social impact initiatives looking at complex challenges are increasingly collective, involving many diverse organizations across multiple domains and at multiple scales, the challenge of measuring impact increases almost exponentially. This challenge is outlined well, as are some tools and questions to apply to shared measurement ventures, by Canadian evaluation guru Mark Cabaj, writing about the success of Lancaster County, Pennsylvania, a community that has managed to eradicate chronic homelessness.[54]

User-Involved Grantmaking

A previous scan had reported on the cresting of 'strategic philanthropy', predicting that the pendulum will swing back to community-partnered or co-creative grantmaking modalities. As such, another trend we can expect to see is more foundations experimenting with participatory, user-involved grantmaking models, along the lines of the Vancouver Foundation's *Fostering Change* program, which involves young people in foster care (or previously in care) serving as designers and deliberators of a new grant stream.

Big Data

The rise of big data, including new robust data-sharing protocols and the liberation of open data sets, is another trend that will intensify. There are many people who love diving into data, but they are generally not the same people as are working on the front lines of a social or community intervention. **One of the key assumptions that is often made in the grantee-grantor interface is the tacit expectation that the program specialists – or managers - also have the capacity to measure and monitor, and to collect and synthesize data.**

Although this is changing as millennials and new "digitally native" organizations integrate technology data-driven decision-making into their business models[55], understanding social impact will require much more than data, as the next section explores.
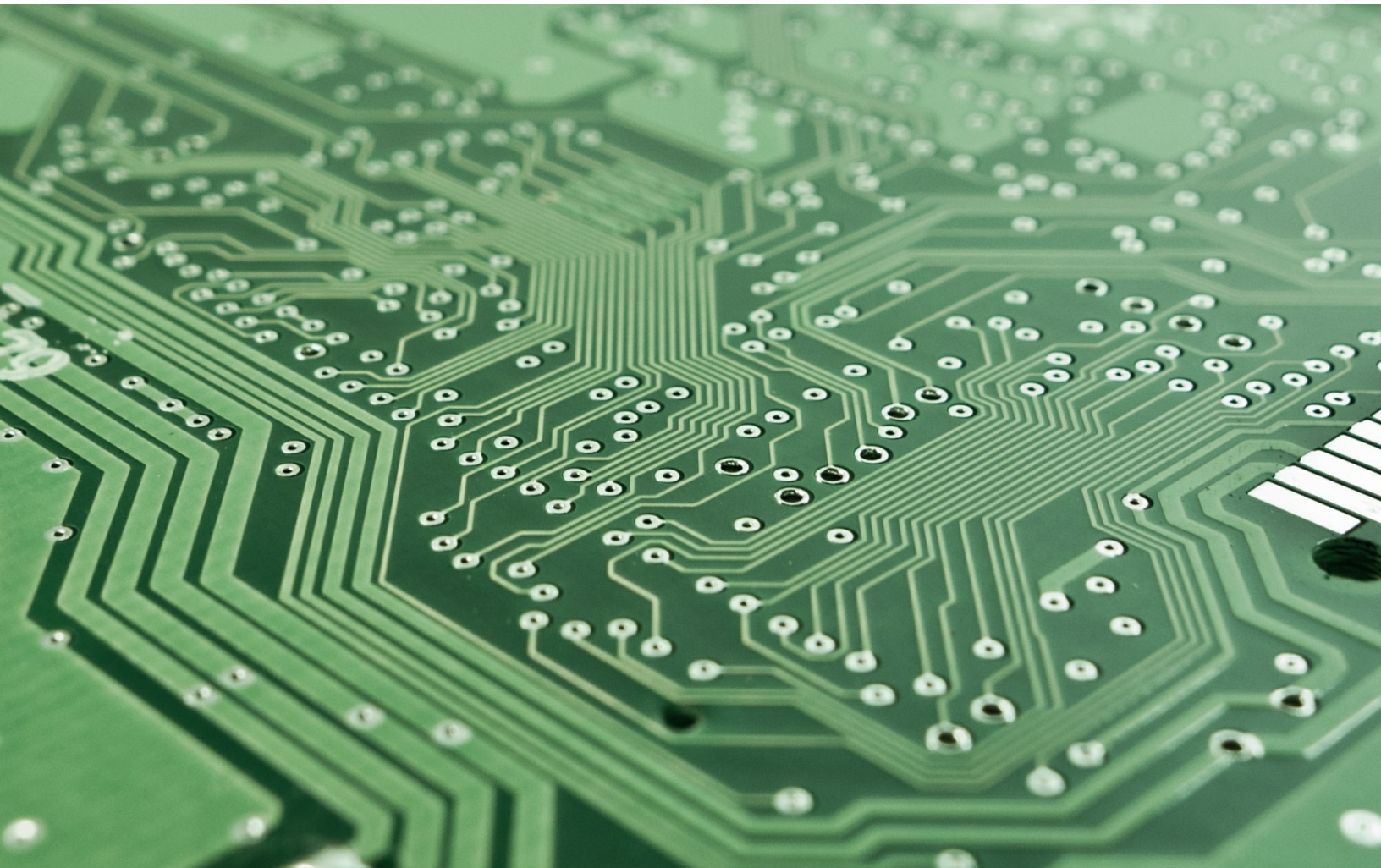
From Big Data to
Collective Intelligence:
The Rise of Social R&D

Research and Development

Geoff Mulgan is the Chief Executive of Nesta, a non-profit foundation in the UK which started its life as the publicly-funded National Endowment for Science, Technology and the Arts. Nesta describes itself as a "global innovation foundation [that backs] new

You should work with your colleagues to ensure that they are devoting a fixed percentage of program funds to experimenting with new approaches to existing problems and measuring the impact of their programs. I expect you to instill a strengthened culture of measurement, evaluation, and innovation in program and policy design and delivery.

- Prime Minister Trudeau's Mandate Letter to Treasury Board President Scott Brison[57]

ideas to tackle the big challenges of our time."[57] It focuses on R&D in the fields of health, education, public sector innovation, the creative economy, arts and culture, and commercial innovation policy. Mulgan just released a book drawing from his experience and insights at Nesta, and previously at the Young Foundation, where he was its founding Chief Executive. Called *Big Mind: How Collective Intelligence Can Change Our World*[58]*,* the book investigates how human and machine capabilities can work together to address challenges in areas as diverse as business, climate change, democracy, and public health.

In the world of commercial innovation, it is a given that research and development, or R&D, is an essential piece of the innovation puzzle. However, in the world of community, environmental and social practice, **R&D is far from being a norm.**

One study found that only 5% of social impact organizations (excluding health care, where there is this already some very

While he acknowledges the importance of "big data", it means little for human thriving and surviving unless married with an advance sense of ethics, awareness and other forms of human insight (which, in Canada's context, includes making efforts to decolonize mindsets and mental models).

sophisticate R&D) engage in any meaningful amount of R&D.[59] And there are precious few "moonshots", collective efforts which require many people toiling together on breakthroughs that profoundly alter the practices, systems and tools that we use to achieve social good.

Vinod Rajasekaran defines social R&D as **"a combination of competency, culture, and craft that is intentionally applied to continuously learn, evaluate, refine and conduct practical experiments in order to enhance social wellbeing."**[60]

The term "social R&D" was first coined by sociologist and social worker Jack Rothman.[61] The concept has been resurrected and profiled this past year in Canada, largely through SiG (Social Innovation Generation).[62] The premise of the SiG provocation is that Canada spends over $300 billion annually on social outcomes, according to the OECD.

