TRANSFORM

Opening Neighbourhood Streets for Children's Play: Results from the StreetPLAY Pilot Program in Toronto

TransForm Laboratory of Transportation and Land Use Planning
School of Urban and Regional Planning, Ryerson University

Research Team

Zainab Abbasi
Graduate Research Assistant
TransForm Laboratory
School of Urban and Regional Planning
Ryerson University

Raktim Mitra
Associate Professor, School of Urban and Regional Planning
Co-Director: TransForm Laboratory
Ryerson University

Contact

Dr. Raktim Mitra
School of Urban and Regional Planning,
Ryerson University
105 Bond Street, Toronto, ON M5B 1Y3
E-mail: raktim.mitra@ryerson.ca
Phone: 416-979-5000 ext 2272

February 2018

This independent research was financially supported by Earth Day Canada through funding from Ontario Trillium Foundation.

TRANSFORM
Transportation and Land Use Planning Research Laboratory at Ryerson University

Ryerson University

Earth Day CANADA

Street PLAY

Table of Contents

1 Executive Summary

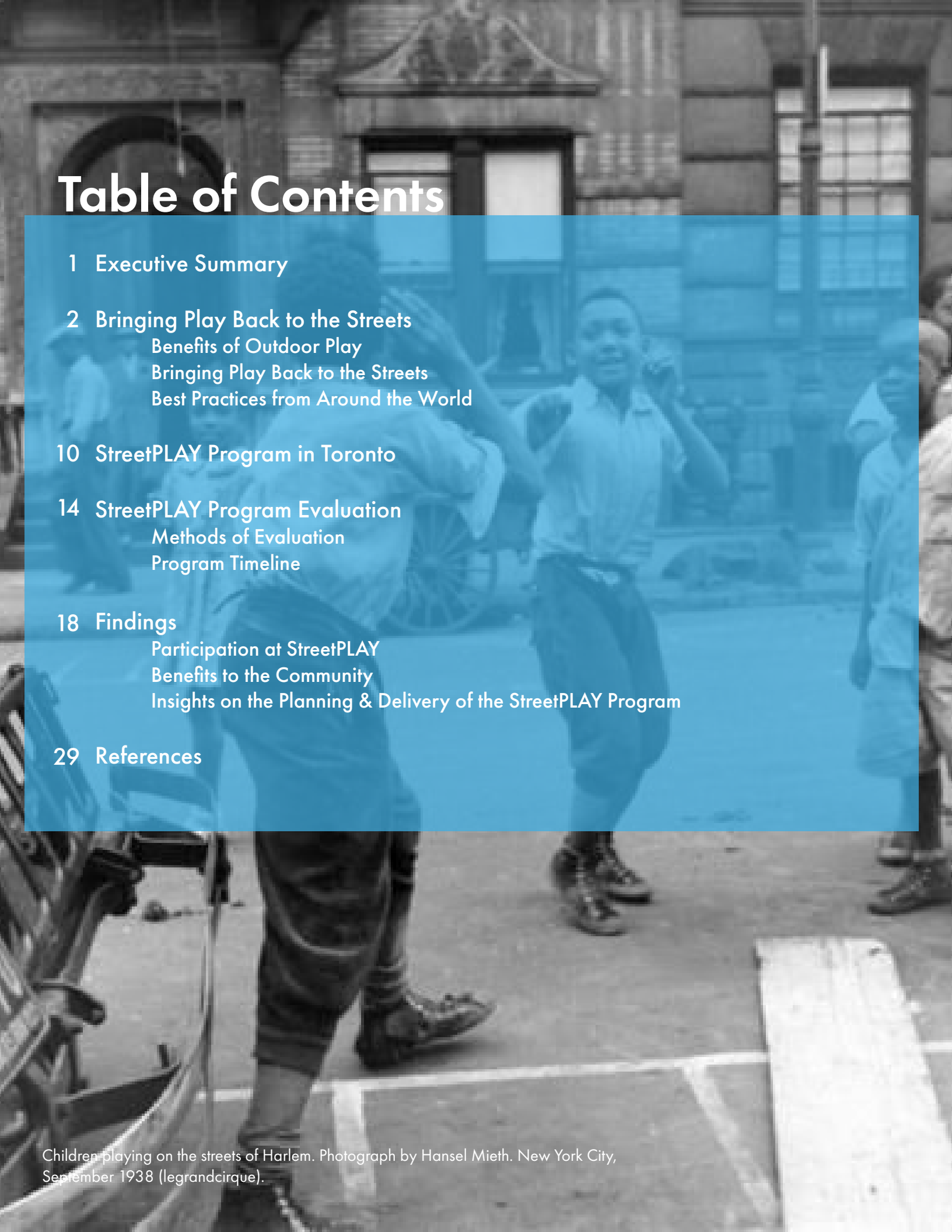
2 Bringing Play Back to the Streets
- Benefits of Outdoor Play
- Bringing Play Back to the Streets
- Best Practices from Around the World

10 StreetPLAY Program in Toronto

14 StreetPLAY Program Evaluation
- Methods of Evaluation
- Program Timeline

18 Findings
- Participation at StreetPLAY
- Benefits to the Community
- Insights on the Planning & Delivery of the StreetPLAY Program

29 References



Children playing on the streets of Harlem. Photograph by Hansel Mieth. New York City, September 1938 (legrandcirque).

Executive Summary

Image Source: Earth Day Canada, 2017

The StreetPLAY Pilot Project was implemented by Earth Day Canada, a non-profit organization based in Toronto to introduce street play programming onto residential streets in the city. Through collaborative efforts with the City of Toronto, Earth Day Canada temporarily closed seven street sections in one of the inner-urban neighbourhoods, namely the Seaton Village, to allow children's outdoor play on these streets. The street closures took place on different street sections each weekday from June to October 2017 and was supervised by Earth Day Canada's street team and local volunteers (parents and high school students). Researchers from Ryerson University conducted an evaluation of the StreetPLAY pilot project to assess the impact of this programming in enabling outdoor play, and the feasibility of replicating similar programming to bring play back to neighbourhood streets. The research also aimed to understand the challenges in implementing a street play intervention in Toronto. We conducted field surveys with parents and caregivers and also surveyed community members. In addition, we interviewed 6 key informants involved in the planning and implementation of StreetPLAY.

The StreetPLAY events were most frequently attended by children aged 4-11 years old and children 12 years and older attended the least. The StreetPLAY events might have been more successful in attracting and retaining the 4-11 year old age group. Age-specific strategies can be explored to attract and engage the the younger and older children (0-3 years old and 12+ years and older). Our findings indicate that boys were more likely to attend the StreetPLAY event than girls. While the majority of parents (56%) were likely to allow their children to play outside since the start of the StreetPLAY program, girls were not as likely (31%) to be allowed to play outside as the boys (69%) following the StreetPLAY events.

The neighbourhood survey results indicated a general positive perception of StreetPLAY, among both parents and non-parent community members. Majority of community members (75%) felt more connected to their community as a result of the StreetPLAY program and 92% agreed that StreetPLAY offered a safe outdoor play environment for children. 68% agreed less adult supervision is required when children play outside during StreetPLAY. Only 3% indicated that they agreed StreetPLAY created excessive noise and only 6% StreetPLAY created congestion on nearby streets.

Our interviews with key informants identified the key areas for future improvement. These include a better system for volunteer management and scheduling; a streamlined street permit process; continued opportunities for children to have access to the street space for play and; a need for improving the community consultation process. Key informants also expressed the importance of self-directed play where children have the freedom to explore, imagine and be independent, which is well-supported in literature and has many documented social benefits to children (Ness & Farenga, 2007).

The results indicate the positive response from parents and non-parent community members towards re-introducing neighbourhood streets for children's outdoor play. It demonstrates the potential for success in implementing the StreetPLAY intervention on Toronto's neighbourhood streets.

Bringing Play Back to the Streets

Benefits of Outdoor Play

Play is a natural and necessary activity for children (Louv, 2005; Moyles, 2015). It is an immense development opportunity with demonstrated benefits children's physical, mental, social and creative health (Valentine & McKendrick, 1997; Cheng & Johnson, 2010; Gleave & Cole-Hamilton, 2012). Research has shown that schools only account for between 20-40% of children's learning outcomes (skills, knowledge and attitudes) achieved by students (Kellock, 2015). Play provides learning opportunities that cannot be replaced by academic learning opportunities. Play carries many social benefits as well, as it helps children learn to share, to communicate, negotiate and work in teams (Ginsburg, 2007).

