

Planning for Children in New Vertical Communities

November 10th, 2016 Andrea Oppedisano, City of Toronto









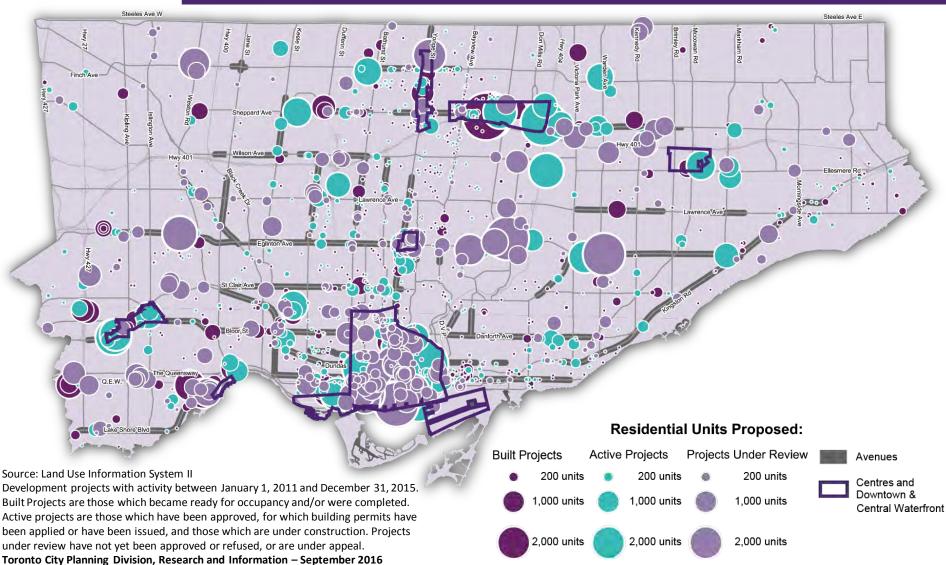


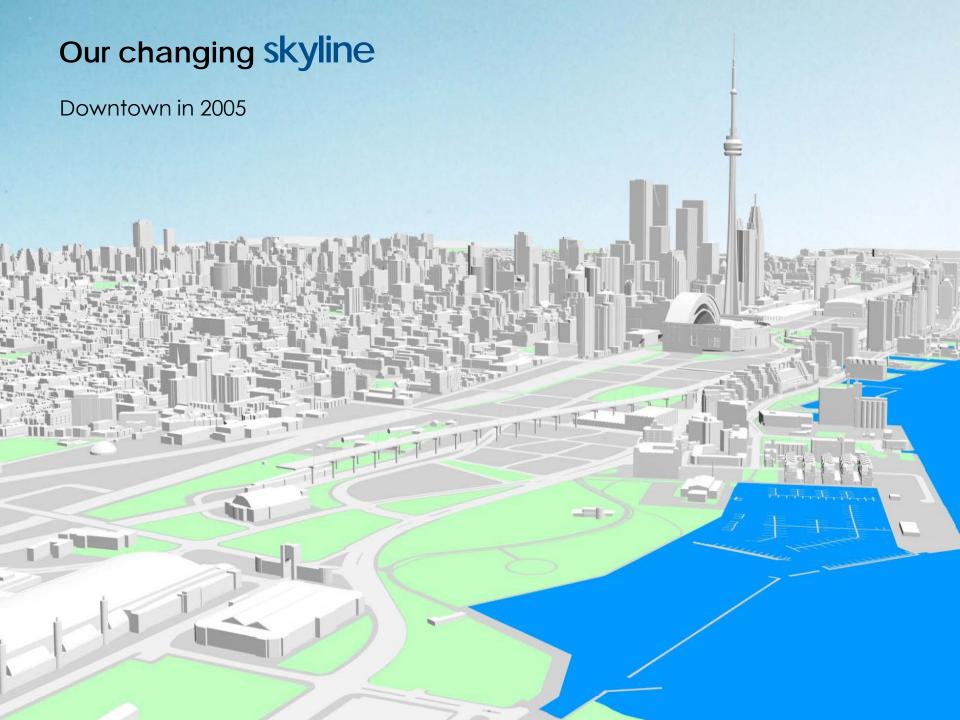


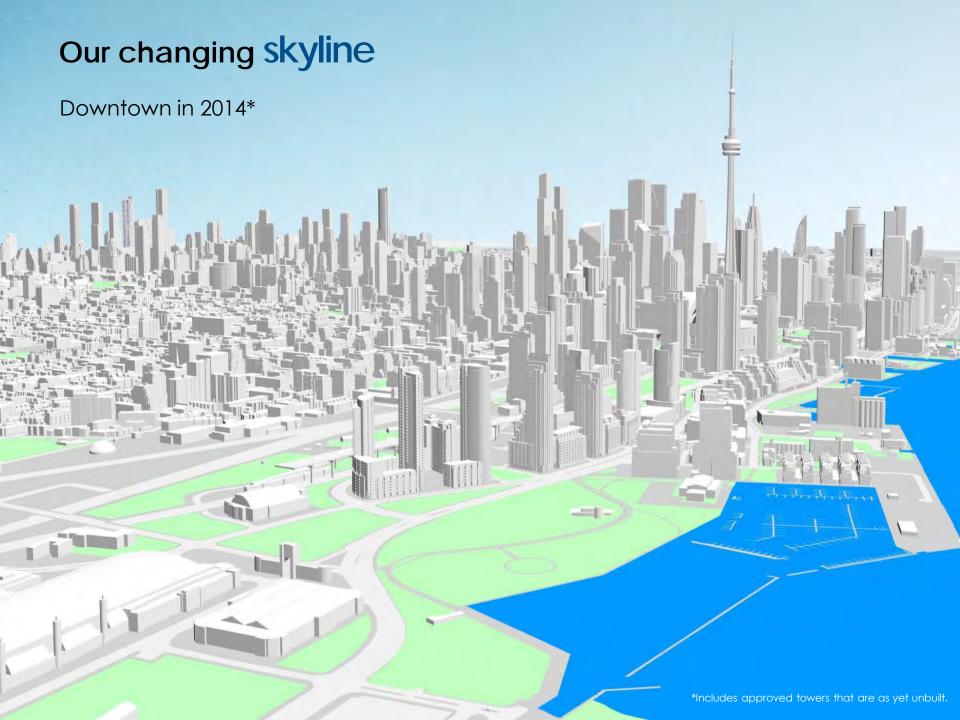


