



SUSTAINABILITY MATTERS: PROSPECTS FOR A JUST TRANSITION IN CALGARY, CANADA'S PETRO-CITY

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Colonization and Resource Extraction on the Canadian Frontier

The first eight thousand years of human settlement in Calgary is an Indigenous story. The land is known as *Moh'kinsstis* ('elbow'), the Blackfoot word used to describe the landscape at the confluence of what we now call the Bow and Elbow rivers. In oral history, Niitsitapi (the Blackfoot people) had "interwoven and integrated themselves with the land, environment, and other living beings in the territory given to them by Is tsi pa ta piyopi," the Creator or Source of Life.¹ The place we call Calgary is within the traditional territories of the Siksikaitsitapi (Blackfoot Confederacy), including the Siksika, Kainai, and Piikani; the Tsuut'ina, the Îyâxe Nakoda Nations, and the Métis Nation.

The story of the last 150 years in Alberta is one of European expansion, which meant the clearances of First Nations to reserves to make way for frontier settlement, agriculture, and oil. To support western expansion, the British Crown established eleven numbered treaties across Canada, Treaty 7 being the one in which the city of Calgary is located; each of these treaties involved relocation of First Nations to reserve lands. According to Treaty 7 Elders, "for the Crown, the most important aspect of the written treaty was the 'surrender' of land. However, all First Nations understand and maintain that the true meaning and intent of the process and lasting treaty relationships that followed were about 'sharing' the land and peaceful co-existence as separate nations" and that "the true spirit and intent of the Proclamations has been lost from our public understanding."² Since the 1874 signing of Treaty 7, all Calgarians have been Treaty peoples.

Calgary (named after Calgary Bay on the Isle of Mull, Scotland) was founded in 1875 as a rail hub along the trans-Canada rail line. The land surrounding Calgary was considered ideal for dryland farming and live-stock grazing, and a strong agricultural economy emerged rapidly. Both the railway and wheat farming form the basis of what economic historian Harold Innes called “the staples economy thesis,” which argues that Canadian society has been shaped by the desire to extract raw materials from Canada for export to Britain.³ In 1894 Calgary incorporated as a city (population 10,000), and by 1912, owing to successive waves of European immigration beginning in the late 1890s, the population had swelled to 55,000. But as the prewar boom turned to bust, the hoped-for development did not fully materialize. Between 1913 and 1947, Calgary’s growth was relatively moribund, with the city not reaching 100,000 people until 1945.⁴

The development trajectory of the city changed forever when, in 1947, Imperial Oil made a major oil discovery at Leduc, just south of Edmonton, the provincial capital. Subsequently, Calgary emerged as the financial and administrative centre of Canada’s oil industry. At that time, Calgary, like many North American cities, was already experiencing a rapid increase in economic activity to meet the pent-up demand for housing, consumer goods, automobiles, and luxury items demanded by returning Second World War veterans.⁵ The Leduc discovery stimulated billions of dollars more in energy-related investments, and within ten years, the population of both of Alberta’s major cities had doubled. Catalyzed by these circumstances, Calgary became the fastest-growing, youngest, best-educated, and highest-income city in Canada.⁶

Postwar Suburbanization

The post–World War II pace of urban development reflected the optimism and wealth of that generation, and the resulting suburban form manifested these values and mimicked the North American trend toward suburbanization.⁷ For many years, more than 100 percent of the city’s population growth occurred in greenfield suburban development on Calgary’s fringe, owing to out-migration from the inner city.

After the war, Calgary city planners faced a dilemma. Conditioned by decades of slow growth and low revenue and unconvinced that the new oil economy was permanent, decision-makers were reluctant to underwrite

the exploding demand for urban services provoked by the oil rush. As an adaptive response, through a series of agreements beginning in 1955, the City retreated from its traditional role of developer/planner and ceded that function to the private sector. In return, the developers began paying for much of the needed suburban infrastructure.⁸ Although seen by civic administrators as beneficial for the city, the agreements codified an arrangement whereby much of the City's ability to control growth was transferred to private developers. Over time, zoning, permitting, and the approval process at City Hall were streamlined in the name of efficiency and profit, and the bureaucracy was actively re-engineered to conform to the suburban vision.