> *Yet our fast-evolving societal challenges "demand equally fast-paced and nimble research, learning, experimenting and replication of approaches so people access the best possible services, supports and solutions no matter where they live in Canada."*

A recent study on The Social Innovation Strategies of Canadian Foundations, notes that one of fourteen tactics that foundations use to deploy their finances, staff capacity and legitimacy is in the area of social R&D.[63]

The study includes *Vital Signs* as one example of how foundations engage in social R&D, where social research is linked to application. But funders are more often part of the problem, not part of the solution: As one call-to-action puts the challenge, Canadian social impact organizations **"are often trapped in highly restrictive funding models that don't value their strategic work as social impact innovators. They lack access to... resources that would enable experimentation, innovation, cross-sector collaboration and multi-organization consortia..."[65]**

Certainly, there are many pilot projects in the world of non-profit and philanthropy, on the one hand, and on the other, there are many millions of dollars of social research, firmly ensconced behind the ivory towers of universities. But these are at the peripheries of what a growing number of people are calling "social R&D", and rarely connected. Moreover, the incentive structure of the social economy and academic culture entrench this:

There are many aspects to social R&D, including the following:

> *Non-profits pretend that each pilot project is wildly successful, researchers publish in top-tier peer reviewed journals that community practitioners may never read or that live behind pricey paywalls, and grant-makers tend to reward both patterns. Beyond this, there is the question of how to effectively reach policymakers, to inform the development of laws, regulations and the allocation of public resources.*

KNOWLEDGE MOBILIZATION:

There is already a mountain of knowledge in most areas of social intervention, and in many cases there may not be much of a need for original research. Canada invests millions of dollars each year into building an understanding of social and human phenomena through disciplines such as sociology, nursing, public health, political science, business, economics, criminology, social work, urban studies and cultural studies, just to name a few.

The trouble is, the primary driver for most academics, in terms of tenure and advancement, is to publish in academic journals, which practitioners may not have access to (or it may be unreasonably priced). In addition, the writing may be baroque and impenetrable, or the publication may lack profile altogether.[64] Some even claim that half of all scholarly articles are never read by anyone other than the author, editor, and peer reviewers.[65] There is, on average, a 17-year lag in health care between knowledge insight in universities and widespread application in the field or in public policy.[66] **It is safe to assume that the lag time between social science insight and social practice is, on average, even longer.**

There are many other forms of knowledge mobilization, including knowledge compendiums, a good example being the World Health Organization's suicide prevention tools,[67] and the blog-style summaries of academic research available through the online magazine *The Conversation*,, whose tagline is "academic rigour, journalistic flair".[68]

Academics also occasionally write in non-peer-reviewed journals such as *Nonprofit Quarterly* or the *Stanford Social Innovation Review*, or, closer to home, in *The Philanthropist*. That said, at research-intensive universities, **such writings tend to be worth substantially less – again in terms of tenure and promotion - than publishing in peer-reviewed ranked journals (if valued at all).**

There are also research aggregators and disseminators, albeit far too few, working very much in the vein that Jack Rothman had advocated for decades ago. They synthesize and package policy- and practitioner-useful research summaries, typically through online platforms – blogs, websites, webinars, plain language research snapshots, etc.

In Alberta, *PolicyWise for Children & Families* is a non-profit corporation aiming to improve child, family and community well-being by leading,
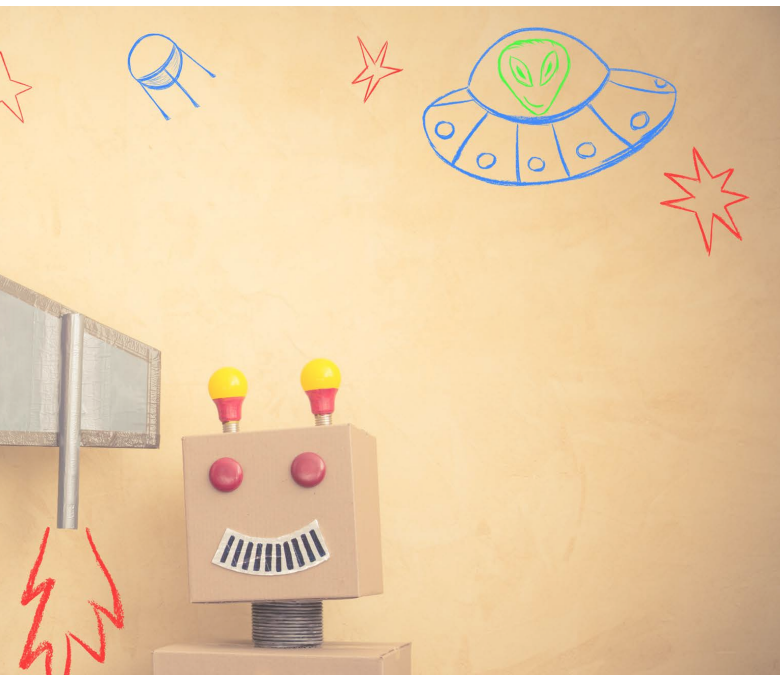
creating and mobilizing research and evaluation for evidence-informed policy and practice.[69] It mobilizes evidence to inform social policy by bridging between government, academia, and community. As part of this, it holds a centralized data repository called *SAGE – Secondary Analysis to Generate Evidence.*

THINK AND DO TANKS:

The original research and ancillary fellowships, internships and other supports provided by many existing non-partisan think-tanks fall broadly into the category of social R&D. Examples in the US include Aspen, Pew and Brookings.   In Canada, the Caledon Institute (now folded into Maytree) was perhaps the best known, and most trusted, think tank on social policy. The Ecofiscal Commissionis a good example of an environmentally-focused solutions

think-tank.   Some of the largest recent grants in US philanthropy – for example, Nicholas Berggruen's namesake $500 million institute and Charles Feeney's $660 million investment in the Atlantic Fellows program - are focused on creating institutional nodes for thinking and acting on seemingly intractable challenges in new ways.

COMMUNITY-PARTNERED RESEARCH:

Last year, the Carnegie UK Trust published a guide to academics and third sector practitioners working effectively together to influence and change policy and practice.[70] The guide digs into many of the challenges inherent to the academic-community interface, and highlights examples of where breakthroughs have occurred. Service learning, open access publishing, 'embedded gateways' (such as on-campus community hubs), action research, support for public intellectuals and university-embedded practitioners are among the innovations highlighted. **But perhaps the most significant opportunity is through co-created research.** Support for community-partnered research is an explicit aim of the Social Science and Humanities Research Council (SSHRC), which notes that such partnerships are **"designed to foster innovative research, training and the co-creation of new knowledge on critical issues of intellectual, social, economic and cultural significance through a**

process of ongoing collaboration and mutual learning."[71]

Effective community-academic partnership, as one recent article notes, "implies symmetry, so that, ideally there is an equity of voice in the selection of research questions, research design and knowledge production, the process and timelines for implementing the project, and agreement on dissemination of outcomes."[72]

LABS:

Social innovation labs were described in a previous scan, but are one of a number of cross-system, deep learning-oriented, place-based approaches to investigating, co-sensing and co-designing an emerging future[73] for a given challenge. There are many approaches to labs, including at least three replicable approaches developed in Canada - the MaRS Solutions Lab, REOS Partners' social lab, and the WISIR Social Innovation Lab.

Labs are often tied to collective impact initiatives, which use a broader suite of collaborative tools and frameworks to build trust, cohesion and action across many organizations, and often across sectors. *InWithForward* is a Canadian "social research and development" collective that uses ethnography and a human-centered design approach to co-design new approaches with clientele

through a multi-disciplinary team approach.[74]

REFLECTIVE PRACTICE:

Reflective practice, first advanced by the philosopher and educational reformer John Dewey, involves community practitioners embracing a 'learning culture' and engaging in a continuous rhythm of action and reflection, or "praxis". Etienne Wenger has outlined many successful examples, modes and patterns of "communities of practice", which serve to enrich a field. There are many examples of this in Canada, including in Calgary[75], **but perhaps the most widespread is in education, in the form of teacher training, conferences, PD days and in-services, for which Canada has been recognized globally for being an exemplar.**[76]

SCALED-UP SOCIETY-WIDE CHALLENGE-FOCUSED RESEARCH CONSORTIA:

In 2013 the UK created a series of *What Works Centres*, based at universities, each focusing on a different social issue, spanning health, wellbeing, justice, education, local economies, ageing and early years interventions. These are essentially evidence centres for social policy.

