

Lucia Blanco MLA Student lucia.blanco@calgary.ca www.lucia-blanco.com

Celia Lee Executive Director at Sustainable Calgary celia@sustainablecalgary.org www.sustainablecalgary.org

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About this document

Streets as Playful Places explores the value of creating everyday access to play for children in their built urban environments, and suggests how we can accomplish this in Calgary through design. Equity is central to the theory and practice of Play Streets: priority is given to under-served neighbourhoods. Actionable strategies are necessary, particularly in these areas, to create healthy and inclusive neighbourhoods. As such, both temporary and permanent solutions are explored, showing action can be taken in the short- and long-term on a spectrum of budgets.

This publication includes a design proposal to transform a residential street into a playful streetscape in the most populated block of the Manchester neighbourhood.

About Sustainable Calgary

Our mission is to encourage and support community-level action and initiatives that make Calgary a safer, healthier, more sustainable city. Projects are based on our State of the City reports, which identify where interventions are needed. Recent work with communities focuses on municipal design and planning processes. Our expertise is producing credible research, and engaging with communities to participate in research, discussion and action.

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"[P]laying allows children to develop a sense of well-being, develops their emotional responses and improves their interpersonal skills. It involves exploration and creativity, helping children think in a flexible manner, developing the creative process, language skills, and learning and problem solving skills."

Play England¹

A. Design for Play

a. Importance of Play

To understand the value of creating daily access to playful experiences for children living in cities, it is important to recognize the correlation between the built environment and the way that children learn and develop both individually and collectively. In their early years, children have the capacity to obtain the tools needed for healthy social, cognitive, physical and emotional development. It is during this crucial time that children shape their perception and knowledge about what they see, taste, smell, hear and touch.² *Designing Streets for Kids*, the most recent design guidelines of the National Association of City Transportation Officials (NACTO), established that "[a] significant amount of brain architecture is shaped in the first three years of life, and this is when children grow and learn the fastest.³ An environment rich with stimulations such as colours, patterns and texture is a foundation for a child's cognitive skills."⁴ For this reason, children need to interact with environments that help build the foundations for solving future challenges: Environments where children can learn and grow from their experiences, decisions, movements and conversations.

Thomas Hendricks in *The Nature of Play* writes that "[c]hildren learn through play but their capacity for learning is limited by their social situation, their emotional condition, and their physical and intellectual development. Yet we best ensure a child's healthy growth, whatever these conditions, by supporting and encouraging the child's own self-initiated learning activities". 5 Given Hendricks's statement, it is important to acknowledge the possibilities for contributing to children's development by providing them pedagogical and playful experiences in their own neighbourhood.

b. Play Experiences in the City

The inclusion of children in the public realm is usually limited to pre-defined spaces such as playgrounds, parks, sports fields or pools where children are allowed to play freely and safely. These areas might include some infrastructure to stimulate children's curiosity and imagination, and challenge their motor skills and dexterity. "Play" infrastructures are not always located within walking distance from children's homes, schools or other key destinations such as health and food services their families use.

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"Children's play is more dependent on the public realm (streets, pavements, verges, incidental open space, front gardens) than it is on playgrounds and parks."

Rob Wheway⁷



Figure 1. Ralph Klein Park Natural Playground, Calgary, AB

While there are some notable and amazing playscapes in Calgary, some with a diversity in programming, textures, colours, and an integration of landscape elements that promote contact with nature—it is more typical to find standard plastic and metal structures placed within green and unshaded areas of a neighbourhood. These traditional structures normally do not have suitable integration with the physical and social urban context and do not fulfil the social and playful functions that promote interesting and stimulating interactions between children and their surroundings.

It is time to recognize that environments for children's play should extend beyond traditional recreational facilities into other areas of the public realm.