The physical activity benefits that play offers has made it a greater area of concern of public health policy in recent years to encourage opportunities for children to play (Canadian Society for Exercise Physiology, 2011). Previous research supports this as it suggests that children who spend more time playing outdoors than indoors are more active (Cooper et al., 2010), and yet, only 47% of grade 5/6 children in Toronto spent more than an hour playing outdoors in a typical weekday (Faulkner et al., 2015). Play participation among younger children may be even less. Low participation in play is a missed opportunity for physical activity accumulation, which is important for children's health and wellbeing. More importantly, encouraging children to play outdoors can help them become more active as they grow up (Page et al. 2009, 2010; ParticipACTION, 2015).

Parents and caregivers, and more broadly the social norms around child supervision, may impact the opportunities for play children partake in, and the duration of children's outdoor play (Faulkner et al., 2015). Particularly, adult concerns for safety from traffic and strangers reduces opportunities for children's outdoor play (Faulkner et al., 2015; Murray & Devecchi, 2016; Faulkner et al., 2015). These perceptions serve as barriers preventing children from freely engaging in outdoor play. Dedicating attention to awareness and shifting the social norms will be important toovercoming these barriers and re-introducing public spaces and streets for children's outdoor play.

Children participate in street play in London, England (London Play, 2015).

Bringing Play Back to the Streets

Children today have been deprived of the opportunity to play (Jarvis, Newman & Swiniarski, 2014), and (re)allowing play in urban and suburban neighbourhood streets can be a way of providing easy access to play space for a vast majority of our children.

Historically common places for children to play outdoors, neighbourhood streets are now taken over by vehicles. Regulatory mechanisms used to separate land uses have discouraged children's participation and play on their streets (Read, 2011; Hart, 2002). Since the mid-1900s, children's free play on streets has increasingly been replaced by organized sports in playgrounds, and playing with dirt have similarly been replaced by activities such as sand pit play and gardening, limiting the possibilities for creativity and imaginative play (Read, 2011).

In England, for example, gutter play was replaced with 'Free Kindergartens' because it embodied less risk and offered gardens as a safe supervised play space. Free Kindergartens were premised on teaching children appropriate behaviour and socialization, as playing on the streets was considered to encourage poor behaviour (Read, 2011).

Around the same time, in the United States, playgrounds were being used to steer children away from playing on the streets and into controlled spaces where behaviour could be monitored closely and 'appropriate' play would occur (Hart, 2002). More than ever before, children were being engineered out of our streets through the segregation of uses and play bans. The City of Toronto followed suit by banning Street Hockey and Ball Play on streets under the City of Toronto Act in 2006; a key purpose of this ban was to maintain streets for the safe passage of vehicular and pedestrian traffic (City of Toronto, 2011; 2016). The ban was also placed to ensure the safety of children who may be less aware of their surroundings when parents or supervisors are not watching them. Leaving hockey nets or basketballs on the street would result in a $90 fine under the ban (City of Toronto, 2011). The ban prevented the opportunity for children to take advantage of local streets as play spaces in close proximity of their homes, where parents or guardians are within earshot distance. In most urban neighbourhoods that are interspersed and well-serviced by streets, streets can be a place to play outside for children who lack easy access to local parks or do not live near local parks.

In 2008, the city of Kingston was one of the first to lift the ban on street hockey in Ontario (City of Kingston By-law Number 2004-190; 2008-144). Under the current bylaw, children can participate in street hockey play as long as they take place during daylight hours in areas where there is a clear view of vehicles approaching, provided that the children have parent or guardian consent to play outside. The framework makes way for children's street hockey play while placing a responsibility on families to have a level of accountability in the play. Recently in 2016, the City of Toronto passed a motion to lift the ban and welcomed the use of local streets for outdoor play (City of Toronto By-law Number 775-2016). This offered an exciting opportunity to welcome children out onto the street for play once again.

In the summer and fall of 2017, Earth Day Canada co-organized with city councillors and the city of Toronto to obtain permits for street closures to test out a pilot programming to celebrate this changed policy environment, and encourage play on local neighbourhood streets. The programming was called StreetPLAY, and was implemented in the Seaton Village neighbourhood- an inner-urban neighbourhood within the City of Toronto, west of downtown.

Children playing in the slums in Glasgow, Scotland in September 1948. Photograph by Mark Kauffman (legrandcirque).

Best Practices from Around the World

The task of re-introducing streets as spaces for children's outdoor free play has become almost impossible without some form of intervention. However, successful street play interventions have popped up in many western cities; the first street play event in the USA was hosted by New York City in 2012 (Murray & Devecchi, 2016; Zeif, Chaudhuri & Musselman, 2016). There has been a resurgence of street play events across North America and Europe in recent years in efforts to welcome children onto the street again.

Playing Out Program, Bristol, UK

The Playing Out model in Bristol, UK was developed by local parents frustrated with the lack of opportunities for children to play freely on the street (Ferguson & Page, 2015). The low cost intervention was developed to provide safe spaces for children's free play. It consists of a partial road closure after school hours on designated days for a given period of time, organized and supervised by neighbours. Since then, the program has grown tremendously and the Playing Out team now provides hands-on support to other streets in Bristol in organizing street plays in their neighbourhood. The positive impact of the program is felt across the country-40 towns and cities in UK have since organized over 250 Playing Out sessions.

Volunteers supervise the street closure at this Playout Out session in Bristol, UK (Playingout.net).

Streets Renaissance Program, New York City, USA

With a population density that has the city bursting at the seams, the children of the city do not have adequate access to safe outdoor play (Hart, 2002). Local community leaders in many neighbourhoods have recognized the potential of streets for safe outdoor play. Building on this momentum, in 2005 and 2006 community organizations, non-profit organizations and the city collaborated to develop various street play programs which have improved community members' access to streets for play all over the city.

The Streets Renaissance Program in New York City runs through a partnership between urban planning, transportation and technology non-profits Project for Public Spaces, Transportation Alternatives and the Open Planning Project. Together, they developed a campaign model to spur positive change in transportation policy in New York City (Project for Public Spaces, 2006). The program resulted in various block parties and street play programs through partnerships with local community organizations in each neighbourhood. The aims of the campaign was to: educate citizens; promote a rebalancing of public space away from private vehicles towards community need; demonstrate to city officials the community support for such programs and; to urge citizens to re-imagine their own streets, and re-claim them for their own use (Kaboom, 2008). One such program was the Block Party program. In New York City, residents can apply for a block party permit for $15 to temporarily close off the street for all community members to enjoy. Transportation Alternatives provided thirty $300 grants to low-income neighbourhoods to encourage them and help cover costs of hosting the block parties, such as the permit, food, drinks and supplies. Grants were primarily awarded to neighbourhoods hosting community events for the first time. Transportation Alternatives also provided hands-on support during the events. As a result, over 3000 block parties took place in 2008, in comparison to 300 in 2007.

In the Jackson Heights neighbourhood, community members advocated to close the street next to their park (78th Street) in order to extend the play space of the often crowded park. The Streets Renaissance Program helped the community navigate liability and insurance issues by working with the City to develop an agreement. The Play Streets program ensured the City's transportation department maintains liability for safety and the maintenance of the street. Local residents were responsible for maintaining the street closure. As a result of the partnerships formed and liability maintained by the City, the neighbourhood successfully closed the street every Sunday from June to November. The pilot project gained a lot of popularity with the community. The community collaborated with the Jackson Heights Green Alliance (JH Green) to establish a long term program for 78th Street (Project for Public Spaces, 2015). Through the collaborative efforts, JH Green successfully turned 78th Street into a car free zone year round, all summer.

As a result, it is a popular site for community events and gathering today and the Department of Transportation is redesigning the site into a pedestrianized plaza to reflect the community's needs (Project for Public Spaces, 2015).

People of all ages playing and socializing on car-free 78th Street in Jackson Heights, New York City (Project for Public Spaces).