Proposed Residential Developments in the City of Toronto between 2011 and 2015

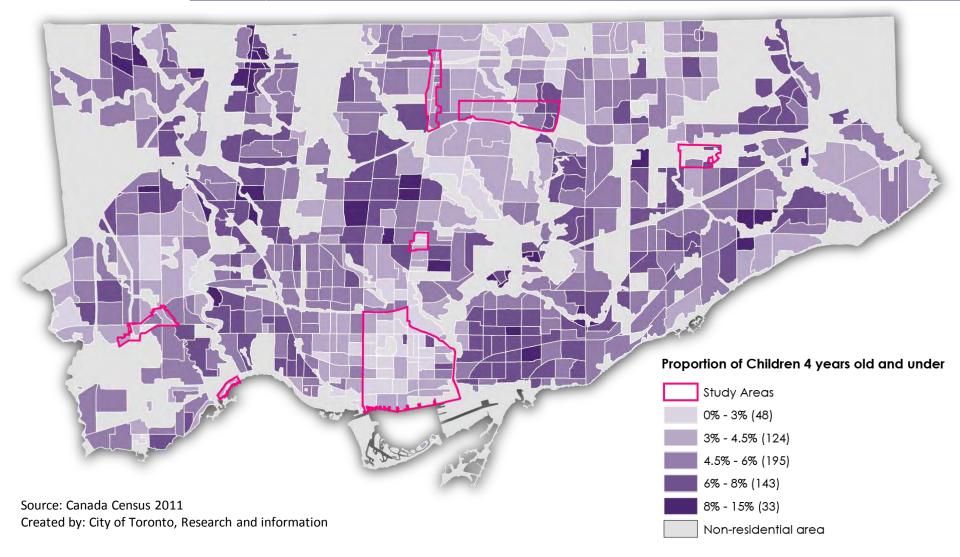
Growing







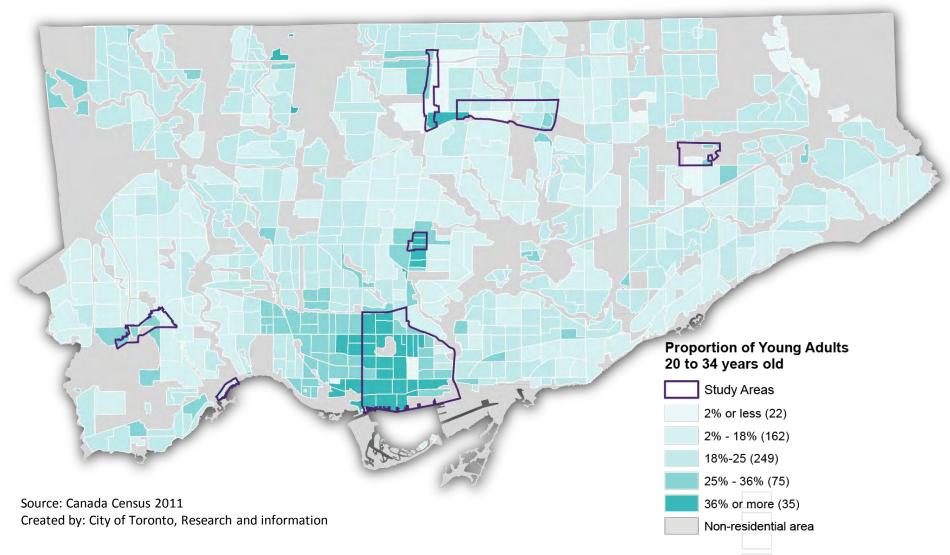
Proportion of Children less than 4 years of age in the City of Toronto, 2011