Rob Wheway, Director of the Children's Play Advisory Service in the UK, states in *Opportunities for Free Play*⁶ that "[w]e need to concentrate on creating an 'environment for play'." He states that "children's play is more dependent on the public realm (streets, pavements, verges, incidental open space, front gardens) than it is on playgrounds and parks." (Wheway, 2015). Design and planning for play should focus on areas at different urban scales that are commonly used by children so that these can be transformed and included in our city's playscape.

c. Importance of Creating Play Experiences in Calgary

In September of 2017, as part of the 20th International Play Association Triennial World Conference program, The City of Calgary presented <u>Calgary's Play Chapter</u> in collaboration with more than thirty local organizations and institutions. Through monthly meetings, these groups worked to explore the meaning of play for the city and identify possible priorities, partnerships, opportunities, and resources.⁸ As part of their mission, the groups involved in the conference established their commitment to:

Create environments that children can control – providing flexibility in materials and spaces that promote inquiry and evoke curiosity.⁹

After publishing *Play Chapter*, The City of Calgary created three new major public play spaces that include the Ralph Klein Park Natural Playground, the Shouldice Park Inclusive Playground and the Jack Long, all of which integrated a diversity of natural elements and materials into their design. Designing a suitable play environment should follow these examples in integrating existing textures and objects in the space, creating environments that are in tune with their natural context. Play environments should also require a flexible and open design approach to generate programmatic diversity and encourage participation

The City of Calgary has more than 200,000 children aged 0 to 14 which represents 18.3% of the total population. In 2017 approximately 26% of Alberta youth aged 12 to 17 years were overweight or obese.¹³



Figure 2. Children playing in Calgary ©Sustainable Calgary

from various generations of Calgarians.

The Vivo Play Project is an example of Calgary-based initiative promoting play through programming and 'play hubs'. They provide communities with a kit of "loose parts" at a local destination and "play ambassadors" facilitate scheduled activities. The goal: open-ended, spontaneous outdoor play in local communities, and promote physical activity, healthy development and social connection.

A recent report by the Canadian non-profit organization ParticipACTION, states that "[p]hysical activity levels in children and youth are associated with more beneficial scores on cardiovascular health, bone health, indices of adiposity, cognitive development and brain health, academic achievement and health-related quality of life.¹¹ Nevertheless, "[o]nly 21% of 5- to 11-year-olds engage in active play and non-organized/unstructured leisure activities for more than 1.5 hours per day on average (2016-17 CHMS, Statistics Canada)."¹² By these measures, children living in Canada are in desperate need of new and exciting environments that will help them become more physically engaged.

University of Calgary research confirms that how we design cities impacts physical activity levels and health outcomes (McCormack et al., 2019). Further evidence shows we need more focus on equity in city design: across North America, lower levels of investment are observed in neighbourhoods with lower incomes, with repercussions for the comfort, health and safety of residents. A Toronto study found children are more likely to be struck by vehicles in lower-income neighbourhoods (Rothman et al., 2019). Research in Calgary also indicates more pedestrian collisions in lower-income neighbourhoods (Lee and Lore, 2019). We have an opportunity to change that, and create safe, child-friendly spaces for everyone.



In 1914, The New York Times published "Children Revel in Street Playground", about a new public experiment by Police Commissioner Arthur Woods. As a way of "obtaining playground space for children in the congested districts", Eldridge Street was closed to vehicles for three and a half hours in the afternoon.¹⁴ Due to its success and residents' approval, the experiment gradually covered other areas of the city and by 1924 New York had fifty Play Streets. Currently, the program is run by the New York City Department of Parks & Recreation.¹⁵

B. Temporary Play Experiences

a. Play Streets Programs

A Play Street is a temporary closure to a low-traffic public right-of-way—usually lasting only a couple of hours a day—that allows children to take over the space and play freely. Play Streets transforms a typically cars-only space into a place for physical activity and social connections. Closing streets in areas where there is a lack of access to open or green spaces unlocks new opportunities for children to play safely.

If you would like to know more about other play streets programs, you can visit the following resources:

Programs run by Cities

Neighborhood Play Streets, The City of Edmonton Street Play Project, London Play Play Streets, CoDesign Studio and The City of Melbourne Play Streets Program, The City of New York

Programs run by non-profit organizations

Street Lab, New York Playing Out, England

i. Grassroots Movement and Community Engagement

Play Streets create a collaborative mechanism between local government and citizens. Every Play Street requires different sectors and groups to come together for the success of the project. Cities provide the authorization, toolkits, traffic control measures such as traffic cones and signage as well as guidelines for safe execution before, during and after the events of the program.