By the 1980s, Calgary's development pattern was beginning to alarm city managers. They recognized a growing disconnection between land use and transit planning and the unsustainably high costs of future maintenance. In 1984 a legally mandated Municipal Development Plan (MDP) was drafted. However, the modest reforms it proposed were seen by the developers, and their allies on City Council and in administration, as threatening to the highly profitable status quo. In a showdown, the plan was rejected following intense lobbying by the development regime, which had a strong ally in Mayor Ralph Klein; the city planners who had created the plan were summarily replaced, and a new town plan, reverting to the established suburban model, was adopted in 1986.

Sustainability and Planning in the Post-Earth Summit Era

Stimulated by Local Agenda 21, the urban manifesto of the 1992 Earth Summit in Rio de Janeiro, new design approaches and participatory processes emerged in Calgary. The 1995 Sustainable Suburbs Study, the 1995 Go Plan (the Calgary transportation plan), and the 1998 MDP—documents emanating from these new influences—signalled that the City of Calgary had engaged with the new agenda. Yet owing to its fossil fuel-generated wealth, its rapid growth, its coming of age in the automobile era, and the entrenched trajectory of the development process, the city remained among North America's most sprawling cities in terms of suburban share of growth, automobile dependence, and rate of growth of the city's footprint.

Calgary's municipal government functions through an impressive array of strategies, plans, policies, and bylaws. Statutory documents include land use bylaws that set the basic building blocks shaping the street-by-street structure of the city: Area Redevelopment Plans and Local Area Plans for existing communities, Area Structure Plans for new communities, and the Municipal Development Plan and Calgary Transportation Plan for the city as a whole. Council adopts other plans and strategies from time to time, such as the Calgary Cycling Strategy, the Ecological Footprint Project, and the Triple Bottom Line Policy Framework, but these are non-statutory.

All of these documents, whether statutory or not, are enacted in conformity with the provincial Municipal Government Act, which establishes municipalities as wards of the provincial government. Two of the most important long-range planning documents to come out of the city in the last twenty years are the non-statutory 2006 imagineCalgary Plan for Long-Range Urban Sustainability and the statutory Plan It Calgary (comprising the 2009 Municipal Development Plan and Calgary Transportation Plan). Together, these two plans are meant to provide the framework for how Calgary will grow beyond 2050.

Plan It and imagineCalgary: Products of Civic Engagement

Galvanized by the failure of the 1998 MDP to achieve meaningful change, a new initiative designed to engage citizens in participatory planning and sustainable transitions, named imagineCalgary, began in 2003. Taking a cue from the Vancouver model, stakeholders and citizens embarked on what was billed as the most extensive public engagement process of its kind to that time, engaging approximately eighteen thousand citizens to help craft a hundred-year vision for the city.⁹

The imagineCalgary Plan was the result of an eighteen-month process that culminated in a presentation of the plan by Mayor David Bronconnier at the UN-Habitat Conference in Vancouver in June 2006. The process design was based on systems thinking and sustainability and was inspired by the work of Donella Meadows.¹⁰ The final plan contained a hundred-year vision statement and a set of goals, targets, and strategies organized around five urban systems. Working groups for each of the urban systems were composed of a broad cross-section of stakeholders with representatives

from the public sector, including all levels of government; the private sector and civil society, including NGOs representing social and community economic development; and environmental organizations. City Council unanimously endorsed imagineCalgary, and this new initiative established sustainability at the core of planning discourse and debate in the city and as the conceptual touchstone for the Plan It process.