Play Streets, San Francisco, USA

San Francisco was one of ten cities selected as part of the national Play Streets program run by the Partnership for a Healthier America and Blue Cross and Blue Shield Association. The project aimed at promoting children's physical activity by closing down neighbourhood streets for play. The Play Streets program in San Francisco was implemented through a partnership between local non-profit, Livable City and was financially sponsored by the San Francisco Municipal Transportation Agency (SFMTA) in June to August of 2013. The program activated smaller scale one to two car-free city blocks for children's outdoor play in four underserved neighbourhoods. The neighbourhoods selected were low income; they had higher rates of chronic diseases and; they were not well-serviced by recreational resources. The program was flexible for neighbourhoods to tailor to their own preferences and use. As a result, the program significantly contributed to the amount of usable open space for recreation, in proximity to the residents' homes. There was strong agreement throughout the neighbourhood that the program strengthened the community (Zieff et al, 2016). In addition to increasing the physical activity levels of the children, adults engaged with their neighbours during the play events.

Recently in 2017 the SFMTA, the San Francisco Planning Department and the Department of Public Health launched a new Play Streets program two year pilot with the aim of implementing the program city-wide. In the first year of the pilot, they will partner with three community organizations to implement Play Streets in communities of concern, as identified by the city of San Francisco. In the second year of the pilot, the program will be expanded city-wide for all communities to apply to and participate in.

Children participate in the San Francisco Play Streets program (San Francisco Municipal Transportation Agency).

USA Play Streets Program, Seattle, USA

In 2014, the Seattle Department of Transportation (SDOT) piloted the Play Streets Program in Seattle. The pilot program aimed to encourage the use of neighbourhood streets for safe and active play; to provide space beyond parks and yards for play and; encourage interaction among neighbours of all ages (Seattle Department of Transportation, 2016). SDOT developed a pilot program which consisted of a free and simple permit to which interested neighbourhoods applied. The permit system was free to encourage all neighbourhoods to participate. Play Streets events were held in all seven districts of the city, although they tended to be clustered around each other. During the pilot, the Seattle Department of Transportation issued over 185 permits for play streets. Following the success of the initial pilots, the SDOT formalized the program in 2016. They have developed a Play Streets Handbook, a checklist and video tutorials to equip interested communities with all the information they need to successfully host Play Streets events (Seattle Department of Transportation, 2017).

Children participate in the Play Streets program on 35th Avenue in Seattle (usa.streetsblog).

Children playing at the Playout Out session in Bristol, UK (Playingout.net).

Children swinging around a lamp post in inner city Dublin, Ireland, 1953. (architectureireland).

StreetPLAY Program in Toronto

The StreetPLAY Program in Toronto

Earth Day Canada, a non-profit organization based in Toronto, collaborated with the City of Toronto to introduce StreetPLAY programming onto residential streets in the city. The pilot project took place in Seaton Village, where there were working relationships with the local city councilors and greater political leadership, as well as interested community members. Working with the local communities, Earth Day Canada organized events in the Seaton Village.

The Seaton Village neighbourhood, in the Annex, Toronto is located minutes from Bloor-Danforth subway line. The median household income in this neighbourhood is higher income than the city of Toronto average (City of Toronto Social Policy Analysis & Research 2011a). In households with children, the majority of children are 14 years old and under (City of Toronto Social Policy Analysis & Research 2011a). The streets in Seaton Village where the StreetPlay project was piloted are primarily lined by detached, semi-detached and row houses which have appreciated by 62% in terms of property values, in a short span of 2 years (Metro news 2017).

Earth Day Canada worked with political leadership (i.e., City councilor) local community and conducted community meetings to identify four residential streets for the pilot project. In the end, seven residential street sections were selected: 4 sections of Clinton Street between Bloor St & Dupont St; Palmerston Gardens; Markham St & Follis Ave and; Pendrith Street. (see Figure 1) Each day of the week, one or two different streets were closed to vehicles and activated for children's street play (Table 1). On weekdays the street closure was from 4-8pm and on Sundays from 2-5pm.

The StreetPLAY events took place in June, September and October 2017. Parents and community members were recruited to supervise the street closures. Earth Day Canada's Street team and local volunteers (often parents or high school students) supervised the events and managed the street closure during the StreetPLAY events. Locally available materials such as recycling bins and hockey nets with a StreetPLAY sign attached were used as a physical barrier to close off the street to vehicular traffic, except for residents living on the street.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Clinton St. (Barton to Follis) 2-5pm Clinton St. (laneway to Barton) 5-8pm Palmerston Gardens 4-8pm Markham Follis 4-8pm	Clinton St. (Yarmouth to Dupont) 4-8pm	Pendrith St. 4-8pm	Clinton St. (Follis to Yarmouth) 4-8pm	Palmerston Gardens 4-8pm	Clinton St. (Yarmouth to Dupont) 4-8pm
Clinton St. (Barton to Follis) 2-5pm Clinton St. (laneway to Barton) 5-8pm Palmerston Gardens 4-8pm	Clinton St. (Yarmouth to Dupont) 4-8pm	Pendrith St. 4-8pm	Clinton St. (Follis to Yarmouth) 4-8pm	Palmerston Gardens 4-8pm	Clinton St. (Yarmouth to Dupont) 4-8pm

Table 1. Weekly schedule of StreetPLAY street closures.

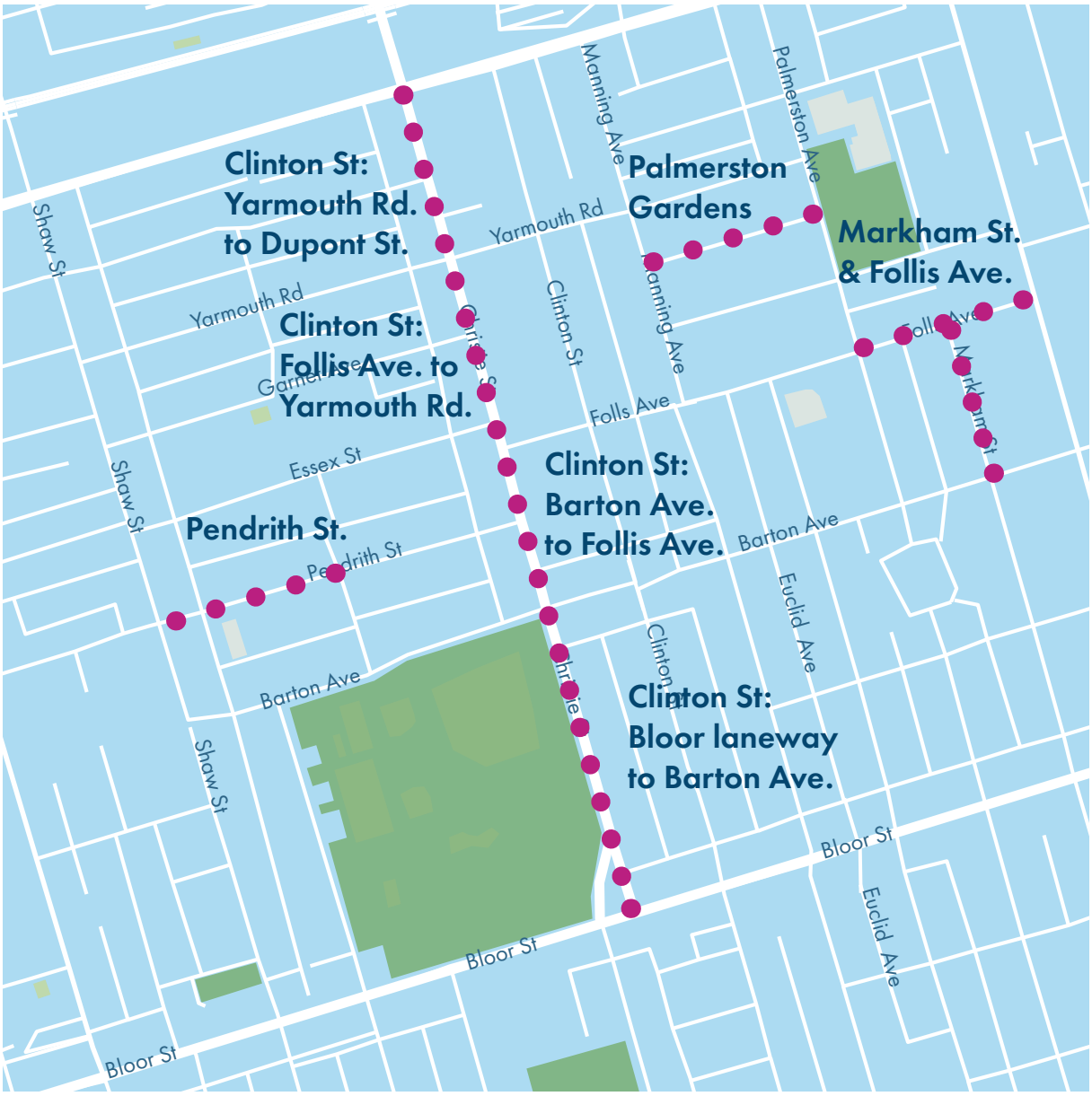


Figure 1. Map of the seven residential street sections selected for the StreetPLAY pilot program.