Community groups fulfill active and operational roles. They are responsible for coordination of programs and initiate conversations with other community members to encourage involvement. Community groups help drive temporary closure of a street by getting approval from local residents.

Before the event, community groups spread the word to invite as many children as possible to participate. During the event, interested neighbours place the required safety measures to close the street and provide "loose parts" such as cardboard boxes, tubes, fabric sheets, ropes, logs, or even pallets so that children can use their imagination to create their own play environments.

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Figure 3. Play Street at the beginning of 20th Century in New York



Figure 4. Children playing with "loose parts" in Mexico City ©LABCDMX

Play Street policies change public space inequities, and provide space in areas where there are a lot of children and a lack of access to green/open spaces. Play Streets can be a catalyst for healthy social interactions among community members by reinforcing their collective sense of security and confidence.

ii. Case Study: Peatoniños, MX

Peatoniños was a research urban experiment in Mexico City led by Alvar Aalto University Ph.D. student Brenda Vertiz. The project responded to the lack of outdoor play experiences for children creating a new street scheme in marginalized areas of the city with a large child population (200 children per block). Rooted in community feedback, the project explored the transformation of a street into a space for playful interactions, to reinforce social cohesion and public space appropriation. The space also provided safety measures and access to activities where children learn about right to play and road traffic safety.

After various iterations of the experiment, Peatoniños became a public program in Iztapalapa, Mexico City's municipality with the largest number of children (more than five hundred thousand children) and with 6m² average of green space.

iii. Case Study: Neighbourhood Streets Project

Neighbourhood Streets Project is a pilot by the City of Calgary's Liveable Streets office. Through a series of prototypes Liveable Streets hopes to understand public policy and practical implications to create a street program within the Calgarian context. The project explores the implementation of temporary traffic calming measures and an engagement process with residents to integrate a street program at different urban scales (multi-community, community, block or spot).

The City is also developing qualitative and quantitative tools to measure the benefits of creating the Neighbourhood Streets Project into a public policy program.





Figure 5. A playscape at Mariendalshallen ©MASU Planning

Location: Frederiksberg Municipality,

Denmark

Name: A playscape at Mariendalshallen Year: 2017 - 2018

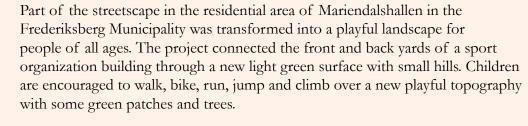
Landscape Studio: Masu Planning

C. Permanent Play Experiences

a. Neighbourhood Streets

According to NACTO's streets typology, there are five different types of streets encountered by children: Streets near Key Destinations, Neighbourhood Streets, Commercial and Mixed-Use Streets, Thoroughfares, Special Conditions and Intersections. The second type "[o]ffer the first contact with the public realm during everyday journeys. These streets span from narrow and quiet with small houses to wide streets lined with high-rise, high-density buildings". 16 Like the Play Street programs, these streets partially or completely reduce vehicle access through permanent interventions such as narrowing travel lines, creating grade and paving tactile surfaces, integrating bollards, signage and street furniture, organizing sidewalks zones and finally creating spaces for structured and unstructured play.

i. Case Study: A playscape at Mariendalshallen, DK



The new playscape includes a combination of streetscape elements as well as play elements such as wooden stepping stumps, parkour equipment and sitting spaces, grab bars and white lines.







Figure 7. View from 2St SW



D. Designing Temporary and Permanent Play Experiences in Manchester, Calgary

Using NACTO's planning and design recommendations as well as other international design-for-play guidelines like Architecture for Urban Play by the LabCDMX, the following design proposals explore the integration of a playful temporary and permanent interventions in the residential area of Manchester. Known as an industrial region and site of Calgary's "Barley Belt", it is also home to more than 300 children aged 0 to 19¹⁷, living primarily in multi-family units. The aim is to transform their surroundings into an accessible and child-friendly community.