The 2009 Municipal Development Plan and the complementary Calgary Transportation Plan, collectively known as Plan It, represented the City's first attempt to integrate transportation and land use planning.¹¹ Plan It contemplated urban growth and development over a sixty-year timespan, during which the population was forecast to double to 2.4 million. Plan It anticipated that half of the 1.2 million new inhabitants would settle in greenfield developments and half within established areas.¹² The plan oriented future development along transportation nodes and corridors using well-established "smart growth" and "new urbanism" templates featuring more compact, transit-oriented design, with attention to a high-quality public realm—sidewalks, parks, plazas, and street-oriented building façades.

Despite considerable good will in creating a broad-based consultation that resulted in imagineCalgary and Plan It, only modest changes resulted, and even those remain under siege. Developers used their substantial political capital in attempts to derail Plan It. In the final act of the Plan It process, in September 2009, the development industry's lobbying arm, the Urban Development Institute, was granted a private audience with Mayor Bronconnier in the final days leading up to the presentation of Plan It documents to Council. Civil society leaders, representing a broad range of stakeholders in the process, sought representation at these meetings but were denied. Council was brought into the discussions at the eleventh hour, and a deal was struck to further water down the plan's substance, whereupon Council passed Plan It by unanimous vote. Ten years on, the promise of Plan It has failed to alter the basic trajectory of suburban development. A 2018 report found that 91 percent of Calgary's population growth between 2006 and 2016 still occurred in greenfield—the highest percentage of suburban growth in Canada.¹³

Assessing Calgary's Progress toward Sustainability

In the wake of the Rio Earth Summit, a new citizen-based organization emerged in Calgary in 1996 to champion sustainability.¹⁴ Sustainable Calgary Society initiated a public engagement process that resulted in two thousand citizens contributing to the State of Our City (SOOC) Community Sustainability Indicators Report. Sustainable Calgary invited citizens to consider a set of indicators that would represent sustainability in Calgary. A set of principles that guided this process is presented at the end of this chapter (figure 1). Since 1998, five SOOC reports have been published, the most recent in 2020. These reports provide a detailed assessment of Calgary's progress toward sustainability. Over time, the reports have found that, on the whole, Calgarians are building a strong, diverse, creative community in a clean natural environment and are relatively well educated and healthy; however, Calgarians' use of natural resources is wasteful and costly, and the inequities in the city are making life difficult for many.

Every SOOC report since 1998 has identified two critical challenges. First, Calgary is a city where inequality persists and deepens, and vulnerable groups in the city—First Nations people, new immigrants, low-income and disabled people—face economic and social marginalization. Conventional wisdom is that the economy has been Calgary's strong suit for at least the past two decades. In most of those years, Calgary led the nation in economic growth and was often best-in-class for building development permits and housing starts—and, until the oil price crash in 2014, unemployment rates. However, the Sustainable Calgary indicator initiative identified a very different set of economic indicators more attuned to affordability and equity, meaningful work and livelihood, and economic resilience and diversity. The second challenge identified by the reports is that Calgarians continue to pursue a lifestyle that consumes far too much of the earth's resources. As the 2011 report states, "We live hard and fast in Calgary and too many vulnerable people and too much of the natural world gets trampled in the process."¹⁵

With respect to our stewardship of nature, the 2020 SOOC report provides evidence that Calgary is living well beyond its means. Our ecological footprint continues to grow and is the largest of any Canadian

city. If everyone on the planet consumed as we do, we would need four to six planets' worth of resources. Our energy consumption per capita has grown significantly over the last twenty years, and our large and growing per capita greenhouse gas emissions constitute a crisis. Our overall population density, while slowly increasing, is far from sustainable and leaves us almost completely dependent on the private automobile and vulnerable to long-term maintenance costs. Steady improvement in number of commuters taking transit to work through the first decade of the millennium has reversed in recent years. Transport spending in the City budget is tilted in favour of transit, but overall spending by all levels of government still favours road building. The only good news story here is how we deal with waste. Total waste to landfill is down by over 50 percent since 2001, with waste-diversion programs delivering results.¹⁶