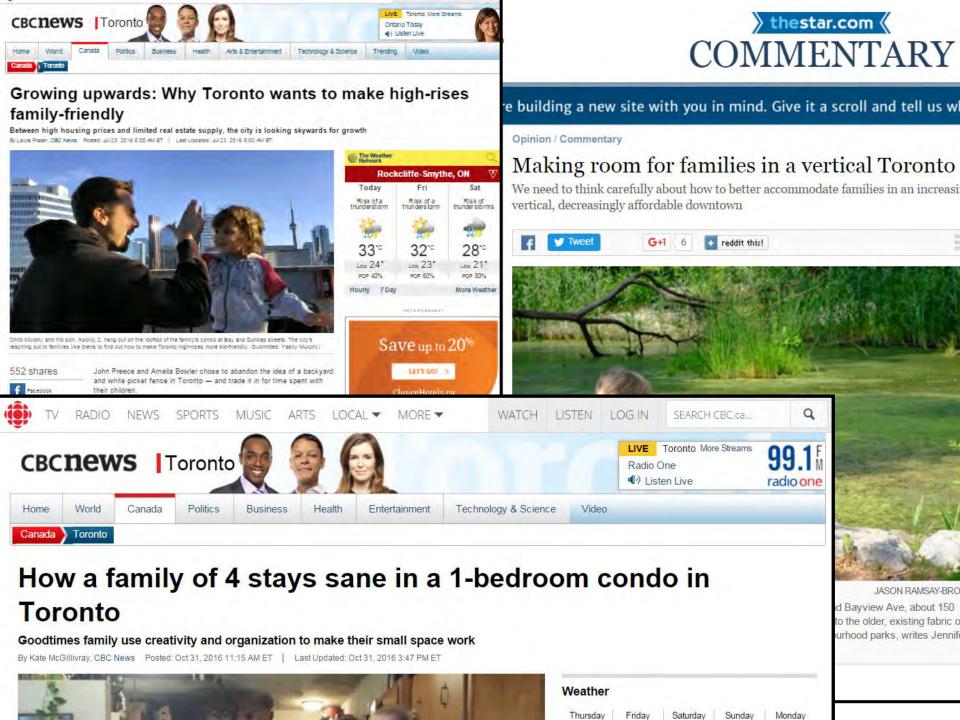


Growing

Growing

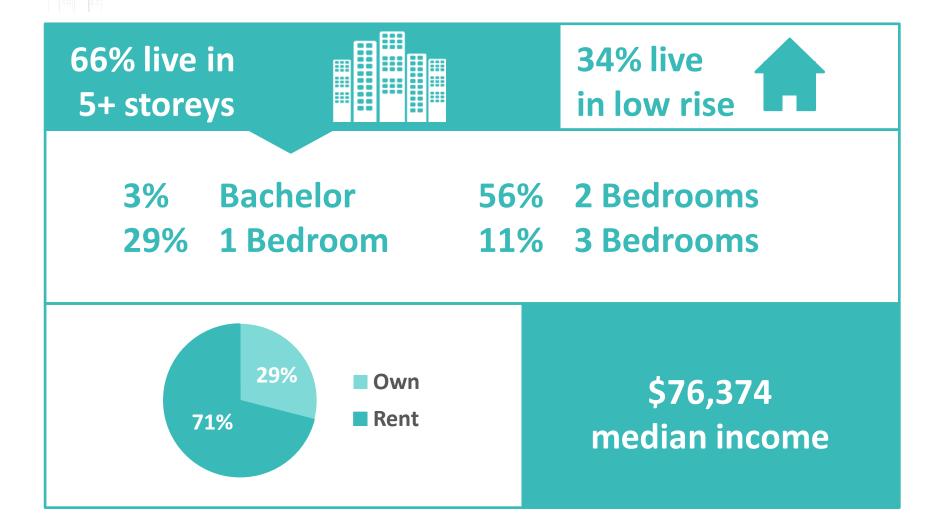
Proportion of Young Adults 20 to 34 years of age in the City of Toronto, 2011





Growing Ho

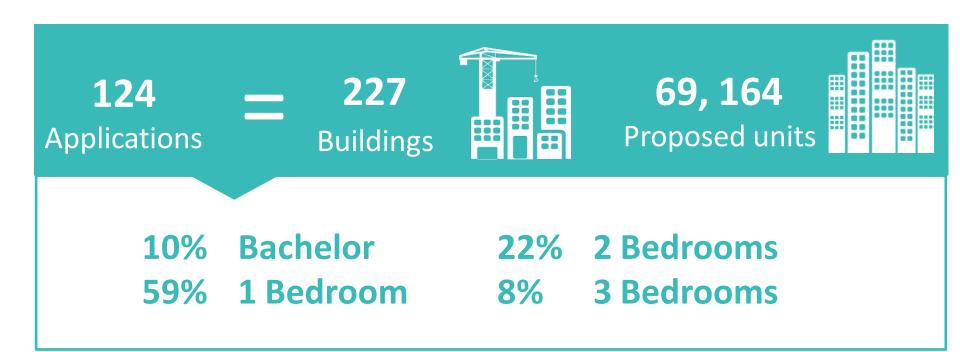
Households with Children in the Downtown, 2011