The temporary intervention shown in b. (See page 31) incorporates a "street mural", limits vehicles access to one lane to enable parking lot access, and provides movable furniture to promote outdoor socializing and play. These temporary interventions enable quick changes on a smaller budget. Paired with an evaluation process, they can inform more permanent changes such as those proposed in c. (See page 35).

a. Street Selection and Site Analysis

- Parks, Open Space

 Residential Cluster, 99% percent of Manchester residents live within this area

 Pedestrian Routes from home school and home school bus stops
 Schools
 Bus Stops
 School Bus Stops
- Site Map of Manchester District, Calgary, Alberta

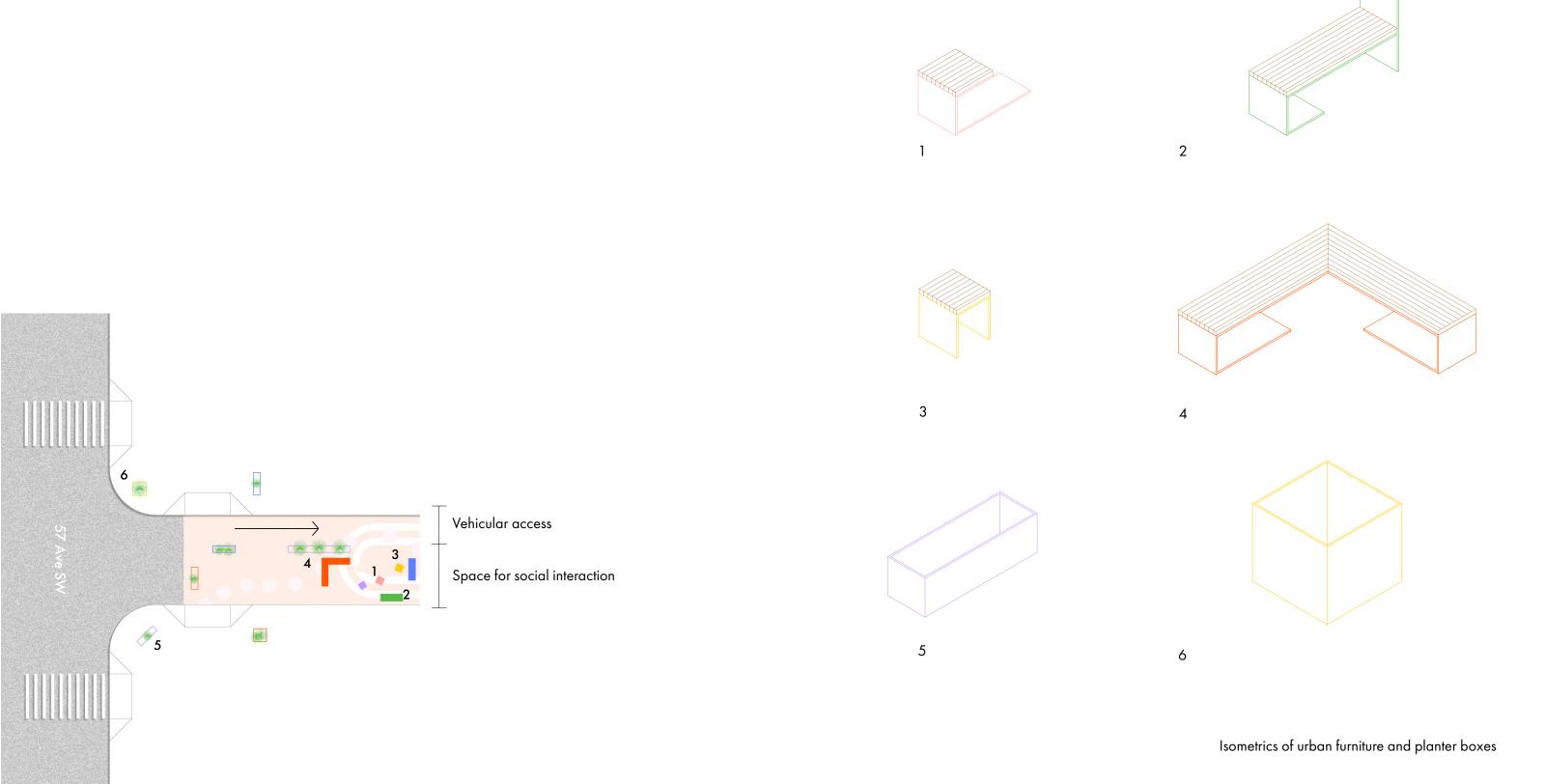
b. Detail Plan of Temporary Playful Streetscape