Children playing on 104th Street filled with water in Harlem, New York City (vintag.es).

StreetPLAY Program Evaluation

StreetPLAY Program Evaluation

As part of the pilot program implementation, a systematic evaluation was conducted by researchers from TransForm Laboratory in the School of Urban and Regional Planning at Ryerson University (www.transformlab.ryerson.ca), in the Summer and Fall of 2017. The evaluation aimed to explore the impact of this programming on play participation, and the feasibility of bringing play back to neighbourhood streets in urban centers.

The research focused on three potential benefits at the community level;
- play participation by demographically and economically diverse population groups;
- improved quality and diversity of play; and
- improved sense of community, citizenship and belonging.

The research also aimed to understand the challenges in implementing a street play intervention in Toronto and reception of the programming at the community level.

Data for this evaluation was collected through field surveys, neighbourhood surveys and key informant interviews. Research ethics approval was obtained from Ryerson University's Research Ethics Board.

Methods of Evaluation

Parents and caregivers of participating children, and community members living on the streets where the pilot programming took place were surveyed in order to explore their participation, experiences and perceptions of the StreetPLAY pilot and understand who might have benefited or affected by the programming.

Field Surveys

Field surveys were conducted among parents and caregivers of children participating in the StreetPLAY program. Field surveys were conducted at each participating StreetPLAY street on three randomly selected event days in July, September and October 2017 (two weekdays and a Sunday at each location). A convenience sampling method was used to recruit parents for the field surveys. Research assistants from Ryerson University collected surveys by approaching parents at StreetPLAY. In addition, we approached every household (on both sides of the pilot streets) to reach parents who were not on the street to supervise their children participating in the StreetPLAY program. For households with more than one child who participated in StreetPLAY, parents and caregivers were asked to complete a separate survey for each child, or clearly indicate the different responses for each child on the single survey.
We collected 105 responses from parents and caregivers, representing 157 children.

Neighbourhood Surveys

Neighbourhood surveys were conducted after the completion of the StreetPLAY pilot program, among community members, regardless of whether they had participated in the StreetPLAY event or not. The surveys were collected in November 2017 in each participating StreetPLAY neighbourhood on two randomly selected weekday evenings. Each address on both sides of the streets was tried at least twice, on different days. For households with more than one child who participated in StreetPLAY, parents and caregivers were asked to complete the survey where answers would be relevant to only one child.
We collected 105 responses from community members.

Key Informant Interviews

In-person semi-structured interviews were conducted in December 2017 with key stakeholders involved in the planning, implementation and delivery of the StreetPLAY Pilot Project. 6 key informants were interviewed to understand the experiences, challenges and lessons learnt from implementing this pilot project. We interviewed 3 community members and 3 professional staff involved in delivering the programming.

The list of key informants were compiled in consultation with Earth Day Canada. The semi-structured interviews were 30-45 minutes and the participants spoke from their professional positions in relation to the StreetPLAY pilot project.

Program Timeline

2017

March

StreetPLAY Pilot Project Community Meeting
Clinton St.

May

StreetPLAY Pilot Project Community Meeting
Palmerston Gardens

StreetPLAY events begin
On all 7 street sections

Ryerson Research Team conducts field observations & collects surveys from parents

July

StreetPLAY events end for summer

September

StreetPLAY Events begin

Ryerson Research Team conducts field observations & collects surveys from parents

November

StreetPLAY Pilot Project ends

Ryerson Research Team collects feedback from community members

Ryerson Research Team interviews key informants

December

Findings

Participation at StreetPLAY

A total of 105 parents were surveyed at a total of 21 StreetPLAY events, who provided data on participation by 157 children. Of the 105 parents and caregivers, 58% were female. Three-quarters (74%) of children participating were between 4-11 years of age, and only 1 in 10 children were 12 years or older. Overall, more girls attended the event than the boys (58% vs 42%).

4-7 years old children made up the largest group to attend StreetPLAY (40%), followed by children 8-11 years old (34%) (Figure 2). Children from these two age-groups might have benefited the most from opening up neighbourhood streets for their play. In comparison, youth aged 12 years and above were less frequent participants in the StreetPLAY program.

Children and youth would most commonly (34%) spend 1-2 hours playing on the streets during a StreetPLAY event (Figure 3). The majority of those who spent 2+ hours at StreetPLAY were 8-11 years old (44%) or 4-7 year old (37%) children. On the contrary, only 9% of 0-3 years old and 9% of 12+ years old spent more than 2+ hours at StreetPLAY. Instead, youth aged 12 years or more constituted a large proportion of those who spent less than 30 minutes at StreetPLAY events.

Our results suggest that StreetPLAY pilot events might have been more successful at attracting and retaining the 4-11 year old children, while more age-specific strategies can be explored to attract younger (0-3 year olds) and older (12+ year olds) children and youth at future StreetPLAY events.

Parents and caregivers attended StreetPLAY for many reasons related to playing with children and socializing with neighbours. The top 2 reasons parents attended StreetPLAY were; to let children play (91%) and; to be outside (37%). Almost one third of parents (31%) reported they attended StreetPLAY to meet, see or chat with other people.

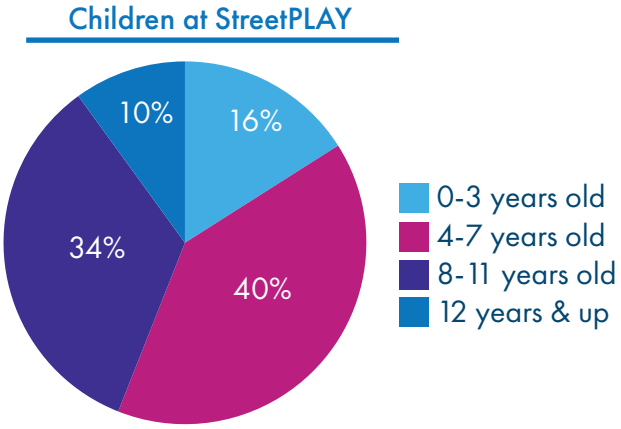


Figure 2. Age group of children at StreetPLAY, reported by parents and caregivers in the field survey.

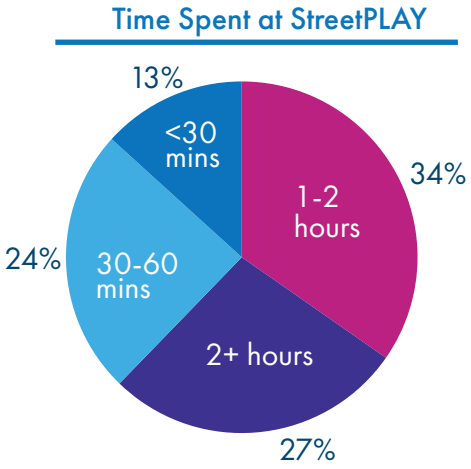


Figure 3. Time Spent at StreetPLAY, reported by parents and caregivers in the field survey.

Frequency of attendance at StreetPLAY

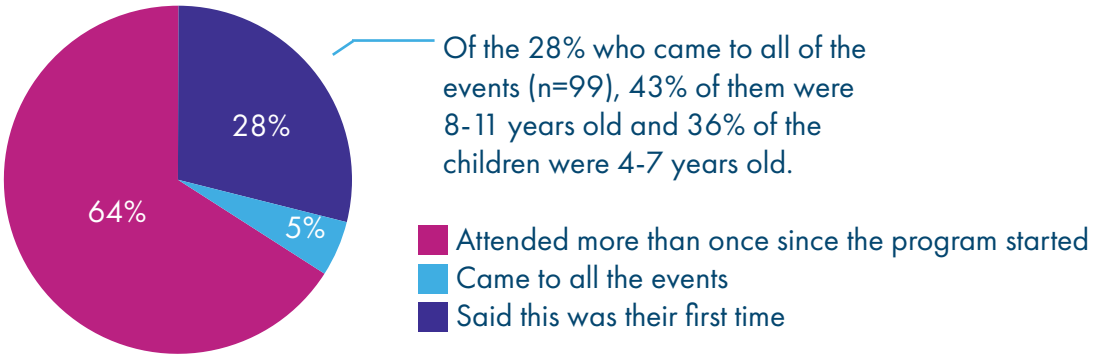


Figure 4. Frequency of attendance at StreetPLAY, reported by parents and caregivers in the field survey.