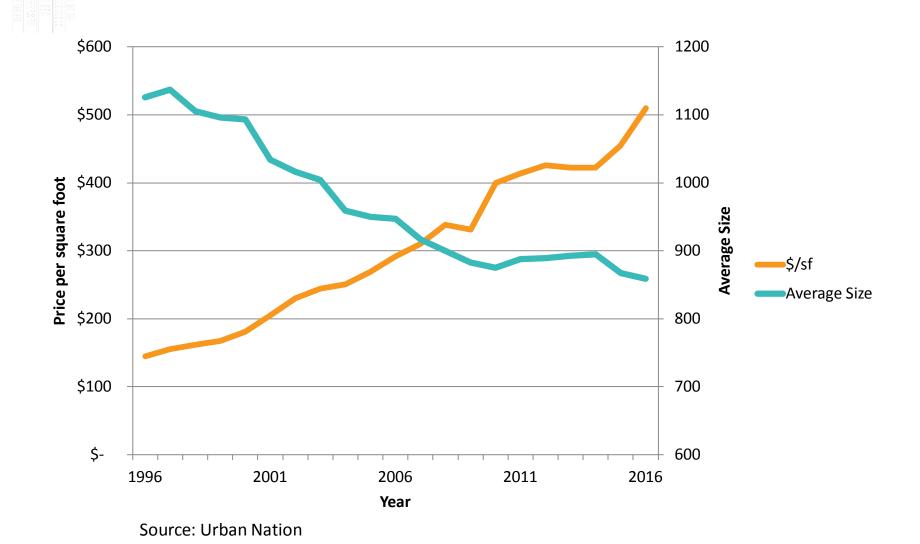
Development projects in the Downtown

For 5+ storey buildings received between January 1st, 2011 and June 30th, 2015



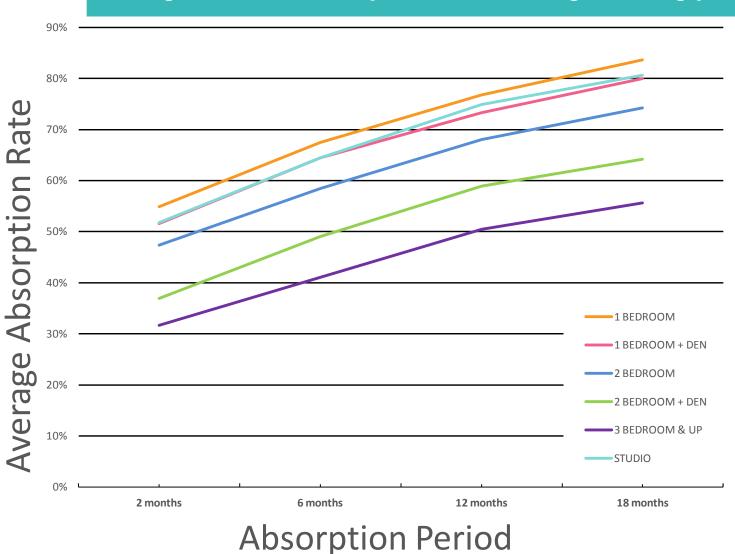
Toronto's Resale Condo Market

Growing



City Wide Absorption Rates by Unit Type

Growing



Growing Wide range of 3 bedrooms

							Toronto	East		
	Etobicoke		North York		Scarborough		York		Citywide	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2008			1,300	1,300			1,344	1,927	1,300	1,927
2009	2,152	2,152							2,152	2,152
2010	900	900	1,117	1,117			855	3,375	855	3,375
2011			978	1,185			802	1,663	802	1,663
2012	1,076	1,076	987	1,472	954	1,920	838	2,551	838	2,551
2013			742	1,248	994	994	742	1,645	742	1,645
2014	1,267	1,590	759	1,360	950	1,448	751	1,868	751	1,868
2015			864	2,790	1,012	1,412	742	3,409	742	3,409
TOTAL	900	2,152	742	2,790	950	1,920	742	3,409	742	3,409



Three Scales of Inquiry

Unit



Building



Neighbourhood





The Study Approach

Design Challenges and Local Innovations

Emerging Trends and Ideas

Directions

PHASE 1 SPRING 2016 PHASE 2 SUMMER/FALL 2016 PHASE 3 FALL/WINTER 2017

Background Review

Identify Issues at Each Scale Demonstration Designs and Testing

Study Area Profiles

Identify Range of Design and Policy Options Draft Guidelines and Performance Standards

Case Studies

Pop Up Consultation

Draft Handbook

CondoHack

Preliminary Design Solutions

Draft Policy Directions

Consultation Summary Report



Phase 1 Consultation: Design Challenges + Local Innovations

Spring 2016

CondoHack

Interviews and walkabouts with families who live in high-density neighbourhoods

Site visits, interviews and workshops with designers, architects and developers

Online survey

Share findings on Growing Up website