The Mowat Center recently produced a publication looking at the application of the *What Works Centres* model in Canada, cognizant of the differential effectiveness of the UK centres to date.[77] While Canada does not have any *What Works Centres* per se, the Canada-wide research consortium referenced earlier in this Scan, *PROOF: Food Insecurity Policy Research*, is an excellent example of high-quality challenge-focused knowledge production paired with mobilization. *PROOF* has been looking at the efficacy of a range of food security interventions, following a large sample population of Canadians.[78]

A robust social R&D strategy applies a variety of these approaches. *The Start Network* is a learning consortium of international NGOs which engages in reflective practice, knowledge mobilization, "Start Labs" and other social R&D activities in the service of improving international aid and development.[79] There are many other tools in the social R&D toolkit, including crowdsourcing, datathons, and simulations (both on-line and in the form of field schools).[80]

Of course, for such R&D activities to be scaled, there are a number of shifts that need to happen, both on behalf of government and of the social sector. For example, an R&D tax credit akin to what exists in the private sector, and an acceptance by all parties of the concept of obsolescence of certain programs. Just as product lines and service models become obsolete in the market, so must some delivery models in the social realm, so that they can be replaced by upgraded, more resilient, equitable or effective models. [81]

However, according to a recent study by the Bridgespan Group, albeit in the US, **only 40% of non-profit organizations**

> Organizations require a curious culture, catalytic leadership, diverse teams, porous boundaries, a pathway for ideas and the resources – funding, time, training and tools – in order for social R&D to be embraced. Another ingredient is the appetite to accept, learn and grow from experimental failures, which can be difficult in the realm of community and social work. But in the private sector, failure is a fact of life, especially in the world of R&D.

surveyed felt they had the capacity to

innovate, which was defined as a break from current practice in the interest of "significant, positive sustained impact".[83] Social R&D is not without its debates and controversies. There is an active and ongoing discussion, for instance, as to whether open-source breeds innovation, or whether patents, copyright and the artificially enclosure of information does.   It is becoming harder and harder to defend the latter perspective. Part of the confusion around "social innovation" is that some innovation catalysts – hubs, intermediaries, accelerators - are premised on collaboration and sharing (of people, ideas and date), while others are extensions of commercial innovation mills - premised on patenting intellectual property and bringing it to market.

Another minefield is in the bridging of social R&D, public policy and social sector advocacy. Consider, for example,

> Highlights of the plan, which aims to cut chronic homelessness by 50%, include building 100,000 new affordable housing units and repairing 300,000 existing affordable housing units.

the public health crisis of rapidly rising opioid fatalities in Canada:

- **Do ideological blinders and political antipathy prevent us from making more evidence-based program or policy 'bets'?**

- **Would decriminalization of narcotic use of all kinds (or at minimum, all opioids) be a wise public health solution, based on the evidence?**

Such a question is emphatically not on the federal government's agenda, yet such politically 'risky' interventions can be the least 'risky' from a public health efficacy standpoint. Practitioners working in criminal justice and incarceration surely encounter a similar disconnect. **Social R&D can help bridge this.**

As benchmarked by the UN Sustainable Development Goals, which measures the percentages of households

Dwelling Affordably,
and in New Ways

spending 30% or more of their income on shelter, **not only has Canada *not* been making progress, but we have been moving backwards.**[84]

This may change soon, as the federal government, which for decades had refused to engage in the issue of affordable housing, has just announced a first-ever National Housing Strategy with a 10-year, $40-billion plan to help address the massive shortage of affordable housing in Canada.[85]

National Housing Strategy

A previously unbudgeted $4 billion new program – the Canada Housing Benefit – will provide a rent subsidy of $2,500 per qualifying household. One of the more interesting features of the new plan is a national housing co-investment fund that will provide $4.7 billion in financial contributions and $11.2 billion in low interest loans to developers that meet certain criteria including a mandated mix of affordable subsidized and market units[86], energy consumption and emissions targets and accessible units. It is unclear whether either the Province, burdened by a record deficit, or the City of Calgary, which is cutting city services

like transit as it faces a $170 million shortfall[87], will be able to match the federal housing strategy with investments of their own.

The program comes a time when housing affordability is reaching a crisis point for many demographics.

The *type* of housing Canadians are choosing is also changing. **Millennials**

Notably, young Canadians now need to save for three times as long as they did 40 years ago for a down payment, which translates to 13 years vs. 5 in 1977.

are now driving the housing market, which is becoming increasingly rental-focused. 32% of Alberta millennials in a recent Royal LePage study cannot afford to buy a home – the highest of any province – and do not expect to anytime soon.[88]

For many years, in larger centres, we have seen a steady shift away from single family homes toward condominium apartments and other forms of multi-family housing, partly due to affordability and partly due to lifestyle choices (wanting to be less auto-dependent and living in walkable, mixed-use neighbourhoods).

We are now seeing very concrete evidence of this shift happening in Calgary as well. In Canada, **Calgarians are now second only to Vancouverites, and ahead of Toronto, in terms of being most likely choose condominiums as a form of home ownership.**

A significant majority of housing starts in Calgary are now in the multi-family market (almost 2:1 compared to single family).[89] Some of this is in East Village, Calgary Municipal Land Corporations' thoroughly planned – and popular - attempt at creating community intentionally, much like Yaletown in Vancouver or Corktown/East Donlands in Toronto, which build vibrancy into long-neglected urban spaces with cultural anchors and a pedestrian-oriented mix of uses.

Density is not the bogeyman it once was: The narrative created by the campaigns looking to unseat certain incumbents on City Council contended that suburban developers are being burdened with anti-sprawl regulations, a narrative that they appear to have misread the public's (lack of) empathy for.
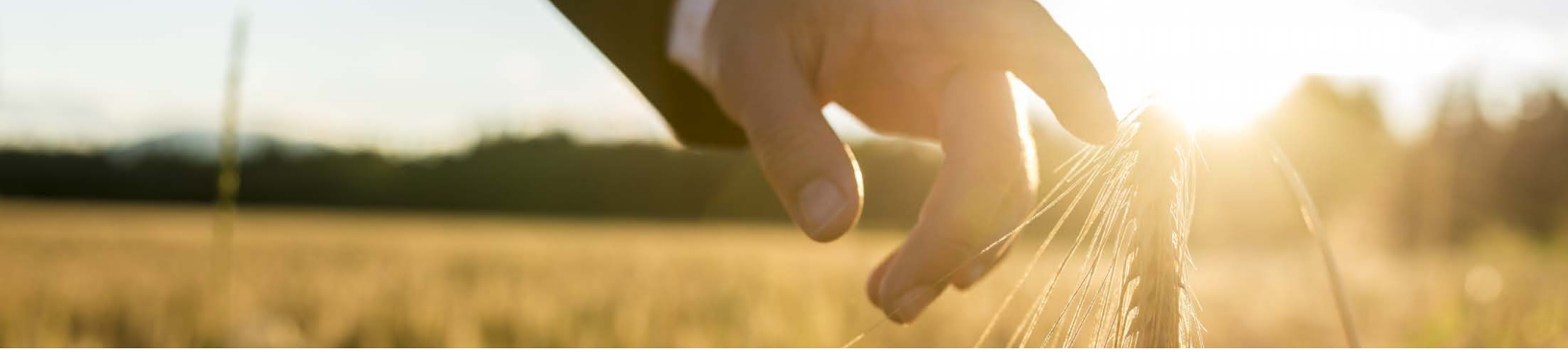
The Future of Food

> *"The single greatest lesson the garden teaches is that our relationship to the planet need not be zero-sum, and that as long as the sun still shines and people still can plan and plant, think and do, we can, if we bother to try, find ways to provide for ourselves without diminishing the world."*
>
> *Michael Pollan, The Omnivore's Dilemma: A Natural History of Four Meals (2006)*

Anyone in or beyond adulthood today, living in a city, has borne witness to an explosion in the diversity, choice, and availability of food. Although we have seen the slow but steady rise in the organic, local and slow food movements, the reality of global carbon-intensive supply chains, water- and chemical-intensive monocultures, feedlots and factory farming remain the dominant features of our food supply system. As food costs the average household in Calgary roughly $9,000 a year[90], affordability is also an issue for many citizens. [91]

The UN's Food and Agriculture Organization (FAO) defines food security as "a condition in which all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life". [91]

As mentioned earlier in this document, Canada's performance on the UN SDG's pertaining to food security is actually regressing in every area measured. Between 2008-2016, food bank use in Alberta rose an astonishing 136.1%.[92]

National Food Policy

This coming year, however, may mark a key step in how we grow, eat and think about the food in Canada. **In 2018, the Government of Canada is set to release its first national food policy** (consultations are underway[93]), addressing issues related to the production, processing, distribution, and consumption of food. The Canada Food Guide, which was last updated in 2007, will receive a major update in 2018, with new dietary guidelines for health professionals and policy makers.