Interventions

- 1. Street mural
- 2. Integrate new crosswalks in the middle of the street

- 3. Narrowed travel lines using planter boxes to limit vehicular and driveway access
- 4. Provide sitting spaces



Detail plan of intersection between 2St SW and 57 Ave SW

c. Detail Plan of Permanent Playful Streetscape

Detail plan of 2St SW



Interventions

- 1. Improve crossing sections
- 2. Narrowed travel lines
- 3. Remove parking from one side of the street.
- 4. Extend sidewalks
- 5. Identify vacant lots that might be redesigned
- 6. Pavement design on sidewalks

- 7. Provide opportunities to play in nature
- 8. Integrate playful installations to stimulate creative play
- 9. Incorporate more greenery
- 10. Sitting spaces especially close to play areas
- 11 Bollards
- 12. Integrate new crosswalks in the middle of the street



Notes

- Aileen Shackell, Nicola Butler, Phil Doyle and David Ball. Design For Play: A guide to create successfully play spaces. Crown/Play England/Big Lottery Fund, 2008
- 2 Lucia Blanco, *Playful Landscapes*. 2020, https://3d77d345-9c51-4be2-88b2-31b9f986657f.filesusr.com/ugd/5eb725_80fb26294ddc4261bfa2372bc0caad9d.pdf
- 3 Center on the Developing Child at Harvard University. 8 Things to Remember about Child Development on National Association of City Transformation Officials. Designing Streets for Kids. Washington: Island Press, 2020
- 4 Encyclopedia on Early Childhood Development. Importance of Early Childhood Development: Early Brain Development and Human Development on National Association of City Transformation Officials. Designing Streets for Kids. Washington: Island Press, 2020
- 5 Thomas Hendricks, The Nature of Play. American Journal of Play, 2008
- 6 Rob Wheway. Opportunities for free play, International Journal of Play, 2015
- 7 Ibid.
- 8 YYCPlays. Calgary's Play Chapter. Collective Impact Report 2018, 2018
- 9 Ibid.
- 10 Ibid.
- ParticipACTION. The Role of the Family in the Physical Activity, Sedentary and Sleep Behaviours of Children and Youth. The 2020 ParticipACTION Report Card on Physical Activity for Children and Youth. Toronto: ParticipACTION; 2020
- 12 Ibid.
- 13 Sustainable Calgary. State of Our City Report: A Urgent Call for a Just Transition. Calgary, 2020
- The New York Times. Children Revel in Street Playground. New York: The New York Times, 1914, https://timesmachine.nytimes.com/timesmachine/1914/07/26/100099379.pdf?pdf_redirect=true&ip=0
- LabCDMX. Arquitectura para el Juego Urbano: Lineamientos para diseñar espacios públicos de juego en la CDMX, Ciudad de México, 2019 https://3d77d345-9c51-4be2-88b2-31b9f986657f.filesusr.com/ug-d/5eb725_73b917a3e7d44156a8b7c720d6a6bbdb.pdf
- National Association of City Transformation Officials. *Designing Streets for Kids*. Washington: Island Press, 2020
- 17 Census Calgary City 2016.

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Complementary Readings

Canadian Parks Council. The Nature Playbook. Canada, 2016 https://www.outdoorplaycanada.ca/portfo-lio_page/the-nature-playbook/

Canadian Public Health Association. *Children's Unstructured Play*. Canada, 2019 https://www.cpha.ca/sites/default/files/uploads/policy/positionstatements/play-positionstatement-e.pdf

Inspiring Scotland. Loose Parts Play: A Toolkit by Theresa Casey and Juliet Robertson. Scotland, 2019 https://www.inspiringscotland.org.uk/wp-content/uploads/2019/07/Loose-Parts-Play-Toolkit-2019-web.pdf