Say hello to Downtown East's exciting new addition.

Ready. Set. Wyatt.

A hub for urban exploration, an emerging presence in the arts, a place that's close to everything and nothing like you've experienced before – the award- winning, world-leading Regent Park revitalization i underway and The Wyatt is the latest addition. Featuring studio to 3-bedroom suite designs. The Wyatt you at the centre of the action with everything from the exciting new MLSE Athletic Grounds to the tree coffee shops to the TTC steps from your front door!





CityPlace, Downtown, Toronto

What makes these units work for children and youth?

 Large 2 storey units with multiple bedrooms and flexible space.

GROWING UP I CASE STUDIES I UNITS

- The large units span the building which allows for light and air from both sides, promoting natural ventilation.
- A variety of apartment configurations suit multiple household types.
- Multiple units are connected to a wide corridor that is day-lit and functions as an informal social space.
- · At grade entrances for the lower units.
- Generous entrance area with large closet and room for a stroller.



The wide corridor on the 7th level provides access for three floors. It's a place to play and to socialize in front of the unit.

PROJECT INFORMATION

Address: 150 Dan Leckie Way

Developer: Context Development

Architect: KPMB Architects

Year Completed: 2011

Built Form Typology: 41-storey tower with 10 and 11-storey mid-rise base

UNIT BREAKDOWN

Total Units: 427 affordable rental housing



This building was designed with large families in mind. Through its use of two storey units, a more efficient layout was achieved by eliminating the need for corridors on every floor. The building's overall features are described in the case study at the building scale.

