Re-imagining our Neighbourhoods:
A vision for the future of Alberta

A paper developed by The Natural Step Canada for the Alberta Real Estate Foundation's 20th Anniversary Thought Leadership Series

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Background

Re-imagining our Neighbourhoods: A vision for the future of Alberta is a project of The Natural Step Canada and the Alberta Real Estate Foundation (AREF). A contribution to AREF’s 20th Anniversary Thought Leadership Series, the purpose of this project is to engage Albertans in a dialogue about what it means to be sustainable at a neighbourhood scale.

This report builds on The Natural Step Canada’s experience working with dozens of communities across the country to accelerate change toward sustainability over more than a decade. It provides a summary of ideas gathered from Albertans through a survey and an online forum, as well as from experts from across Canada through interviews. We engaged people in a dialogue about what sustainability means at the neighbourhood level.

This process addressed questions such as:

- What are the characteristics of a sustainable, vibrant, livable neighbourhood?
- What are the current barriers and obstacles to social, economic, and environmental progress?
- What are the steps we might take to move toward a desired future in our neighbourhoods?

It also incorporates research and findings from The Natural Step Canada’s Sustainable Neighbourhood Action Planning Guide, also funded by the Alberta Real Estate Foundation and currently being piloted in a City of Calgary neighbourhood project.

The Natural Step Canada wishes to thank the Alberta Real Estate Foundation for its support and leadership in bringing conversations that matter to Albertans. It also wishes to thank the advisors who contributed their expertise to the development of this paper. The expert advisory panel members include:

- Mark Anielski, Anielski Management Inc.
- Paul Born, Executive Director, Tamarack Institute for Community Engagement
- Andy Filmore, Planning Department, Halifax Regional Municipality
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- Doug Pollard, Senior Analyst, International Relations and Operations, Canada Mortgage and Housing Corporation International
Introduction

Neighbourhoods are the building blocks of society. They are the places we call home, where we live, work, and play. Yet most Canadians agree that our neighbourhoods are not what they could and should be. The social, economic, and environmental challenges facing Canadian communities and neighbourhoods are unprecedented, including: urban sprawl, rapid growth in major city centres, shrinking populations in rural communities, greenhouse gas emissions, falling incomes of immigrant families, summer water shortages, declining participation rates in elections, increased air and water pollution, increased health impacts, waste management issues, and a widening gap between wealthy and poor families, to name a few. All present serious risks to quality of life—both today and in the future.

How do we begin to address these sustainability challenges in our communities and our neighbourhoods? How do we create sustainable, vibrant, livable neighbourhoods? The Natural Step Canada posed these questions to Albertans and engaged them in a dialogue about what it means to be sustainable at a neighbourhood scale. We explored the current barriers and obstacles to social, economic, and environmental progress, and the steps we might take to move toward a desired future in our neighbourhoods.

What is sustainability and what is a sustainable neighbourhood?

Sustainability is a term that has different meanings for different people. In this report, when we refer to sustainability, we mean “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Sustainability is as much an economic and social issue as it is an environmental issue. Sustainable—at its simplest—means lasting. Sustainability is about living within the limits of the Earth’s capacity to sustain us—both today and tomorrow.

Whether we live in Calgary or Fort McMurray, and whether our community is rural or urban, large or small, we all share the same planet, our only home.

To sustain life, we are supported by systems that provide the food, water, and materials to keep us healthy. As a social species, we also create and maintain social ties and supports, which enable us to meet our needs. We all interact with these social and ecological systems every day—through the water we drink, the food we eat, and the people we are connected with.

The choices that we make in our homes, our neighbourhoods, and our cities shape our relationships with the systems around us. Through these relationships, we affect the health of our watersheds, our air, our neighbourhoods, our food systems, and our economy. We also influence our possibilities for the future, as well as for our children and grandchildren. Sustainability is about creating the future we want to live in. By making more sustainable choices today, we contribute to healthy communities over the long term.

Every day, news headlines reveal ways we are already compromising these opportunities: stories about climate change, water scarcity, housing shortages, contaminated food, and air pollution. These stories are all part of a bigger picture that is unfolding—a result of choices individuals make at home and as part of a larger community.