Our survey findings indicate children participated in a diversity of play activities, from cycling and skateboarding to water play, from hula hooping to colouring (Figure 5). In addition, the StreetPLAY events appeared to have facilitated imaginative play, as our interviewees pointed out. Children created new games using various toys, and built things using random items from their home. During the field observations, we also observed a range of play activities that were novel and created by the children, activities that do not necessarily have a name. Children were observed walking the cat on a leash, washing the bike, crawling, learning to walk, having a picnic on a blanket that was laid out and playing with the water hose and wagon.

Many of the interviewees reported the importance of such self-directed play, the independence and freedom of children to explore, imagine and come up with their own play activities. These observations are well-supported in literature; many sources indicate that play should be voluntary, self-directed play where children have opportunities to engage in appropriate risk taking (Zieff et al, 2016; Murray & Devecchi, 2016). It is considered the most natural and effective form of learning (Gleave & Cole-Hamilton, 2012). This independence and control over their environment helps them develop social skills (Ness & Farenga; 2007). These studies highlight the importance of children's independent mobility, and the ability to access and play in local spaces without complete adult supervision.

Children's Most Frequent Activities at StreetPLAY

Figure 5. Activities at StreetPLAY, reported by parents and caregivers.
Running (81%), Cycling/Skateboarding (70.2%), Ball Games (63.3%), Drawing/Colouring (44.93%), Bubbles (32.27%), Skipping (31%), WaterPlay (16.56%), Hula Hooping (15.19%), Hopscotch (12.65%), Scooter (6%), Other (4.2%)

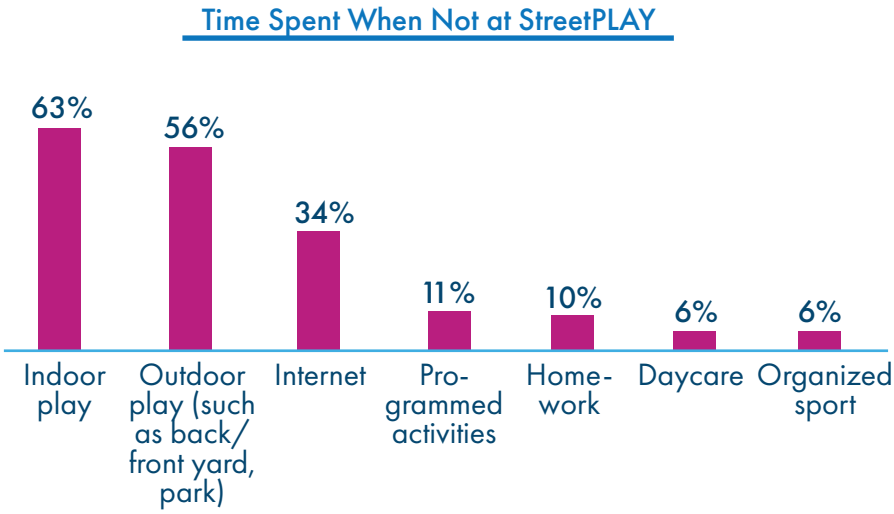


Figure 6. Childrens' activities, when not at StreetPLAY, reported by parents and caregivers.

When compared with the potential alternative activities that a child would engage in, it becomes clear that the StreetPLAY events created opportunities for physical activity and social play, both of which are critically important for their health and wellbeing (Faulkner et al., 2015; Participaction, 2015). For example, a large proportion of participating parents reported that their children would either play indoors (63%) or use the internet (34%) if they were not at a StreetPLAY event (Figure 6).

In addition, the events created opportunities for participating parents/caregivers to develop and maintain social capital. More than half (53%) of parents said they talked to someone they did not know at the StreetPLAY event and 72% of parents said they talked to someone they knew in the community.

Benefits to the Community

As part of the pilot program evaluation, we explored the community benefits of StreetPLAY, which included diversity of play participation across socio- demographic groups, perceived improvement in the quality and diversity of play and, as well as improved sense of community, citizenship and belonging. A total of 105 community members responded to a survey which took place post-pilot implementation, 53% of them had children who may or may not have participated in the StreetPLAY events.

Benefits to Various Socio-Demographic Groups

Our findings indicate that boys were more likely to attend the StreetPLAY event than girls. Parents reported whether they had a boy or girl, and whether that child attended or did not attend StreetPLAY. Of all the girls reported in our results, 83% attended StreetPLAY while 17% of the girls did not attend. Of all the boys reported in our results, 100% of them attended StreetPLAY. This result is particularly important in the context that girls were also not as likely to be allowed to play outside as the boys after the StreetPLAY events (31% vs 69% of boys). Our finding is consistent with existing literature that suggests that girls engage less in outdoor play and accumulate less physical activity (Faulkner et al., 2015; Bringolf-Isler et al., 2010; Singer et al., 2009). Based on our results, it appeared that these StreetPLAY events have the potential to offer outdoor play opportunities to many girls who would not otherwise be able to participate in outdoor play. More targetted efforts would ensure that both boys and girls are benefitted from similar play-related programming.

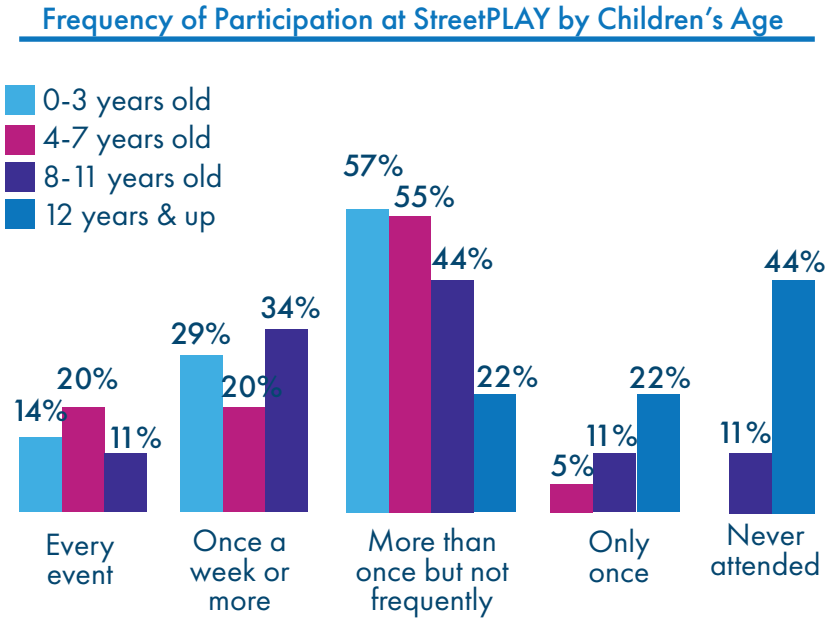


Figure 7. Frequency of children's participation at StreetPLAY, broken down by age group.

With regard to a child's age, 20% of children aged 4-7 years old attended every event; the highest representation of an age group in this category (Figure 7). Another 20% of these children attended the StreetPLAY events once a week or more, along with 34% of the 8-11 year olds. These findings are consistent with our findings from the field survey, which indicated that children aged 4-11 years were the most frequent users of these events (Figure 2). On the contrary, children aged 12 years and older attended StreetPLAY the least, in comparison to all other age groups. 44% of children 12 years and older never attended StreetPLAY events. No children ages 12 years and older participated in StreetPLAY on a weekly basis or more frequently.

It is possible the StreetPLAY events and related campaigning and/or community engagement did not interest this age group or their parents/caregivers. It is also possible that a 12+ year old youth is perceived to be 'too grown up' for StreetPLAY. There may be an opportunity to engage these youth in StreetPLAY programming at other capacities, for example, as volunteers or traffic wardens.