Calgary's ecological footprint, a measure of the per capita land that would be required to supply all the resources consumed by a given population on a sustainable basis—food crops, pasture, forest products, seafood, CO₂ sequestration—was estimated at approximately 12.4 hectares per person in 2014. This was over 50 percent greater than the Canadian average and more than seven times the global fair share. In 2017 Calgary had a population density of 2,473 people per square kilometre, based on a population of 1,246,377 people and a built-up area of 504 square kilometres. The population density has increased 1.3 percent since 2001 but is still 23 percent less dense than the 3,228 people per square kilometre calculated for 1951. Calgarians own more vehicles per capita than in any other Canadian city, and we are second only to Edmonton in per capita vehicle kilometres travelled.

The 2020 State of Our City report also highlights positive sustainability trends over the last twenty years. Calgary has significantly reduced per capita water consumption and increased rates of recycling, has maintained relatively clean air in comparison to other Canadian cities, and has increased the number of community gardens. Its school system produces some of the best international test scores.

A Shifting Political Landscape

A watershed event occurred in Calgary in 2010. In a stunning upset of the conservative, developer-friendly history of individuals occupying the

office of mayor, a young, liberal-minded Muslim emerged from the activist community and was elected mayor. Even more stunning, in 2015, the forty-year reign of the Conservative Party in Alberta came to an end as the social democratic New Democratic Party, led by a dynamic female leader, took control of the provincial government. Both leaders mobilized social, economic, and environmental change with some notable success. Yet both leaders found themselves championing oil and gas pipeline expansion, and in 2019 the Conservative agenda returned with a vengeance with the re-emergence of the Right under the United Conservative Party. Calgary's journey to sustainability remains a long and winding road; the reason is summed up in the title of Kevin Taft's 2017 book, *Oil's Deep State: How the Petroleum Industry Undermines Democracy and Stops Action on Global Warming—in Alberta and in Ottawa*.¹⁷

At the time of writing, Calgary is severely challenged by the global pandemic, and in the midst of the pandemic, one of the most potent social movements of the last twenty years, Black Lives Matter, emerged across North America, inciting thousands of Calgarians to take to the streets in protest and to join a powerful discussion via social and conventional media. It is unclear in these early days how the pandemic and Black Lives Matter will affect the political and economic trajectory of the city. What we do know is that these events are an exclamation point to unsustainable and unjust social and political structures and have shone a glaring light on the ravaging of the natural world by our current economic system, reinforcing our contention that now, more than ever, sustainability matters.

Figure 1: Sustainable Calgary Principles of Sustainability

1. *Maintain or enhance ecological integrity.* A sustainable community lives in harmony with the natural world. It protects the air, water, soil, flora, fauna, and ecosystems that it depends upon for its survival. These are the life support systems for all human communities.
2. *Promote social equity.* In a sustainable community, each and every citizen is afforded access to the benefits and opportunities that a community has to offer without social or economic discrimination.
3. *Provide the opportunity for meaningful work and livelihood for all citizens.* A strong, resilient, and dynamic local economy is essential for community sustainability. A sustainable economy provides the opportunity for meaningful work and livelihood for each and every citizen.
4. *Encourage democratic participation of all citizens.* We live in a democracy. The bedrock of a democracy is citizen participation in the functioning, planning, and decision-making of society. In a sustainable community, participation is both a right and a responsibility and should be available to every citizen.
5. *Maintain ethical relations with our neighbours.* In our bid to achieve sustainability, we need to find ways to work co-operatively with our neighbours in our urban village and the global village. Sustainability cannot be achieved at the expense of our neighbours—wherever they may be.