Creating vibrant and livable neighbourhoods means addressing all of the quality-of-life factors that make neighbourhoods great places to live, including safety, culture, education, green spaces, belonging, and so on. At the same time, it also means thinking about long-term sustainability, meaning that we need to design neighbourhoods in a manner that does not undermine the Earth’s ability to support us in the long term.

It is, therefore, important to understand how our local actions are undermining the Earth’s ability to sustain us. A group of international scientists have determined the four root causes of how we negatively impact the Earth’s ability to sustain human society and the ability of future generations to meet their needs. Hundreds of leading corporations and organizations around the world, including many in Alberta, are using these same four root causes to help them make strategic decisions toward sustainability—decisions that reduce financial risk and support innovation.

Based on scientific consensus, these are the four root causes of the ways in which we undermine the Earth’s ability to sustain us and, therefore, compromise the ability of future generations to meet their needs. These are the basic ways in which we are un-sustainable:

1. We dig stuff (like heavy metals and fossil fuels) out of the Earth’s crust and allow it to build up faster than nature can cope with it.

2. We produce substances (like pesticides, fire retardants, and other synthetic compounds) that break down slowly and allow them to build up faster than nature can cope with them.

3. We continuously damage natural systems and the free services they provide (like climate regulation and water filtration) by physical means (like overharvesting resources and paving over wetlands).

And...

4. We live in—and create—societies in which many people cannot meet their basic needs (like access to safe housing and affordable, healthy food).

By addressing these root causes, we can learn to live within the constraints of nature and protect the ability of future generations to meet their needs.

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2 To learn more about the four root causes of unsustainability and the science behind them, please visit: www.naturalstep.ca/sustainability.
Re-imagining our future: key characteristics of sustainable neighbourhoods

In order to move toward neighbourhoods that are vibrant, livable, and sustainable, the first thing we need to do is understand what that means and agree on what we are working toward.

From August to October 2011, The Natural Step Canada and the Alberta Real Estate Foundation hosted an online forum and distributed a survey to a variety of Albertans. We also conducted interviews with a selection of well-respected community and neighbourhood experts from across Canada.

In our research, our interviews with experts, and in conversations with Albertans, there was widespread consensus on the key characteristics of vibrant, livable, sustainable neighbourhoods.

A vibrant, sustainable neighbourhood is one that meets the needs of residents while protecting the environment and leaving an affordable legacy. This type of neighbourhood engages citizens in decision-making and creates a feeling of belonging. People want to stay there. It offers homes that are located near shops, schools, recreation, work, and other amenities. Like a village, these places are a pleasant, convenient, and safe walk, cycle, or bus ride from home. The neighbourhood is pedestrian-friendly and makes it easy to walk or cycle. Land is used efficiently and services meet the needs of the residents. Old or new, they also feature a choice of homes that people can afford.

Social well-being: creating a feeling of belonging

According to Paul Born from the Tamarack Institute, there are three principles for what makes for a successful community in neighbourhoods:

1. We need to know our neighbours as a very first pre-condition to creating great places to live. Too often we don’t know or trust our neighbours.

2. We need to take care of each other. There are many ways of doing that, such as Neighbourhood Watch, Block Parents, babysitting programs, and carpooling.

3. We need to work together to do something for the public good. This gives a shared sense of purpose and a strong feeling of belonging.

Albertans who participated in our online forum and survey agreed that great places to live start with knowing your neighbours. They suggested that key characteristics of vibrant neighbourhoods would include community spaces where residents could convene, interact, and get to know each other, such as green spaces, community gardens, and community activity centres, as well as local stores and services. Residents who know each other are more likely to trust each other and to collaborate. They are more likely to share a common interest in removing barriers to meet human needs and believe in cultivating a better quality of life—the knowledge, skills, and health of each individual in the neighbourhood.