The colours on the unit plans correspond to the colours on the building section. The first three levels are ground-oriented units. The third level units have direct access to the podium rooftop courtyard play area.

The corridors occur on the 4th, 7th and 10th level. The corridor on the 7th level, serves three levels of units, which results in activity and social interation. This promotes a sense of community as people take ownership of the space outside of their front door. The wide corridor also functions as flexible play space and has access to exterior light.



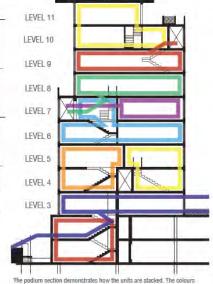
The view of the north elevation shows the wide 7th level corridor. It is expressed as an animated, orange element which is legible at an urban scale.



Levels 4 and 5 feature Units C and D which are both accessed from the corridor on the 4th level. Both units have 4 bedroom with different layouts. Unit C, in organge, locates one bedroom on the lower level which liberates the upper level for a den or flexible play area. Unit D, in yellow, locates all the bedrooms on the upper level and includes a linear study area.



Level 7 features the wide, orange corridor which provides access to three levels of units. Each unit entrance has room for a stroller, a coat closet and a generous storage room. Unit H tucks the kitchen beside the bedroom, freeing up the central space for living and dining.



correspond to the plans. The three corridors are annotated with an 'X' and describe how the corridors are not required on every floor.

Storage

GROWING UP I CASE STUDIES I BUILDINGS ELEMENTS

What makes this building element work for children & youth?

- Bulk storage for residents can be made available in areas of the building that are not suitable for residential units, such as the deep internal floor area on lower floors.
- Stroller storage rooms at grade helps to localize the mud, sleet and salt that often accompany strollers during the winter seasons.
- Bicycle storage, beyond the minimum requirement, encourages physical activity by allowing all family members to store their bicycles and equipment like trailers.



Outdoor bicylce shelter in Hammarby Sjöstad, Sweden enables easy access and keeps associated dirt from getting tracked into the building.



Stroller storage and cubbies in Ukkel, Belgium minimizes conflicts in the elevator, frees up space in residential units and prevents interior surfaces from getting soiled.

Multi-Purpose Lobby

What makes this building element work for children & youth?

- A portion of the lobby can be used as a common area and social space akin to a public library or cafe.
- Additional amenitie areas can be located adjacent to the lobby such as a flexible community room, play area for children, a lounge, or a homework room for youth.
- Providing wifi in the lobby helps make the space more usable, especially for youth.



The lobby space in Eco Apartments, Massachusetts, USA, offers a casual atmosphere with a variety of seating options wifi and a television that can show programs tailored to the residents using the space.

Courtyards

What makes this building element work for children & youth?

- Provides private, protected outdoor play, social and rest areas for residents in vertical communities.
- Play spaces in courtyards at grade or on the podium level can be informally supervised by residents in units above or by users of the adjacent indoor amenity spaces.



The newly installed play equipment in Stuyescant Town, New York City, USA has been built in response to the large number of families that have moved into the buillings. The private outdoor space is framed by the buildings.



The private courtyard space in 'ze05' Multi-Unit Housing, Berlin, Germany is shared between units and provides a safe place for children to play while being supervised from inside the units.

Work Spaces

What makes this building element work for children & youth?

- A shared workshop room can provide equipment and space for messy activities like fixing a bike or hosing down a stroller. These common resources promote a 'sharing economy' where each family isn't burdened with the ownership and requirement to store objects that are infrequently used.
- Rooftop community gardens encourage social interaction and offer opportunities to learn about healthy living and eating.
- Flexible amenity space can accommodate a variety of activities such as arts and crafts for children and families.



The community gardens in Station Center, Union City, California, USA, are a great way for children and youth to socialize with neighbours and learn about nature and growing food.



A flexible room and transform into a craft room and provide a space for children to be creative and the possibility of cross-generational interaction and learning.

Schoolyard to Playground Initiative

What makes this neighbourhood element work for children & youth?