Food Sustainability in Calgary

The City of Calgary's 2012 Food Action Plan has led to recent changes in land use bylaws to expand and accommodate a range of food production activities, such as hydroponic, aquaponic, aeroponic and aquaculture, as well as brewing and distilling, to occur in certain commercial and industrial districts. The City is now examining how to accommodate outdoor urban agriculture and rooftop greenhouses in additional land use districts. The number of philanthropic funders interested in food issues is definitely growing, evidenced by the recent creation of a new Canadian food funders network[94] and the Canadian-based Global Alliance for the Future of Food.

Calgary has a number of nation-leading initiatives that are planting the seeds of the future of food in this city:

- ❖ Grow Calgary operates the largest urban farm in Canada.
- ❖ Hop Compost is Canada's first inner-city compost facility.
- ❖ The Alex has created the first community food centre west of Winnipeg.
- ❖ SPUD.ca (Sustainable Produce Urban Delivery), which has recently teamed up with Blush Lane Organic Market, is changing how shoppers think about their groceries.

❖ Companies like social enterprise TruBuch Kombucha and Fiasco Gelato, a certified "B Corp", are at the leading edge of responsible food enterprise.

❖ Calgary Co-op was the first major grocer to get behind the "Localize" local food source labelling movement.

❖ There are, to date, 27 food and drink members who have joined REAP, an association of locally owned businesses that are committed to people and planet.

❖ Calgary also has four orchard pilot projects. Countless more sustainable food-focused enterprises and initiatives are bound to be on the horizon.

Let's Text: Youth Mental Health

Bell's "Let's Talk" campaign, surely among the most successful interventions of a Canadian company on a social issue, has helped encourage Canadians to be open to speaking, thinking and learning about mental health. **For teens and young adults, however, "let's text" may be a more apt way of igniting a conversation, the background to which is a deeply troubling set of statistics.** The process of entering adulthood is a tumultuous period – juggling education and often multiple jobs, leaving home and paying rent and tuition, enduring the social pressure to binge drink and experiment with other substances, relationships and epiphanies that can profoundly challenge personal identity and worldviews.

Student Mental Health

Most students with a full-time course-load are working 11-20 hours a week, and there are more frequent volunteer and community service expectations attached to both scholarly advancement and employment.[95]

The brain continues to develop between the ages of 18-25, a period when certain mental illnesses such as schizophrenia tend to develop.

In a recent study of Alberta college and university students, 13% have "seriously considered committing suicide" in the past year, which means they have done more than just muse about it. [98]

More than 90% of those who succeed at suicide suffered from depression or some other form of neurological damage.[98] **In the same study, 68.3 per cent of Alberta students reported that they felt "overwhelming anxiety" at some time during the past year, and 65% felt feeling "very lonely".[99]**

In a Maclean's survey of 17,000 post-secondary across Canada, MRU had the dubious distinction of being the university in Canada where students feel most "overwhelmed".[100] That said, MRU also placed in the top 10 universities in terms of quality of campus mental health services, as did University of Lethbridge.

It is not clear what is causing these levels of anxiety and depression, and there are many theories, ranging from the fact that we are simply measuring better and paying more attention, to pathologizing the "teenage brain,"[101] to the rise of factors such as social media, technological anxiety, helicopter parenting[102], the converging time and financial stressors, and even the under-studied *weltschmerz*, a profound sense of melancholy about the state and plight of the broader world around us.[103]

The Alberta Government announced in June that it is investing $25.8 million over three years, following the tabling of recommendations by the Advisory Panel on Post-Secondary Mental Health, in part to create a "Healthy Campus Alberta Community of Practice".

This is an important start, but we will need to know much more about the causes, and experiment with many preventative measures, before we can address this urgent issue with confidence.

Access, Equity and 21st Century Disruptions in Education

Education is assumed to be one of the foundations of a "good society". Moreover, access to education ensures that all Canadians have equal opportunities to learn and thrive. But do all Canadians have equal opportunities to access post-secondary education? If not, then what kind of society are we creating?

Many people have puzzled over such questions for a very long time, knowing that **education is the most important engine of social mobility.** But the conversation appears to have a renewed urgency. According to the 2017 Edelman Trust Barometer, 40% of Canadians believe that "people like me are denied access to the education and opportunities we need to get ahead."[105][104]

The reality is that Canadians – rural, remote and Indigenous populations, in particular – do not enjoy the same access to opportunities as urban Canadians.

There appears to be a renewed urgency, due in part to the Calls to Action from the Truth and Reconciliation Commission of Canada,[105] but also the need for Canada to be globally competitive and to ensure advanced civic literacy in a world of social media, 'fake news' and challenges to the perceived legitimacy of science, outlined elsewhere in this report.
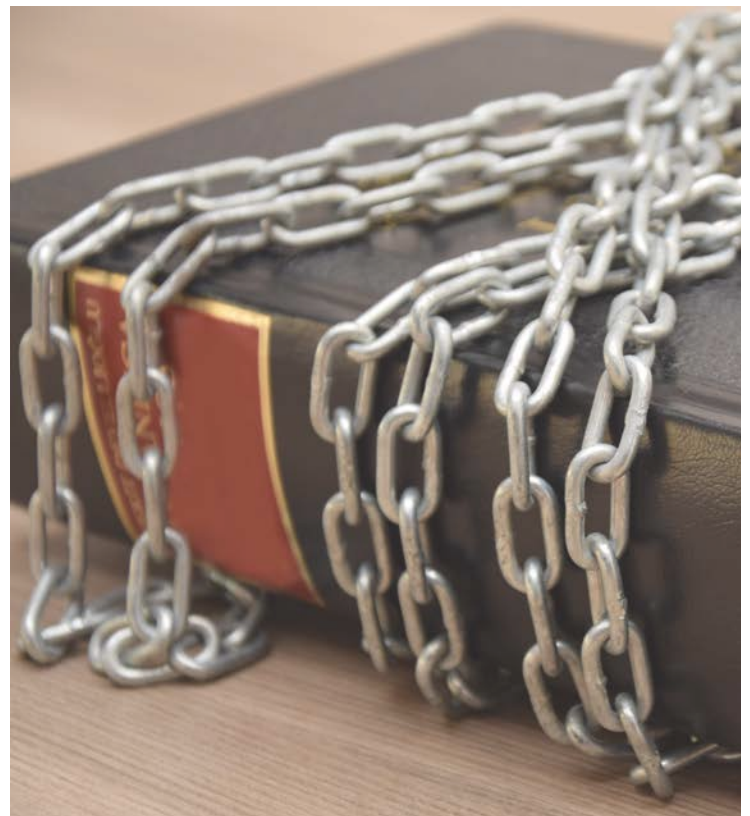
The President of Arizona State University, John Crow, a well-known crusader for inclusive education, argues that the *"the standard model [of post-secondary] is elitist,"* and *"if we don't learn how to communicate better and work with the community, there are going to be pitchforks and tar-and-feather buckets waiting outside the gates for us."[106]* Closer to home, Vancouver Island University President Ralph Nilson, who is a leading advocate in Canada for the idea of universities as inclusive vs. exclusive, has hired a full-time staff person whose job is sign up families in surrounding First Nations and rural communities to the *Canada Learning Bond.[107]*

The OECD's *Programme for International Student Assessment (PISA)* rankings, which measure overall educational performance across countries in terms of numeracy, literacy and other indices, also looks at social equity, belonging and quality of the educational experience for immigrants. The premise behind the rankings is that schools should provide a good education for all students, regardless of their parents' education, career, country of origin, or other social factors.

On the other hand, Canada appears to be better poised to excel in skills

necessary to navigate the 21st Century.[109] The Worldwide Educating for the Future Index, put out by The Economist and the Yidan Prize Foundation, notes that Canada rates second in the world – behind New Zealand and ahead of Finland, Switzerland and Singapore – in terms of preparing students for the future. [110]

Yet, despite Canada's globe-leading scores on literacy, and excellence in most of the other standard educational metrics, Canada underperforms on most of the access and equity metrics, with little or no improvement since 2006.