“If you look at what makes people happy, income is important, but human relationships are much more important and we’ve increasingly allowed our human relationships to deteriorate in the interest of having more income.”
—Lord Richard Layard, London School of Economics

“The future isn’t something we enter, it’s something we create.”
—Leonard Sweet
Governance: effective and inclusive participation, representation, and leadership

Albertans and experts agree that in order to create desirable neighbourhoods, residents need to interact and be involved in the co-creation of their neighbourhood, and they need to have a say in the way their community is managed. Neighbourhoods do more than house people. They form a support for wider activities, providing many of the social services that link individuals with each other, giving rise to a sense of community.

As well, neighbourhoods need to find ways for inclusive engagement—giving voice to marginalized or minority groups. Experts indicated that having a neighbourhood organization is a key success factor in facilitating adequate and representative citizen engagement at the local level.

Transportation: active, convenient, and green

Walkability was one of the primary characteristics identified by both Albertans and experts. Well-connected communities have good public transport services linking residents to their work places and services (e.g., health, education, recreation, and commercial areas). The transportation system is powered by 100% renewable energy. Residents should be able to attain as many of their needs as possible within walking distance from their homes. A street pattern should take the form of a continuous web with paths linking one place to another. Good public transport infrastructure and a bicycle path network are essential in order to limit car use.

Nature: a thriving ecosystem, parks, and green spaces

Most Albertans imagined sustainable neighbourhoods as being places with ample green spaces, such as parks, community gardens, places to walk and bike, and development that works with and incorporates natural landscaping. Neighbourhoods not only have to be walkable, but there has to be somewhere to walk.

Experts and Albertans both indicated that sustainable neighbourhoods should not be built on sensitive natural ecosystems. Some experts propose the idea of a habitat exchange, where for every square foot of land used to build houses and infrastructure to serve a neighbourhood, an equal amount of land must be set aside in perpetuity. Albertans indicate that neighbourhoods should include green spaces, community gardens, and parks so that residents can play, meet, grow food, and decompress while outside. In addition, sustainable neighbourhoods provide the opportunity for people to enjoy clean, safe surroundings and live in a way that has no relative impact on natural systems.

Economy: a flourishing and lively local economy

Sustainable neighbourhoods would encourage local entrepreneurship and foster businesses that contribute to the well-being of social and ecological systems, and perhaps also support local food. All residents of working age have access to employment at a living wage. All community members—including youth and elders, in particular—have access to meaningful work in their neighbourhood or community.

Density: compact, beautiful spaces

Experts and Albertans surveyed agree that the density of sustainable neighbourhoods is much higher than it is for today’s typical suburbs and they are designed around people, not cars. They are compact, beautiful spaces
that allow for social interaction and privacy, and minimise resource consumption, while providing access to various shops and services.

Albertans want to walk their kids to school, walk to the local park or green space, walk to get a coffee or meet with friends, and walk to the corner store. In addition, survey responses indicated a desire for a diversity of housing types to accommodate different income levels and different age groups so that people don’t have to leave their community when they age or when life circumstances change. Finally, density needs to be balanced with appropriate green spaces so that people are not living in a concrete jungle.

**Buildings and infrastructure: sustainable materials and renewable energy**

The built forum in sustainable neighbourhoods mimics natural systems and contributes to the social character of the community. Experts indicate that sustainable building materials are primarily local and can be easily re-used or recycled both during the construction process and at the end of the building’s useful life. Building materials are also sourced from industries that produce or manufacture products in a sustainable manner. Buildings are typically oriented towards the sun and designed to significantly reduce their heating and cooling costs. Ultimately, sustainable buildings rely on 100% renewable energy. Waste from the neighbourhood is managed in a closed loop, where, for example, sewage is used to create biogas to heat the neighbourhood, to power public transportation, or to produce energy. Albertans also want buildings that use local resources and energy, and have no negative impact on their health.

**Services: diverse and local**

In addition to density, Albertans want to have access to a diversity of public, private, community, and voluntary services that are accessible to all residents. This includes local shops, entertainment, cultural opportunities, places to work, medical services, and community centres and recreational spaces for all ages. Albertans also indicated that volunteer services to help take care of each other are important, including babysitting, co-operatives, and Block Parents.