The Seaton Village neighbourhood, where the pilot StreetPLAY programming took place, can be considered a relatively moderate-to-high-income neighbourhood. Among our survey participants, 31% had a total household income of $120,000 or more in 2016. Only 4% of neighbourhood survey participants had a total household income of $39,000 and under. Of those who attended StreetPLAY, children from the higher-income families appear to have participated more frequently, compared to lower-income households. For example, all children who attended every event came from households who reported household incomes of $120,000 or higher. The results indicate some inequities in participation, and that families with a high income may have attended more often than low income families. Although statistical representativeness of the household income data cannot be confirmed due to low response rate (i.e., only half of survey respondents disclosed their household income). These results did not allow us to draw any definite conclusions. These results indicate that the pilot events might have been less effective in attracting some socio-economic groups. Future StreetPLAY programming may benefit from more robust community engagement to ensure that the benefits of opening up neighbourhood streets can reach children from all demographic and economic groups.

Community Support and Concerns

Majority of parents were more likely to allow their children to play outside since the start of the StreetPLAY program (56%) (Figure 8). Our neighbourhood survey aimed to understand children's interest in StreetPLAY since the StreetPLAY events occurred, and support from the parents. 44% of parents said their child wanted to play outside more since the start of the StreetPLAY program, and 63% of parents said their child was keen or very keen to participate. StreetPLAY also provided an opportunity for children to socialize and make new friends; 68% of parents said their child made new friends during StreetPLAY.

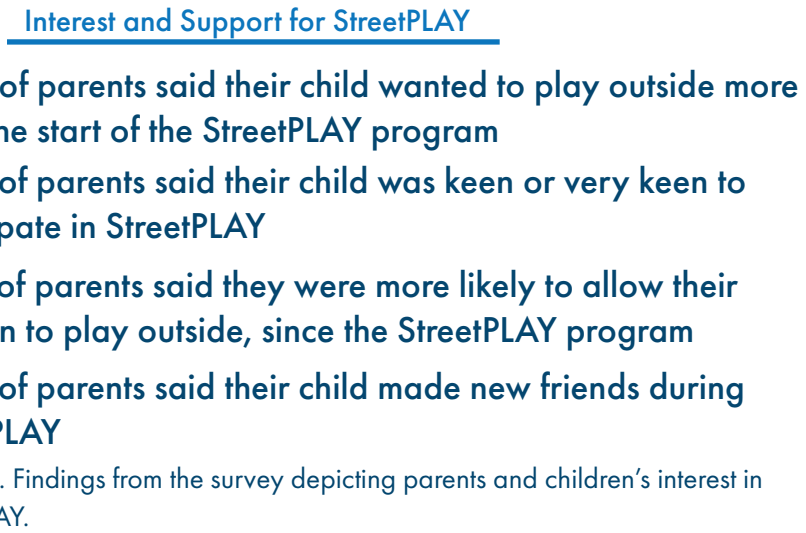


Figure 8. Findings from the survey depicting parents and children's interest in StreetPLAY.

In order to assess broader implications of the StreetPLAY pilot programming on the local community, our neighbourhood survey asked a set of questions that aimed to capture the community's perceptions on safety and convenience, as well as the impacts on their sense of community, citizenship and belonging. The community members responded to a group of statements (Figure 9 & 10) on a 5-point scale ranging from 'strongly agree' to 'strongly disagree'. For the purpose of this report, proportion of positive responses (i.e., strongly agree or agree) are reported.

Sense of Community, Citizenship and Belonging

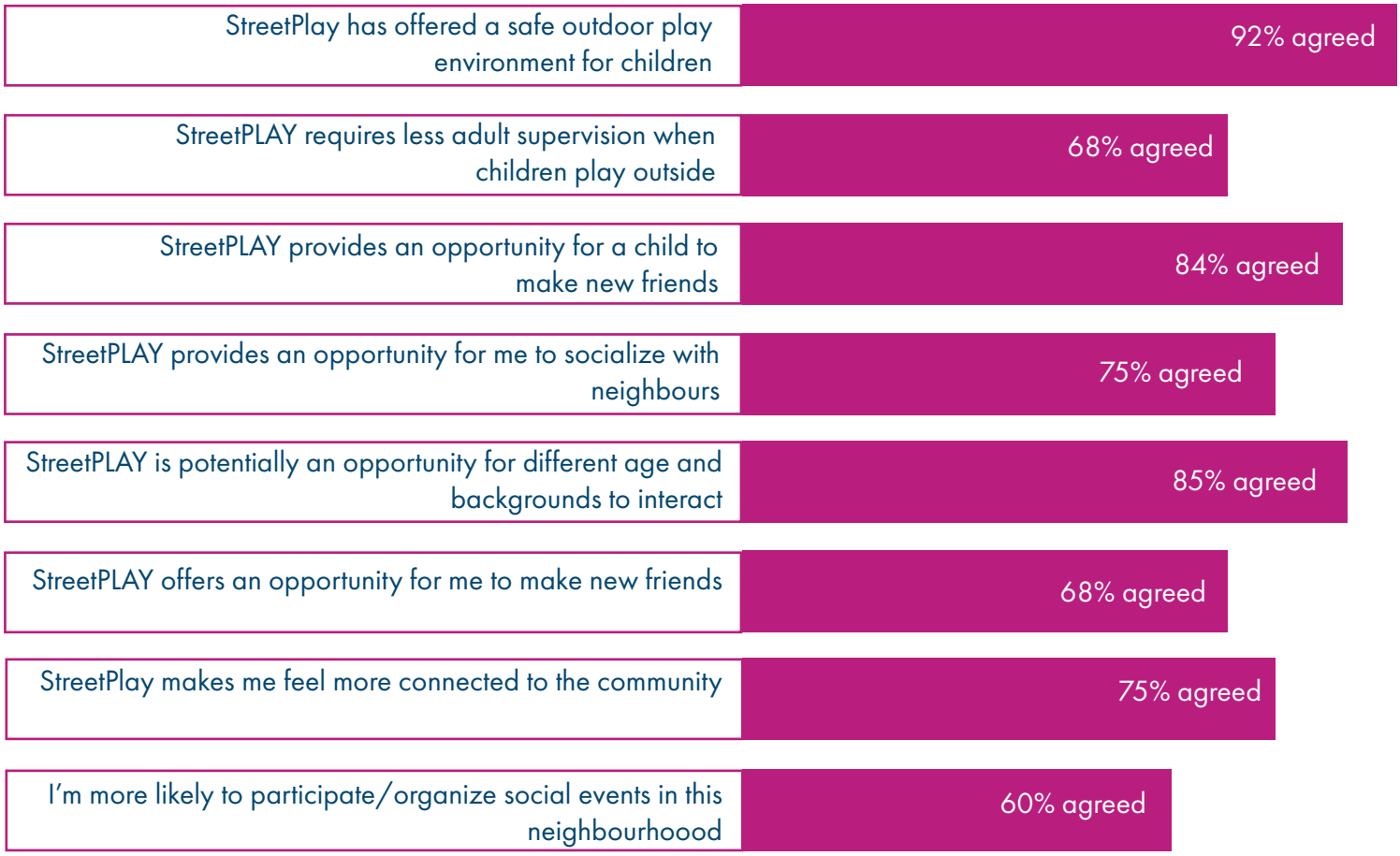


Figure 8. Neighbourhood perceptions on safety, socialization and connectivity.

Almost all of the community members (92%) felt that the StreetPLAY events offered a safe play environment for children where they can play without constant adult supervision and make new friends. There appears to be not much disagreement about the benefits of these events to children in the community.

Beyond benefits to children, the StreetPLAY pilot project improved the sense of community, citizenship and belonging among community members (Figure 9). The majority of community members (75%) also felt more connected to their community as a result of the StreetPLAY program, and 85% agreed it provides an opportunity for different age and backgrounds to interact. Community members reported that they were more likely to participate and/or organize social events in the neighbourhood. This finding was consistent across both parent and non-parent community members. We found there weren't any significant statistical differences in how respondents with children perceived these questions around sense of community and belonging compared to those who did not have children.