The Scan uses different criteria than the PISA scores, measuring global awareness and civic education, entrepreneurship, tech prowess, leadership, interdisciplinarity and creativity. **So, it appears that the majority of Canadians are well-positioned to thrive with a 21st Century skillset, while not all Canadians have access to this skillset.**

The connection between access and excellence is starkly demonstrated in the now-famous roll out of "MOOCs" (Massive Open Online Courses) by Sebastian Thrun, cofounder

and CEO of Udacity. Thrun had been teaching advanced AI and robotics courses to students at Stanford, who were of course paying exorbitant tuition and partaking in a quintessentially elite experience.   Thrun then opened his course, through a MOOC, to tens of thousands of students worldwide, with many performing as well as the Stanford students, though they might be taking the free course from sub-Saharan Africa or the Indian subcontinent, for example.

While the early shine of MOOCs has been tarnished, due to high incompletion rates and the passive lecture-style delivery mode, a second wave of massive online learning is making adjustments that hold promise for unifying this access/equity and quality paradox.[111]

environmental scan

#WelcomeToCanada

Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tossed to me,
I lift my lamp beside the golden door!

From The New Colossus, a sonnet by American poet Emma Lazarus (1883)

As the homeless, tempest-tossed refugees of Africa and Syria continue to risk their lives crossing the Mediterranean to seek refuge in Europe, it turns out that European countries are not among the top 10 hosts of refugees globally.

In fact, the 5 largest countries are in the Middle East and South Asia, while the next 5 are in Africa. Germany nearly cracks the top 10 this year, but Canada is well behind, welcoming just shy of 60,000 refugees, compared with, for example, Jordan's 2.7 million, Turkey's 2.5 million or Ethiopia's three quarters of a million.[112]

But myths can be more powerful than numbers: The now-famous tweet from Prime Minister Trudeau - *"To those fleeing persecution, terror & war, Canadians will welcome you, regardless of your faith"* - was issued immediately in response to President Trump's move to bar refugees and visitors from seven Muslim-majority nations.

On the surface, it appeared to signal that Canada is the new land of liberty, and despite criticism both from the left and right on the offhand and misleading message in the tweet[113], the government did deliver, according to the Auditor General, on its commitment to welcome 10,000 Syrian refugees.
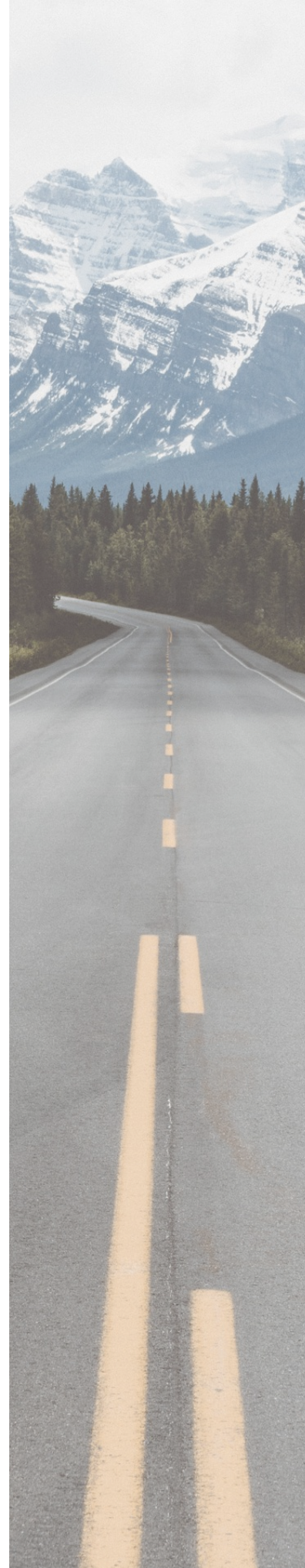
Canadian Immigration

Thousands of migrants have been crossing the Canada-US border on foot this past year, most from Haiti, and most via Quebec, where the Canadian Forces have set up three temporary shelters. Despite the government having dispatched cabinet ministers to the US to try and clear the air on the rules regarding Canadian immigration and refugee policy, a picture has been painted in many newcomer communities in the US that Canada is what its Prime Minister tweets it is.[114]

> **As pollster Michael Adams notes: Most Canadians continue to believe that immigration is good for the economy, disagree that immigration levels are too high and express growing confidence in the country's ability to manage any challenges associated with immigrants and refugees." In this respect, Canada remains exceptional.**

Yet, a poll by the Angus Reid Institute suggests that Canadians are not enamoured with this approach, with a majority believing the Canada is "too generous" with respect to asylum seekers.[115] At the same time, the attitude toward the specific issue of illegal border crossings does not seem to extend to Canadian's attitudes toward immigrants generally. [116]

Meanwhile, the Trump administration has announced that it would lift the Temporary Protected Status (TPS) for Haitian nationals, who will now have 18 months to formalize their status in the US or leave the country. Haiti is insisting it does not have the ability or infrastructure to accept them back. As such, we can expect an increase of

Haitian refugees in 2018, primarily to Quebec, though likely transcending into other provinces.[117]

There have been significant changes to Canada's immigration policies this year. While the country currently admits new 300,000 immigrants annually, this number will gradually increase to 340,000 by 2020.[118]

An amendment to the Immigration Act now lessens the time needed for permanent residents to obtain citizenship.[119]

Rules have also been eased for the economic immigration programs, including the Canadian Experience Class, the Federal Skilled Worker Program, the Federal Skilled Trades Program and a portion of the Provincial Nominee Program.[120]

From Land Acknowledgement to **Acknowledgement on the Land**

"Innovation isn't always about creating new things. Innovation sometimes involves looking back at our old ways and bringing them forward to this new situation"

Senator Murray Sinclair [122]

The place where Calgary sits now, its defining feature being the Elbow shape of its rivers, was called Moh-kíns-tsis by the Niitsitapi (Blackfoot), Kootsisáw by the Tsuut'ina, and Wincheesh-pah, recently updated to Wichispa Oyade,122 by the Iyarhe Nakoda (Stoney).123 Various Indigenous Peoples have resided in this region for thousands of years, the Blackfoot for many hundreds of years. For 200 years (between 1670 and 1870), the entire Hudson Bay watershed, which includes the Bow drainage basin, wherein Calgary sits, was called Rupert's Land, "granted" to the Hudson's Bay Company.

The 133 years since Calgary's founding – seven years after the signing of Treaty 7 - seems almost trivial by comparison, when we acknowledge that we live in such an ancient and storied place.

Strengthening Indigenous Recognition

Yet, with the exception of certain automobile thoroughfares – a curious form of acknowledgement – there is very little recognition within Calgary's built or natural landscape. We have communities that allude to explorers or colonial governors (*Palliser*, *Douglasdale*, *M(a)cKenzie*), that harken back to Scotland, England and Ireland (*Manchester*, *Bonnybrook*, *Bowness, Killarney*), French-Catholic connections (*Mission, Rouleauville, Mount Royal*) or that are literal references to the landscape (*Bridgeland, Spruce Cliff, Sunnyside*). Some don't even seem to reference any part of our vernacular experience – the tropical hardwood-inspired Mahogany or the emphatically un-Tusan Tuscany. Even the Paskapoo slopes development – which, for a time, was to be called Aiss ka pooma, based on consultations with Blackfoot elders – has now reverted to "Trinity Hills", a randomly Irish-Catholic etymology.

Honouring Indigenous Heritage

The renaming of *Langevin Bridge*, memorializing one of the architects of Canada's decades long experiment in cultural genocide, to *Reconciliation Bridge*, is an **interesting harbinger of what is to come.** The active debate over Del Geist's Bowfort Towers sculpture installed near Canada Olympic Park, **a fumbling of the public art file of literally monumental proportions,** has served to ignite discussion on the proper role of consultation and inclusion of Indigenous residents and Treaty 7 Elders in the selection and citing of local public art. The court action launched by the Stoney Nakoda First Nation challenges the Alberta Government to consider renaming certain sites in this region, including Calgary itself, after names traditionally used by the First Nation to describe sites and features that they used and occupied. A grassroots local initiative has emerged to imagine and campaign for an Indigenous gathering space in Calgary, details pending.   Meanwhile, plans for

Tsuut'ina Park, Crossing, and Centre, three major First Nation-owned commercial, research and retail developments are proceeding.