- Rethinking Underused Resources: Reuses underutilized sites in a variety of ways within a short period of time
- New Open Spaces: Creates public space for community activities and makes immediate, visible changes across the city
- Educational Value: The design process teaches kids about planning initiatives, urban design, public engagement and the democratic process
- Healthy, Sustainable Living: The initiative achieved Mayor Bloomberg's goal to increase the number of residents living a short walk from a park, and ensured playgrounds amenities met neighbourhood needs

PROJECT INFORMATION

Developer: Trust for Public Land Architect: (various)

Landsoape Architect: (various) Year Completed: 2007-2013

Built Form Typology: Public Park

BREAKDOWN

290 school playgrounds city-wide Budget: \$117.2M (221 schools)



Through a participatory design process, schoolyards across the city were transformed into playgrounds. Many schoolyards required nothing more than a school custodian onsite to unlock the space and achieve the project goal. By the summer of 2007, 69 playgrounds were open at a cost of \$50,000 per school.

In 2007, Mayor Bloomberg launched the Schoolyards to Playgrounds Program with 290 schools across New York City. The program renovated hundreds of schoolyards and made them open to the public outside of school hours.

The nonprofit Trust for Public Land led the transformation of these the spaces through capital investments such as play equipment, painted sports surfaces, trees and benches. The majority of schoolvard transformations were located in Brooklyn and Queens, the two boroughs with the highest need for new playground spaces. The initiative helped advance the Mayor's goal of ensuring every New Yorker lives within a 10-minute walk from a park or playground.

The iniative sought to repurpose underutilized sites and redesign the spaces to benefit local residents. Community

consultation helped identify specific needs and directions for each park.

Various solutions were derived in partnership with communities. Surface parking and unused asphalt lots were redesigned. Urban furniture and amenities were incorporated, such as painted games, sports courts, benches, gazebos, trees, gardens and play equipment.

Dense urban environments often lack publicly accessible open space. Unlocking schoolvards after hours is an opportunity to make more efficient use of limited resources. Participatory design can help communities rethink their environments and contribute to building a better city.















BEFORE-



Before: surface parking in a schoolyard. By rethinking existing city infrastructure, the Schoolyard to Playground program helped ensure more New Yorkers have easy access to a park or playground.



Before: surface parking in Public School 205, Brooklyn, NY



Before: Public School 138, Bronx, NY.





After: public park. The program identified spaces in neighbourhoods with a high need for open space and opened them year round for public use, after school and on weekends.

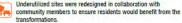




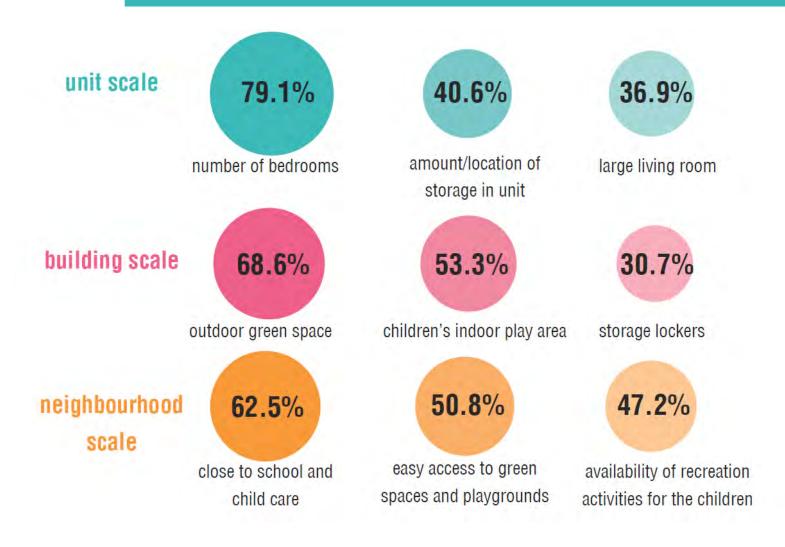
Mayor Bloomberg realized that schoolyards across the city were underused resources and often locked when they are needed most. 69 schoolyards required nothing more than a school custodian to turn a key in order to help meet the project goal.