Community Concerns on Safety and Convenience

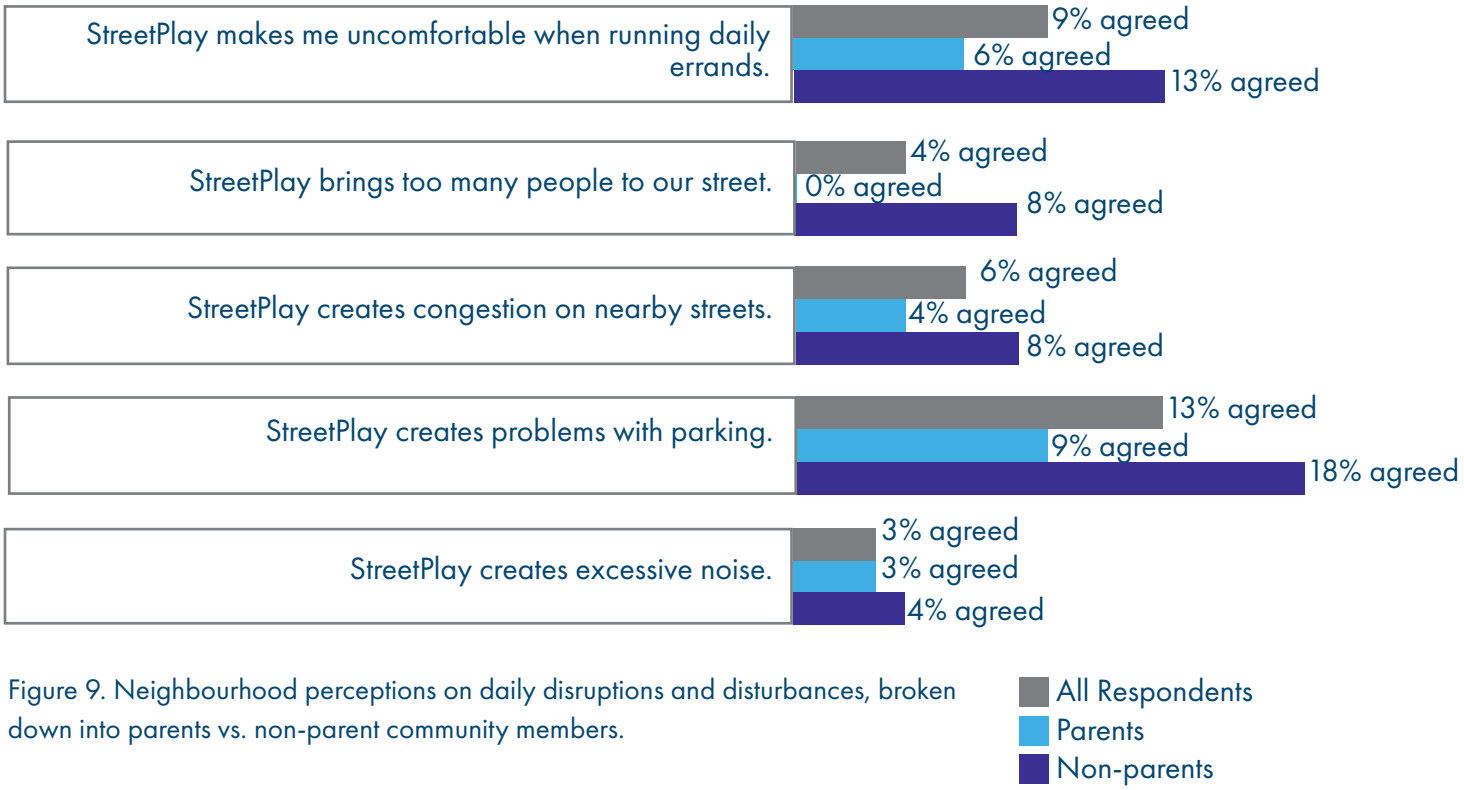


Figure 9. Neighbourhood perceptions on daily disruptions and disturbances, broken down into parents vs. non-parent community members.

With regard to the negative impacts on the community, residents identified parking, running daily errands and congestion in nearby streets as their key concerns relating to the StreetPLAY events. However, the proportion of residents who were concerned about these potential disruptions or disturbances were relatively low, compared to those who did not see these as being major concerns. For example, only 13% of the residents identified on-street vehicle parking during the StreetPLAY events as a major concern, while the other 87% disagreed (Figure 10). It is important to note that there were significant differences in how respondents with children perceived these potential disturbances compared to those who did not have children. Overall, though, the reception of the StreetPlay pilot was positive across the community.

Insights on the Planning & Delivery of the StreetPLAY Program

Planning & Program Delivery: Successes & Opportunities

We surveyed key informants on the key challenges and opportunities they came across in the implementation of the StreetPLAY program. Interviewees discussed the factors which facilitated the planning and delivery of the program and the areas in which the program succeeded, discussed below.

1. The program successfully brought children and community members out onto the street.

Community champions and programming staff reported that the streets came to life with StreetPLAY. They observed children making new friends, different age groups interacting, families spending time together, community members with or without children meeting one another. All adult community members that we interviewed made new friends with neighbours whom they had not known previously.

2. Ease in set-up of StreetPLAY events.

The use of recycling bins and StreetPLAY signs used as a barrier for the street closure were easily stored in willing residents' yards, which made it easier to set up and take down the event on each street.

3. Residents did not have to pay a fee for the pilot project, nor was third party insurance required.

Coordination between Earth Day Canada and City of Toronto's Transportation Services Division facilitated the planning and delivery of the StreetPLAY pilot project. The City did not require residents to pay a fee for the street closure permit and therefore the events were free and open for everyone to enjoy. The City also did not require third party liability insurance, which significantly facilitated in making the pilot project a reality.

4. Good response rate at the community engagement events prior to program delivery.

Earth Day Canada engaged with the interested communities on multiple events, which led to a greater awareness of the pilot project.

5. Planning adjustments along the way were made as needed; such as with the recruitment of volunteers.

Supervision of the street closures posed a challenge with not enough community members to supervise at times. Earth Day Canada recruited local high school students and then hired staff from Toronto's YES Employment program. Their responsiveness to the neighbourhoods' needs facilitated the smooth continuation of the pilot.

6. Communication and engagement with local city councillors throughout the process.

Local city councilors were consistently kept informed of the progress of the pilot project. This strong, open communication made it easier to solve any issues with the implementation along the way.

Key Challenges in the Planning & Program Delivery

Interviewees discussed the key challenges they faced in the planning and implementation of the program. Some challenges arose through the daily implementation of the events while others were tied to the administrative side of planning the events and securing permits.

1. Volunteer management to supervise street closure

Our interviewees discussed the difficulty in securing volunteers for the street closure. It was difficult finding community members who were consistently committed enough. The process was adaptive to this however, as Earth Day Canada recruited high school volunteers, and then staff to supervise the closures. Some interviewees suggested finding a good balance between community members and external volunteers or staff to supervise.

2. Scheduling

Event scheduling was identified as a major challenge. A more formalized schedule in advance facilitated by inputs from committed community members and through wider community participation would ensure smooth supervision of the events.

3. Some community members were uninformed or unsupportive of the events.

Earth Day Canada conducted a series of community events to enable inputs in the StreetPLAY programming. However, despite several rounds of information that was sent out to residents, some community members were not well-informed of the event, which created some confusion.

It appears that the community engagement process and subsequent program delivery did not adequately ensure enthusiastic participation from seniors in the community, local public schools, and nearby small businesses. In addition, some residents identified the community engagement and subsequent decision making process of being somewhat "undemocratic", which points to the need for a more participatory process in future planning of similar events.

4. StreetPLAY closure application process

The application process for street closure was identified as a major undertaking, and a potential barrier to StreetPLAY events due to its cost and insurance requirements. The StreetPLAY pilot programming was provided free of cost, but the actual costs associated with the necessary permit, if the residents had to pay it, would potentially limit the accessibility of such programming to lower income neighbourhoods. In order to make the events more feasible and widely accessible in the long term, a good relationship between the City offices and community-based organizations is key.

Planning & Program Delivery: Areas for Future Improvement

Results from our survey clearly indicated the benefits of the StreetPLAY pilot program to the local neighbourhoods. Based on our analysis of data, field observations and key informant interviews, we recommend the following for further improvement in planning and program delivery, as they relate to opening up Toronto's streets for children's outdoor play:

1. Further efforts should be placed on ensuring that the future StreetPLAY programs become more inclusive of gender, age and socio-economic groups so that they can benefit a wider community of children and other citizens.