The City's draft Indigenous Policy Framework, in addition to calling for civic spaces for ceremony, calls on civic projects of all kinds, not just those on the built landscape, to place Indigenous participation at the centre.[124] This follows on the heels of the report *White Goose Flying*, which outlines the City's response to the Truth and Reconciliation Commission's Calls to Action. Civil society organizations can be expected to undertake a similar process of reflection, much as Vibrant Communities Calgary, Mount Royal University and the University of Calgary are doing through their respective Indigenous strategies.

> This shift cannot be ornamental – such a shift requires rethinking organizational structures, processes, environments, and entails yielding the interest of the organization's own advancement agenda to the interest of the commons.

As Elder Roy Bear Chief has noted, in the context of Vibrant Communities Calgary's *Enough for All Strategy*, the Sun Dance, one of the great philanthropic traditions in what is now called Alberta (a tradition that was banned under the Indian Act for seven decades) involved many sacred societies working collaboratively, putting the ceremony at the centre, and their own identities at the periphery.[125]

The United Way of Calgary and Area has also launched their *Natoo'si* strategy, which **puts healing and reconciliation at the centre of their investments and interventions,** rather than supporting programs issue-by-issue.

A Rise in Indigenous Social Entrepreneurship

We are also seeing the rise of Indigenous social entrepreneurship, recognized in part through two national Indigenous Innovation Summits since 2015.   Initiatives such as the Treaty 7 Film Collective, Trading Post 150, Iiniistsi / RedX Talks, and the Imagination Group of Companies are part of a growing number of Indigenous-run, locally-created community initiatives or enterprises.

As we prepare over the coming decade to celebrate the 150th signing of Treaty 7, we can look forward to many deeper forms of acknowledgement, expression and inclusion within our organizations, community collaborations and public environments.

Dawn of the DAOs:
Blockchain and Internet 2.0

If one was to have purchased a Bitcoin as part of its initial currency offering, or ICO, it would have cost as much as that first piece of carry-on luggage - $25. That same Bitcoin is now valued at $19,000 and counting (up from $6,000 in early September).

Bitcoin is the most famous example of a cryptocurrency, a form of virtual "money" secured not through a central bank, nor by any nation state, but through centralized peer-to-peer cryptographic algorithms that are, allegedly, unhackable. There is currently over $155 billion circulating worldwide in cryptocurrencies, including Bitcoin.[126] Despite the fact that so much of this phenomenon is pure speculative hype, **even the Bank of Canada is looking at potentially creating a digital currency.**[127]

Blockchain

The technology underpinning cryptocurrencies is generically referred to as "blockchain". Blockchain transactions do not have to take the form of currency. In fact, any transaction involving contracts, records, voting cards or any other information-based representations can utilize blockchain. These transactions are validated, permanent and unalterable.

Blockchain has obvious disruptive potential in the realms of finance, insurance and real estate.

Thanks to the largely Canadian-developed Ethereum blockchain, developers now have the opportunity to experiment with using blockchain in any realm they can imagine, through setting up a Decentralized Autonomous Organization, or DAO.[128] DAO's are run by programming code using a collection of smart contracts that form an unalterable Ethereum blockchain. The code replaces the rules and structure of a traditional organization, eliminating the need for a "leader". The purchased DAO tokens equate to equity shares and ownership, which gives the purchaser voting rights.[129]

It is unclear exactly *how* blockchain will enable or disrupt the work of social entrepreneurs and community organizations, but it will certainly do both.

Good Deed Blockchains

Among the nearly 900 DAO apps (or Dapps) developed so far on the Ethereum blockchain, there are at least a handful that **aim to change how social good is monitored, funded and facilitated:**[130]

- ❖ *Provenance* is a Dapp that **enables far greater transparency in supply chains,** so consumers, watchdogs and certification systems can better monitor based on fairness, sustainability or other social purpose metrics (as the name of this app implies, there is an obvious role here for following the chain of custody for works of art).

- ❖ *BoardRoom* is a Dapp that **aims to make board governance more seemless and transparent.**

- ❖ *Weifund* is among a handful of **crowdfunding start-up** Dapps.

There are Dapps in the works for **open community collaboration and open journalism:**

- ❖ *Consensys*, a venture production studio based in New York, has developed the *Blockchain for Social Impact Coalition* (BSIC), which **"incubates, develops, and implements confederated blockchain products and solutions that can address social and environmental challenges across the United Nation's Sustainable Development Goals."**[131]

Internet 2.0

But Internet 2.0 holds at least as many dangers as it does possibilities for its estimated 5 billion users by 2020 (representing 80 billion connected devices)[133].

Net neutrality, which is the principle – enforced by US law – **that prohibits internet service providers from speeding up, slowing down or blocking any content, applications or websites based on preferential treatment.**

To date, North Americans have enjoyed, and largely taken for granted, a fundamental principle of Internet 1.0: **Net neutrality.**

Among Donald Trump's pageant of dystopian pledges is the elimination of net neutrality, which would "shape" users' internet experience and access based on who is able to pay more for their content to be viewed and used. It would be much like the experience of accessing the internet on one's "smart TV", through commercial portals like Netflix, Facebook, Amazon, Alibaba and whoever else pays the premium price. Browsing will be mediated through such channels, and censorship of political or social dissent (whether state-mandated or ISP-determined) would potentially flourish. The implications for education are potentially disastrous.[134] The Federal Communications Commission (FCC) voted 3-2 on December 15 to repeal net neutrality.

Tech Frontiers

Other technologies that are set to take off through 2018 include:

❖ The rise of bots (software that runs automatic tasks over the internet, web crawlers being the best-known example to date) and chatbots (which can simulate, through video, audio or text, how a human would behave as a conversational partner), both of which are expected to outpace mobile application development within 5 years.[135]

❖ Tesla stock is set to soar this year, with a 70% predicted growth in electric vehicles overall, and their planned roll-out of the more affordable Model 3 and a new Semi heavy-duty truck.[136]

❖ Other tech innovations currently being prototyped that could prove profoundly disruptive include solid state batteries, algae farms, and Amazon Go - the company's new cashier-less auto-debit retail stores. Any technology that promotes wellness and aging in place – fitness trackers, sleep supporters, smart homes and voice-activated devices (welcome to Canada, Alexa), for example – are also sound investments.

❖ Car sharing will become more commonplace, as consumers begin hedging their bets on the longevity of internal combustion-powered cars, and as autonomous vehicles appear nearer on the horizon.[137]
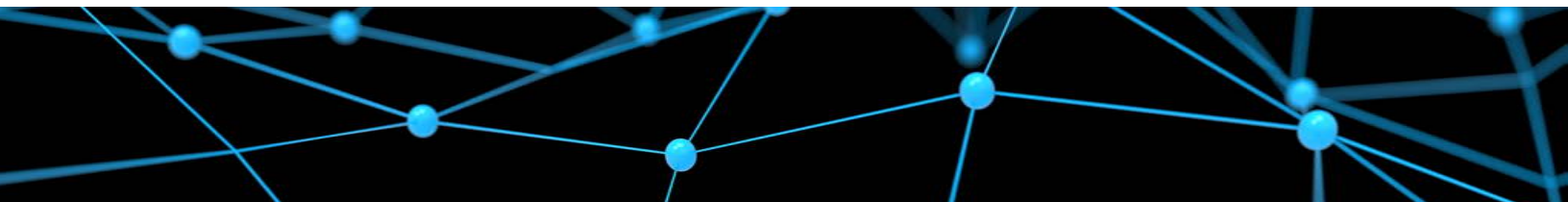
Cannabis, Carbon and the Conservative Identity Crisis

By Canada Day, 2018, Albertans will be able to consume, grow, and purchase in private retail settings, recreational cannabis.