NOTES

- 1 Lorna Crowshoe and Fraser McLeod, *Indigenous Policy Framework for the City of Calgary* (Calgary: City of Calgary, Calgary Aboriginal Urban Affairs Committee, 2017), 8, <https://www.calgary.ca/csps/cns/first-nations-metis-and-inuit-peoples/first-nations-metis-inuit-peoples.html>.
- 2 Treaty 7 Elders and Tribal Council, *The True Spirit and Original Intent of Treaty 7*, with Walter Hildebrandt, Dorothy First Rider, and Sarah Carter (Montreal/Kingston: McGill-Queen's University Press, 1996), cited in Crowshoe and McLeod, *Indigenous Policy Framework*, 12.
- 3 For more on this, see Mel Watkins, "Comment Staples Redux," *Studies in Political Economy* 79, no. 1 (2007): 213–26.
- 4 This historical discussion has been informed by Lawrence Bussard, "Early History of Calgary" (Master's thesis, University of Alberta, 1935), <https://archive.org/details/earlyhistoryofca00buss/page/n1/mode/2up>; Hugh Dempsey, *Calgary: Spirit of the West: A History* (Saskatoon: Fifth House, 1994); and Max Foran and Heather Foran, *Calgary: Canada's Frontier Metropolis* (Los Angeles: Windsor, 1982).
- 5 Robert Stamp, *Suburban Modern: Postwar Dreams in Calgary* (Calgary: Touchwood, 2004).
- 6 For a more in-depth understanding of the unique social forces shaping Canadian cities, see Harry H. Hiller, ed., *Urban Canada*, 3rd ed. (Don Mills, ON: Oxford University Press, 2014).
- 7 Stamp, *Suburban Modern*.
- 8 Max Foran, *Expansive Discourses: Urban Sprawl in Calgary, 1945–78* (Athabasca, AB: Athabasca University Press, 2009).
- 9 John Punter, *The Vancouver Achievement: Urban Planning and Design* (Vancouver: University of British Columbia Press, 2003).
- 10 Donella H. Meadows, *Thinking in Systems: A Primer*, ed. Diana Wright (White River Junction, VT: Chelsea Green, 1998).
- 11 The updated 2020 Municipal Development Plan and Calgary Transportation Plan were approved by City Council in November 2020 and will go into effect after the third reading of the related bylaw. City of Calgary, "Calgary Transportation Plan," 2021, <https://www.calgary.ca/transportation/tp/planning/calgary-transportation-plan/calgary-transportation-plan-ctp.html>.
- 12 I (Keough) was intimately involved in these final days of the MDP debate. The 50/50 split between inner city and greenfield development represents a last-minute "compromise" forced by the suburban developers and their allies on Council, who threatened to scuttle the entire process if the division was not reduced from the 65/35 split originally contemplated.
- 13 David Gordon, *Still Suburban? Growth in Canadian Suburbs, 2006–2016*, with Lyra Hindrich and Chris Willms, Council for Canadian Urbanism Working Paper #2, August 2018, http://www.canadiansuburbs.ca/files/Still_Suburban_Monograph_2016.pdf.

- For further analysis of the failure of sustainability planning in Calgary, see Byron Miller, "Sustainability Fix Meets Growth Machine: Attempting to Govern the Calgary Metropolitan Region," in *Governing Cities through Regions: Canadian and European Perspectives*, eds. Roger Keil et al. (Waterloo, ON: Wilfrid Laurier University Press, 2016), 213–38.
- 14 It should be noted that I (Keough) was intimately involved in both the imagineCalgary and Plan It processes and was a co-founder of Sustainable Calgary Society and lead researcher and/or co-author of each of the State of Our City reports.
 - 15 Noel Keough, *State of Our City Report 2011: Sustainability in a Generation* (Calgary: Sustainable Calgary Society, 2011), 8, <https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5bff5fd970a6ad4f2ff729e0/1543462882064/2011-SOOC-Report.pdf>.
 - 16 Noel Keough, Bob Morrison, and Celia Lee. *State of Our City 2020: An Urgent Call for a Just Transition* (Calgary: Sustainable Calgary Society, 2011), 7, <http://www.sustainablecalgary.org/publications>.
 - 17 Kevin Taft, *Oil's Deep State: How the Petroleum Industry Undermines Democracy and Stops Action on Global Warming—in Alberta and in Ottawa* (Toronto: Lorimer, 2017).

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