**Mixed use: living, working, and playing**

A sustainable neighbourhood offers a mix of functions (e.g., living, working, and playing) that enhance the vibrancy and reflect the cultural diversity of the neighbourhood. Mixed use also includes multiple services, such as parks, green spaces, local shops, community centers for all ages, entertainment, informal meeting places, cultural opportunities, places to work, places for recreation, and medical services.

Albertans want to create socially cohesive and diverse communities through a mix of social categories, housing types, employment opportunities, shared community activities, and generations. Experts feel strongly that diverse neighbourhoods are much healthier than those with one income bracket, family type, or ethnic group.

Albertans also indicated a preference to live in neighbourhoods that were diverse in age, income, and ethnic groups. In mixed use neighbourhoods, instead of being afraid of each other, residents begin to draw each other out and build trust. Mixed income is a very important part of creating a healthy neighbourhood. According to Paul Born, we build trust in mixed, diverse neighbourhoods, which can lead to reduced crime. People are more engaged in mixed neighbourhoods than in neighbourhoods that are mostly low-income—which are often very transient—or high–income—where people often live in larger homes and don’t engage with neighbours outside.
Current reality

As we move toward sustainable neighbourhoods, it is helpful to understand where we are today, the current barriers and challenges, and the opportunities to overcome them. The following high-level summary was gathered from survey results, interviews with experts, and an in-person forum held in Calgary on November 19, 2011.

Urban car-oriented sprawl

It is widely agreed by planning experts and Albertans who contributed to this report that neighbourhoods and suburbs designed around car use, where residents have to drive to amenities, is clearly undesirable and unsustainable.

Currently, the automobile is the primary mode of transportation for getting around (e.g., to work, shopping, and recreation) in neighbourhoods. A study by the Canada Mortgage and Housing Corporation found that the percentage of homes in Calgary within 1 km of a rapid transit station decreased from 60% downtown to 3% in the outer suburbs. Typically, the further Albertans live from the downtown core, the less likely they are to use public transit. Albertans indicated that when it comes to walking and biking, a high level of traffic going through neighbourhoods threatens safety. Too much traffic means kids can’t play on the street.

In addition, Albertans indicated that they have become accustomed to poorly designed neighbourhoods where traditional single-family car-oriented sprawl is the norm. They also stated that they fear change, as many residents don’t know what it’s like to live in a walkable neighbourhood. A lack of mixed use means amenities are far away from homes.

Many neighbourhoods contain big box malls, which aren’t easy to access by foot or bike. This perpetuates the use of cars and makes it hard for small or local businesses to flourish. Bike lanes are rarely a priority in car-oriented neighbourhoods. Often, neighbourhoods that are only residential don’t have community spaces or community events. There frequently isn’t enough public space to bring neighbours together. This contributes to a lack of trust and the lack of a shared sense of belonging.

Furthermore, Albertans believe that incentives encourage urban sprawl, including cookie cutter homes, uniform streets, and often single-use functions, not mixed use. On a positive note, there are a few new compact, walkable neighbourhoods being built (e.g., Emerald Hills and Centre in the Park in Strathcona County), neighbourhoods designed around alternative energy popping up (e.g., Drake Landing Solar Community in Okotoks), and some developers are starting to tune into the shift in public interest.

It’s not all bad news. Cities and towns have developed new programs to encourage different modes of transportation. For example, Edmonton’s “Local Motion” program encourages walking, cycling, ride-sharing, and taking public transit. In addition, the number of bike paths in towns and Cities has increased over the past 10

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years and Albertans bike about 3 times more than Americans.

**Large ecological footprint**

According to the 2007 Canadian Living Planet Report,⁴ if everyone lived like Canadians, we would need 4.3 Earths to support us. The report reveals that while Canada is endowed with abundant natural resources, it also has the fourth largest ecological footprint per person of all nations. Results reveal that, with an ecological footprint of 7.6 global hectares per person, Canada is using resources and turning them into waste at a much higher rate than the global average.

We are consuming a disproportionately large share of the Earth’s natural capital capacity. And our current mode of development continues to consume natural systems that, in some cases, should be preserved or could be used for other purposes.

**Waste is increasing**

According to Alberta Environment, the amount of residential waste generated by Albertans continues to increase, while diversion rates are decreasing at the same time. The Alberta residential sector currently has a waste diversion rate of 29%.