Bay Street is starting to heat up as the multi-billion dollar industry presents opportunities for many players, new and old, small and large. The recent $245 million investment by *Constellation Brands* (which distributes Corona beer, Kim Crawford wine and other popular brands) in cannabis producer *Canopy Growth Corp* brings a new level of legitimacy to the new industry.[138]

Meanwhile, on December 1, Conservative Party Health-Critic Marilyn Gladu, stood to recite a poem, the gist of which is an appeal to "keep our great country safe from the weed."[139] Indeed, while **two-thirds of Canadians support marijuana legalization, a majority of Conservatives believe it should remain illegal.**[140]

A smattering of applause from Gladu's party cohort was matched in equal number with cringes from other Conservative MPs.

> Such a divide is symbolic of the sharp social cleavages that have emerged among conservatives – whether big 'C' or small 'c' - in Canada.

Naheed Nenshi's third consecutive victory as Mayor saw the largest voter turnout in a municipal election in many years. Some in the big "C" conservative establishment were no doubt surprised at the affirmation of his leadership – a narrower victory than the previous election notwithstanding – which Calgarians have granted Nenshi through re-election.

Some pundits have remarked that this represents a fundamental shift in the political character of the city. While this may be true, it is also worth remembering that Calgary's last four Mayors (going back to Ralph Klein) were elected as either card-carrying members of the Liberal party, or otherwise wore their centrist values on their sleeves.

Calgarians have for more than a generation now seemed drawn to centrist or even centre-left politics at the local level, while maintaining an equally consistent right-of-centre bent at the federal level.

In this light, it is interesting to look at the United Conservative Party's (UCP's) strategy and prospects in Calgary, where the provincial election will almost certainly be decided (if one assumes Edmonton will generally go NDP and rural Alberta will generally go UCP). With Greg Clark stepping aside as leader of the Alberta Party (and no obvious visible successor yet in the wings), and with the Alberta Liberal Party essentially lifeless, the next provincial election will almost certainly be a two-way race between the NDP and UCP.

Certainly, the NDP is in rough shape, their main achilles heel being a very large public deficit, even with a recovering economy, and growing debt.

The math suggests a united alternative to the NDP would be formidable – the latest poll showing 47% of Albertans would vote UCP.[141] However, the UCP's new 'tent' may be far too big to be a home for cosmopolitan progressives and social conservatives alike.

The cleavages are not merely the news-baiting 'wedge' issues like gay-straight alliances in schools (and on issues like this, Kenney can be polarizing to the point of being politically toxic to the party's broader successes)[142]; The divisions also pertain to views on economic development, inter-provincial trade and the role of education.

For example, some conservatives support investments in an entrepreneurial ecosystem, with a radically updated education system to match. Others support a 'back to basics' curriculum, and a 'stick to our knitting' doubling down on a fossil fuel-based industrial strategy. Some favour the privatization of ATB Financial in order to balance the books, while others recoil at the thought of surrendering sovereign wealth for such a short-term outcome. Some are among the biggest boosters of a minimally-regulated recreational marijuana market, while others remain horrified the narcotic is actually being legalized. **Some, such as Preston Manning, even support a carbon tax.**

A Kenney Victory

If Jason Kenney does get elected premier in 2019, we can expect at least the following:

- ❖ **To have reached office, younger people will not have come out in droves to vote.** As political scientist Lori Williams observes, the UCP is associated with being too far right for millennials, particularly on social issues.[143]

- ❖ To have reached the Premier's office, **he will have had to keep the socially conservative fringe elements of the party silent,** much as Stephen Harper adroitly did with his successive electoral victories.

> Following the federal Conservative victory playbook, Kenney will have to appeal to new Canadians. If the UCP styles itself as the party of angry, white, WASPish males, and with Alberta attracting even more new immigrants that B.C. for the first time, it is hard to see an electoral path to victory.

- ❖ **Generalized fiscal austerity,** with a likely elimination or cut in certain social programs, as well as education and health expenditures. This will lead to added pressure on non-profits, philanthropic organizations and a rise in user fees and tuition for post-secondary students.

- ❖ **ATB Financial will likely be privatized,** providing a one-time injection of revenue to help balance the books. At minimum, the idea of privatization will be publicly floated.

- ❖ **The carbon tax will stay.** There will be much bluster leading up to the election, pursuant to the UCP pledge to scrap the tax. However, there are **three important calculations that virtually guarantee the carbon tax as a permanent fixture,** in some form:

    - ○ The federal government has stated that they will implement a federal carbon tax where there is no such provincial tax in place. Better, then, to have a 'made in Alberta' solution.

    - ○ With the passage of time, the initial 'pain' of the carbon tax (which has barely registered in terms of the cost of energy to consumers[145], particularly in relation to the latest market-induced spike) evaporates. Yet, the revenue stream remains, and for a revenue-starved government bent on avoiding the imposition of a sales tax, this is as easy as an alcohol or tobacco 'sin tax' to keep on the books ad infinitum.

    - ○ Public opinion on climate change – especially in the cities - will continue to consolidate in favour of action.

A Notley Victory

If Rachel Notley is elected premier in 2019, we can expect at least the following:

❖ The NDP will have **moved away from trusting mainly partisans to cultivating a big, progressive centre-left 'tent'.** While Notley already governs largely from the centre of the political spectrum, senior civil-service and political appointments more often than not reward party loyalty. There are many non-NDP progressives "on the fence" or feeling like they have no natural political home. The NDP should in theory be able to reach this group more easily than the UCP, and victory will almost certainly depend on it.

❖ Some other **'big names' will have run under the NDP banner,** which might include a handful of prominent disaffected former Tories. Some Calgary seats will continue to go NDP, while Edmonton will have been a virtual sweep for them.

❖ **The Alberta Party will have even less momentum and visibility** than it does now, so will not have been a factor in splitting the centre-left vote.[146]

❖ **An early "ripping off the Band-aid" fiscal rebalancing measure,** potentially including a sales tax (although Finance Minister Ceci has vowed not to introduce this), and some mild to potentially significant austerity measures.

❖ **A big, new non-automobile-centered infrastructure idea**, such as a smart solar grid, or a passenger train link between Edmonton and Calgary.

If the economy picks up steam, the latter of the above two scenarios may well come to pass, as the 'silent majority' of Albertans, who might naturally be characterized as "red Tories", will either stay home come election time, or may hold their nose and re-elect Notley rather than take a gamble with closet social conservatism and the reputational risk to the province that may accompany a Kenney premiership.

The safe money right now is on a UCP victory, but there is a path, perfect though it would need to be, for the NDP.

Red Pill Citizenship

"The very concept of objective truth is fading out of the world. Lies will pass into history.

- George Orwell

The 1999 science fiction film *The Matrix* launched a cultural meme, **centered on the choice between choosing the blue pill – which represents the choice of blissful ignorance over inconvenient truth – or the red pill – which represents a choice to inquire into and discover real phenomena, unpleasant though this discovery can sometimes be. Nearly 20 years later, this choice seems less like fiction.** It is an uncomfortably apt allegory in our electronically-mediated experience of the world.

The anti-Islam, pro-secession propaganda even induced a small number of Texans to attend bogus rallies, only to be greeted by similarly-duped counter protesters. [147] It is a funny story, until one considers the shadowy geo-political motives underlining the generation of "fake news", much of it either tacitly or overtly Kremlin-sanctioned, aimed at influencing elections or undermining multilateral institutions, in particular NATO and the European Union. **In one particularly unnerving incident, Pakistan's foreign minister issued a nuclear threat, in the form of a reckless tweet, in response to a fabricated "news" story about Israel.**[148]

In 2016, the *Heart of Texas* "movement", manufactured halfway around the world by Russian online trolls, had more followers than the official Texas Democrat and Republican Facebook pages *combined*.

According to the *2017 Edelman Trust Barometer*, trust in media is unsurprisingly declining, but ironically social media is eroding far *less* than trust in mainstream media. [149] Yet, it is social media – Facebook in particular – which is creating an echo chamber of ideas and serving as the fake news conduit.