2. Volunteers and community members would benefit from an improved volunteer management and scheduling system.

3. A more streamlined street permit application process will make the street closure process easier and more accessible for all neighbourhoods.

4. There needs to be continued opportunities for children to have access to the street space for play.

5. Efforts to implement an easily accessible platform for community feedback will ensure all community members have the opportunity to share their thoughts and concerns.

6. Greater efforts need to be made to explain StreetPLAY to community members, so that all road users (including drivers and pedestrians) can recognize the benefits of shared road space in neighbourhood streets.

7. The community should have greater control over the decision making processes relating to the StreetPLAY events, including the selection of locations and frequency of road closures.

8. A dedicated storage space in the neighbourhood is needed to store signs, shared play equipment, loose play parts. The storage space should be accessible to the neighbourhood and volunteers to use for StreetPLAY events.

References

Bringolf-Isler, B., Grize, L., Mäder, U., Ruch, N., Sennhauser, F., Braun-Fahrländer, C., & SCARPOL Team. (2010). Built environment, parents' perception, and children's vigorous outdoor play. Preventive Medicine, 50, 251–256.

Butler, J. (1990). Gender trouble. New York, NY: Routledge

Canadian Society for Exercise Physiology. (2011). Canadian physical activity guidelines. Retrieved from http://www.csep.ca/guidelines

Cheng, M., & Johnson, J. (2010). Research on children's play: Analysis of developmental and early education journals from 2005 to 2007. Early Childhood Education Journal, 37, 249–259.

City of Kingston (2017). By-Law to Regulate the Use of City Streets. Corporation of the City of Kingston, Ontario, By-Law Number 2004-190. https://www.cityofkingston.ca/documents/10180/16904/Streets+Bylaw

City of Toronto (2011). Playing of Ball Sports on Residential Streets In Toronto. City of Toronto Staff Report to Public Works and Infrastructure Committee. https://www.toronto.ca/legdocs/mmis/2011/pw/bgrd/backgroundfile-37328.pdf

City of Toronto (2016). By-law no. 775-2016. Public Works and Infrastructure Committee Item PW14.11. City of Toronto.

City of Toronto Social Policy Analysis & Research (2011). Annex Demographics. City of Toronto.

Cooper, A. R., Page, A. S., Wheeler, B. W., Hillsdon, M., Griew, P. J., & Jago, R. P. (2010). Patterns of GPS measured time outdoors after school and objective physical activity in English children: The PEACH Project. International Journal of Behavioral Nutrition and Physical Activity, 7(31).

Faulkner, G., Mitra., R., Buliung, R., Fusco, C., & Stone, M. (2015) Children's outdoor play time, physical activity and parental perceptions of neighbourhood environment. International Journal of Play, 4(1), 84-97.

Ferguson, A., Page, A. (2015) Austerity as Opportunity Supporting Healthy Street Play on a Budget: A Winner from Every Perspective. International Journal of Play, 4(3), 266-269.

Gill, T., (2014) The Play Return. London: Children's Play Policy Forum.

Ginsburg, K. R. (2007). The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds. Pediatrics, 119(1), 182+.

Gleave, J., & Cole-Hamilton, I. (2012). A literature review on the effects of a lack of play on children's lives. London: Play England.

Kaboom (2008). New York City: Streets Renaissance Campaign, Streets as Space to Play. kaboom.org/bestpractices

Kellock, P. (2015). The Case for Play. Playground Ideas. http://www.yorkshireplay.co.uk/wp-content/uploads/2015/10/The-case-for-play-V5.pdf

Page, A. S., Cooper, A. R., Griew, P. J., Davis, L. H., & Hillsdon, M. (2009). Independent mobility in relation to weekday and weekend physical activity in children aged 10–11 years: The PEACH project. The International Journal of Behavioral Nutrition and Physical Activity.

ParticipACTION (2015). Position Statement on Active Outdoor Play. International Journal of Environmental Research and Public Health, 12(6).

Page, A. S., Cooper, A. S., Griew, P. J., & Jago, R. (2010). Independent mobility, perceptions of the built environment and children's participation in play, active travel and structured exercise and sport: The PEACH project. International Journal of Behavioral Nutrition and Physical Activity, 7(17).

Project for Public Spaces (2006). New York City Streets Renaissance. https://www.pps.org/projects/new-york-city-streets-renaissance

Project for Public Spaces (2015). 78th Street Play Street. https://www.pps.org/places/78th-street-play-street

Hart, R. (2002) Containing Children: Some Lesson on Planning for Play from New York City. Environment & Urbanization, 14(2), 135-148.
Jarvis, P., Newman, S., & Swiniarski, I. (2014) On "becoming social": The importance of collaborative free play in childhood. International Journal of Play, 3(1): 53-68.
Lester, S., & Maudsley, M. (2007). Play, Naturally: A Review of Children's Natural Play. Play England, Natural Children's Bureau.
Louv, R. (2005) Last Child in the Woods. New York, NY: Workman.
Metro news (2017). Home in Toronto's Seaton Village Neighbourhood Appreciates 62% in Two Years. Torstar News Service.
Moyles, J. (2015) The excellence of play, 4e. Maidenhead: Open University Press/ McGraw Education.
Murray, J. & Devecchi, C. (2016). The Hantown Street Play Project, 5 (2): 196-211.
National Playing Fields Association, Children's Play Council and Playlink. (2000). Best play. What play provision should do for children. London: Author.
Ness, D., Farenga, S. (2007). Knowledge Under Construction: The Important of Play in Developing Children's Spatial and Geometric Thinking. U.S: Rowman & Littlefield Publishers, Inc.
Read, J. (2011). Gutter to Garden: Historical Discourses of Risk in Interventions in Working Class Children's Street Play. Children & Society 25(1), 421-434.
Singer, D., Singer, J., D'Agostino, H., & DeLong, R. (2009). Children's pastimes and play in sixteen nations: Is free-play declining? American Journal of Play, 1, 283–312.
Valentine, G. & McKendrick, J. (1997). Children's outdoor play: Exploring parental concerns about children's safety and the changing nature of childhood. Geoforum, 28 (2), 219-235.
Seattle Department of Transportation (2016). Play Streets Program Briefing Report. www.seattle.gov/transportation
Seattle Department of Transportation (2017). Play Streets. http://www.seattle.gov/transportation/projects-and-programs/programs/public-space-management-programs/play-streets#playstreetsvideotutorials
Zeif, S., Chaudhuri, A. & International Journal of Play Musselman, E. (2016). Creating neighbourhood recreational space for youth and children in the urban environment: Play (ing in the) Streets in San Francisco, Children and Youth Services Review 70: 95- 101.
Zieff, G et al. (2016). Creating neighborhood recreational space for youth and children in the urban environment: Play(ing in the) Streets in San Francisco . Children and Youth Services Review 70, 95–101.

Image Sources

Cover: Earth Day Canada (2017). Photograph supplied by Earth Day Canada, who acquired verbal permission for this photograph.
Table of Contents: Le Grande Cirque: http://legrandcirque.tumblr.com/post/13960714816/children-playing-in-the-slums-photograph-by-mark
Page 1: Earth Day Canada (2017). Streetplay: https://earthday.ca/earthplay/streetplay/
Page 3: London Play: https://www.channel4.com/news/what-stops-children-playing-in-the-streets-these-days-nigel-farage
Page 5: Le Grande Cirque: http://legrandcirque.tumblr.com/post/13960714816/children-playing-in-the-slums-photograph-by-mark
Page 6: Playing Out: http://playingout.net/about/playing-story/
Page 7: Project for Public Spaces: https://www.pps.org/places/78th-street-play-street
Page 7: San Francisco Municipal Transportation Agency: https://www.sfmta.com/permits/special-event-street-closures
Page 8: USA Streetsblog: https://usa.streetsblog.org/2014/06/05/seattle-opens-up-neighborhood-streets-for-kids-to-play/
Page 8: Playing Out: http://playingout.net/about/playing-story/
Page 9: Architecture Ireland: http://architectureireland.ie/the-city-the-shrinking-play-ground-of-dublin-the-1950s-versus-now
Page 13: Vintag.Es: http://www.vintag.es/2015/05/18-cute-photos-of-children-with-their.html

TRANSFORM