**Buildings and infrastructure**

Currently, the built forum uses materials that are not presently recyclable or reusable, and approximately half of landfill waste comes from construction and demolition materials.

Many neighbourhoods are faced with crumbling infrastructure with a significant replacement cost. The infrastructure in many towns and cities is in need of fixing or replacing at significant cost to taxpayers, and infrastructure is often replaced with inefficient technologies. Affordability issues often arise when neighbourhoods lack a variety of housing options.

**Inconsistent and weak regulations**

Experts indicated that the policies on efficient design and sustainable construction that have been included in local plans of various municipal governments are often difficult to uphold in practice. Furthermore, developers often don’t clearly understand the long-term benefits (e.g., economic, social, and environmental) of building in a sustainable manner, and members of the public tend to focus on the immediate, as opposed to long-term costs.

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Key transition strategies: opportunities and best practices

Although the current reality might seem daunting, there are a number of best practices Albertans should be proud of and that exist in other parts of Canada and around the world. We’ve highlighted some of the best practices throughout this report and you are encouraged to look for others which exist. This section provides a summary of what Albertans and experts think we can and should do to move toward sustainable neighbourhoods. The various actions and activities are framed in a set of key transition strategies, which can be used by municipal and provincial staff, along with developers and members of the public, to help frame a discussion on re-imagining Alberta’s neighbourhoods.

Encourage sustainable neighbourhoods and discourage urban sprawl

Experts and Albertans both agreed that urban sprawl must be reversed in order to create sustainable neighbourhoods. Designing future development around public transportation hubs will help shift our neighbourhoods from being car-oriented to neighbourhoods that are walkable, bike-friendly, and have quick and convenient public transportation. This means designing neighbourhoods with higher densities.

Update regulations

Albertans and experts indicated that tougher mandatory standards would make the most impact in improving the sustainability of new and existing neighbourhoods (e.g., LEED for New Developments and the Living building Challenge). This would also help level the playing field for developers. Experts indicated that changes to the building code would be required.

Improve public awareness

In order to increase awareness and demand for sustainable neighbourhoods, local governments, NGOs, and the province should communicate the benefits through special programs, joint research, and other forms. Research from the Canada Mortgage and Housing Corporation and other reputable sources is available.

Seek support from local authorities

Experts and Albertans indicated that support from local authorities to help new and existing neighbourhoods become more sustainable would be beneficial. This support should be provided for all development, not just isolated sites, and should include improvements to their role as a source of advice. Furthermore, experts indicated that there is a need for embedded expertise on sustainable development matters within the planning department of local authorities.

Obtain better research

Experts and Albertans both indicated that more and better information on the financial, economic, social, and environmental benefits of sustainable neighbourhoods should be prepared and made readily available.
Organizational profiles

About the Alberta Real Estate Foundation

The Alberta Real Estate Foundation (AREF) supports and originates initiatives that enhance the real estate industry and benefit the people of Alberta. Created in 1991, AREF is the result of industry leaders and Provincial government officials coming together to establish the beginnings of a fund that focuses upon the achievement of real estate excellence in Alberta.

The early years of the Foundation focused upon funding initiatives related to education and training for professionals in the real estate industry. Over the years, the Foundation has evolved and expanded its focus to benefit the industry and people of Alberta.

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About The Natural Step Canada

The Natural Step Canada is a dynamic non-profit organization with over a decade of experience helping organizations and individuals understand and make meaningful progress toward sustainability. We are part of a growing global sustainability network with projects in 18 countries.

We envision a sustainable world in which individuals, communities, and businesses thrive within nature’s limits. And we strive to inspire, educate, and connect Canadian leaders to accelerate the transformation toward a sustainable world.

The Natural Step Canada builds the capacity of municipal and business leaders to transform their organizations and lead their communities toward sustainability. Through award-winning learning programs and our unique suite of advisory, coaching, training, and process facilitation services, we translate the fundamentals of sustainability into practical steps businesses and communities can take to achieve lasting change. With a proven track record in Canada, The Natural Step has become a leading source of expertise and advice in the field of transformational change toward sustainability.

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