The Edelman barometer underscores this echo chamber effect, where bias is an acknowledged and preferred filter for news intake, and where more than a third of people readily admit they prefer ideas and actions they *agree with* to ideas and actions based on *facts.*

Within 5 years, some IT analysts predict that fake news will be more frequently consumed than real news.[151]

How artificial intelligence, or AI, will play into this is doubly chilling: **By 2020, some tech analysts believe that "AI-driven creation of 'counterfeit reality', or fake content, will outpace AI's ability to detect it".** [152] In tandem, we can expect to say new forms of digital trickery, like video facial manipulation.[153]

Philanthropy futurist and blogger Lucy Bernholtz cautions that foundations and nonprofits need to be much more aware of these phenomena:

The social media systems are purpose-built to manipulate. Facts and good intentions aren't enough. Understanding the nature of the information ecosystem - the ways it makes getting your message heard harder, not easier, and the ways it threatens the well-being and safety of those you are trying to help - is no longer an optional, edge requirement. It's reality for all of us in the digital age.

A report earlier this year by the Public Policy Forum, reflecting on this deepening crisis in news, in Canada and abroad, **suggests that the government lift restrictions on philanthropic support for journalism, in order to restore the "civic function" aspect of quality journalism.**[155]

The launch this year of the *Solutions Media Network* internationally, of *Discourse Media* in Canada, and *The Sprawl* in Calgary, are just a few of the examples of an emerging civic journalism, also manifest in the form of podcasts like *Canadaland*.

Beyond the media, trust in other institutions in Canada is at an all-time low. The Edelman Trust Barometer saw Canada move into the "mistrust" category vis-à-vis other countries for the first time this past year.[156] Moreover, the Barometer revealed a **growing gap in trust of institutions between those who consider themselves the "informed public" and the general population, who are considerably less trusting.** Trust in NGOs, business, media and government have all declined, although trust in NGOs remains the highest, at 59%.

The **credibility of financial institutions and CEOs has decreased most markedly over the past year, down to 25%** of the population viewing them as trustworthy. In Canada, this might be fueled in part by revelations of pressure sales and employee bullying at the big banks, but it also reflects a global trend in every country studied. In Canada, this past year saw huge pay raises for CEOs of Bombardier (50% increase vs. thousands of employees laid off, with over a billion dollars in public subsidy), PotashCorp (34% increase vs. 400 employees laid off), and many other firms.

The bankrupt Sears gave retention bonuses to its CEO and senior executives, while employees not only lost their jobs, but their pensions too.

Calgary-based companies also helped chip away at this sense of trust. The CEOs of EnCana and Canadian Pacific, for example, received large bonuses in

the service of protecting shareholder value, which included laying off thousands of employees, a great many of them Calgarians.[157]

CEO salaries in North America, which in the mid-1960s were 20 times the median worker's salary in the company, have now eclipsed 300 times, most of this increase happening in the last decade.[158]   Add to this the recent revelations of offshore wealth sheltering, courtesy of the Paradise Papers.

In the face of this profound weakening of trust, if there is another financial collapse, inevitably accompanied by massive public bailouts to those companies "too big to fail", the very legitimacy of shareholder capitalism may be on the ropes.   Such tenuous legitimacy may open the door to a more mainstream "steady-state economy" conversation.

The influential 20th century economist John Maynard Keynes anticipated the day when society could focus on ends (happiness and well-being, for example) rather than means (growth for growth's sake and the singular pursuit of shareholder profit). Nobel Prize winning economist Joseph Stiglitz, the New Economics Foundation and the Centre for the Advancement of the Steady State Economy have advocated similar ideas.[159] We can expect, at a minimum, more conversations about "stakeholder

capitalism" vs. "shareholder capitalism"[160], and alternative measures to GDP to be mentioned and utilized more frequently by national governments.

It's not just capitalism that is under the microscope. Despite Donald Trump nemesis George Soros' recent $18 billion philanthropic investment in building inclusive, open, rights-based democracy worldwide[161], there are many threats emerging to the legitimacy of western, liberal democracy.

> Beyond hacking to influence election outcomes, and the rise of neo-fascism, outlined in the previous Scan, western democracy may face its ultimate test in its ability to effectively deal with certain chronic, intractable challenges.

Former Prime Minister Kim Campbell, speaking on the next 150 years for Canada, noted that **we should be concerned that if we cannot collectively address climate change, then liberal democracy itself may be on the ropes.**   In recent decades, Canada has had a very fluid partisan culture, but this also appears to be hardening into a more US-style polarity.

There is also a simmering undercurrent of populism, that appears ripe for either the far left or far right (or both) to

exploit: **According to one study, the majority of Canadians now believe that Western-style representative democracy is a failed system.**[162] That said, the research conducted on their *Americas Barometer* by Environics Institute so far indicates no worrisome change in trust in liberal democracy, either in Canada or in most countries measured.[163]

The *Edelman Trust Barometer* raises a number of other cultural flags. **One in two Canadians believe that the recent influx of migrants from Syria and elsewhere is "damaging our economy and national culture"** (although, as we'll see later, *Environics'* research contradicts this), and 80% believe the elites – CEOs, government leaders, media moguls, university presidents, etc. – are out of touch with regular people.[164]

There appears to be a growing "siege mentality" to borrow a phrase from New York Times writer David Brooks, where dysfunctional group behaviour is flourishing on both the left and right, from campus social justice warriors to gun lobbyists:[165] "… [It] starts with a sense of collective victimhood.

It's not just that our group has opponents. The whole 'culture' or the whole world is irredeemably hostile. From this flows a deep sense of pessimism." It also leads to polarities,

where both Tiki-torch Nazi rallies and campus witch-hunts in the name of "safe spaces" can happen simultaneously, both camps fashioning themselves as "the noble us versus the powerful them."

People who are perennially comfortable with social change - who even wear it as a badge of honour – can all too easily judge others for failing to keep up. This can make those who are less apt to embrace change to feel under siege.

But only about a quarter of the world's people, for example, view diversity and inclusion as a positive force.[166] Wise to this, some prey on this sense of being under siege to advance veiled or obvious forms of xenophobia.

The breakdown in civil discourse is not limited to the US, nor to the troll-o-sphere: As one anecdote, even though Calgary Mayor Naheed Nenshi has been in Office for over six years, the vast majority of the 200+ racially- or religiously-charged violent threats he has received were in the past three years.[167]

In light of these phenomena, a new form of active citizenship – call it "supercitizenship", "Civics 2.0" or, to extend the Matrix metaphor, "Red Pill Citizenship" – is required to successfully navigate, stay afloat and traverse the rough waters that lay before us.

More "awake", yes, but also more heterodox and rooted in dialogue, trust-building and getting to know "the other". This entails not merely critical thinking, but dialogue across cultures, classes and life-worlds.

The urban-rural divide is particularly critical; As Michael Pollan suggests, **"shake the hand that feeds you."**[168] It also demands the ability to identify fake news from real news, the ability to distinguish junk science from real science (a passion of Canada's new Governor General and former astronaut Julie Payette), and **a deeper understanding of what it means to be a Treaty person.**

It requires a inquisitiveness and imagination such that we are in touch with a long view of history and a long view of the future – a curiosity about our own ancestors, a familiarity with great and timeless narratives that connect us to culture(s), and thinking in seven generations – backward and forward.[169]

Red Pill Citizenship is choosing reality, but it is not bleakly objective. It is also in search of moral truth, where literal truth proves inadequate.

Our global storehouse of stories – manifest through culture and language (including code), and in turn institutions of government, finance, business, community welfare, the arts and philanthropy – is where moral truth resides, though it may shift radically with time.   What once seemed benign or even beneficent can one day be revealed as an atrocity.[170]

Stories, language and culture is also what sets us apart from other animals. It is what gives us the power to create our own futures, not submit to fate, or dogma, or market forces, or whatever other "inevitable" agendas others with power try to lord over those with less power, seductive and even useful these might sometimes be. Human societies need not follow prescribed patterns.

We can shift our cultural norms, assumptions, behaviours and policies, and design our way to a much better future. In fact, if we do not, there is more than a strong possibility, so long as we follow the dominant industrial monoculture we have furnished for ourselves, that we may be heading for a collapse of systems critical to the prosperity of human communities.[171]

What does it mean to be human in the 21st century?   What do we need to do to create the conditions for people to learn, care, innovate, and thrive?

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What does it mean to be human in the 21st century? What do we need to do to create the conditions for people to learn, care, innovate, and thrive?

2018 | environmental scan

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