Growing Up Survey

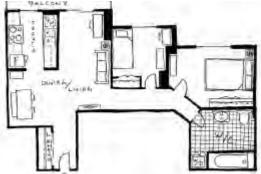




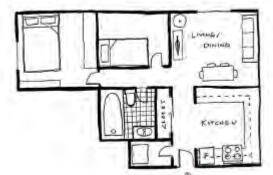
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Humber Bay Shores



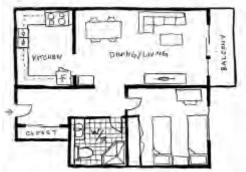
Mount Pleasant & Davisville



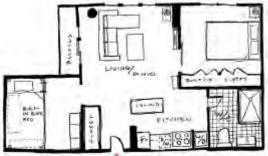
Scarborough Civic Centre



Kennedy & Sheppard



Yonge & Sheppard



Liberty Village



The Esplanade



City Place



North York Centre





CondoHack: Liberty Village







Phase 2 + 3: Draft Design Guidelines









Flexibility





Private Outdoor Storage

Space

Area to Play

2+ Bedrooms

Building



Additional Personal Storage



Storage for Strollers/Bikes



Family-Specific/ Supportive Indoor



Family-Specific/ Supportive Outdoor



Clustering of Family Units in Lower Storeys

Neighbourhood



Proximity to Parks & Open Green Space



Proximity to Daycare/School



Proximity to Public Transit



Proximity to Shops/ Services



Proximity to Community Centre



Walkability of Neighbourhood (Traffic Safety)

Growing Unit Design Guidelines

- Generous entryways that include space for strollers
- Living rooms to relax, socialize, play and study
- Kitchen and dining areas should accommodate seating at a rate of two spaces per bedroom
- Include areas for bulk storage and laundry
- Windows and natural light throughout the unit
- Balconies and terraces should be a minimum of 1.8m deep x 2.7m wide
- Flexibility within the unit i.e. the possibility of adding an extra bedroom

Entryway

Provide generous space for families with children and youth to comfortably enter and exit unit.

RATIONALE

An entryway serves many functions for a family. It functions as a mudroom, an area to get ready and an area to store items. The space may be required to accommodate multiple people at a time along with strollers or large items. Entryways are the gateway between private space and shared corridors, so acoustic and visual privacy is paramount.





Built in full height cubbies and installed hooks near the front door can provide extra storage as well as a place to sit when getting ready.

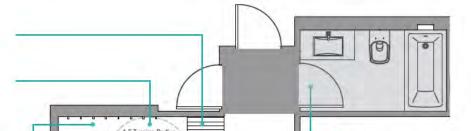
GUIDELINES

- Spacious enough for at least four people to stand comfortably in the space.
- + Ideally near a bathroom for quick access to a toilet or sink.
- Provide a 1.5mx1.5m area to accommodate strollers and larger items.
- Include adequate blocking to anticipate wall hooks, shelves, etc.
- Provide immediate storage for outerwear and bulky items (e.g. hockey bag, stroller).
- Washable floor finish.

In buildings with double-loaded corridors, entry doors should be staggered for privacy and acoustic reasons.

IMPLEMENTATION

- Extra wall space could allow for a bench or additional storage
- Minimum 1.5m x 1.5m entry to accommodate up to 4 people & a stroller





Building Design Guidelines

- Organize units in lower portions of the building adjacent to open space
- Lobby design should promote socializing
- Circulation space that supports interaction between neighbours
- Flexible indoor and outdoor amenity space that allows for multiple users and uses incl. messy activities
- POPs that contribute to the chain of open spaces and offer resting spaces on the way to a park
- Alternative building typologies that allow for a variety of unit types

ANDARDS | BUILDINGS

Organize family units in the lower portions of the building adjacent to open space.

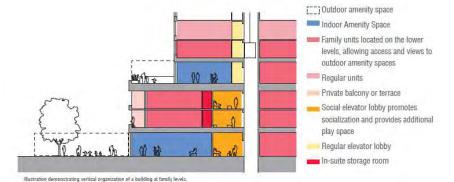
A critical mass of families creates a sense of community and when organized at the lower portions of the building, provides easy access and supervision of children as they play in outdoor spaces.



An open shared outdoor space located between two rows of units allow for socialization between kids in surrounding units and

TYPICAL CHARACTERISTICS

- Locate family units in lower portions of the building that overlook common public or private outdoor play areas.
- For both mid-rise and the base of tall buildings, using deeper floor plates on the lowest floors allow for deeper units that could incorporate storage, washrooms or laundry rooms.
- · Group family units together to encourage socialization.
- Vertically integrate amenities to provide easier access for units in various locations, this includes additional outdoor space at grade or on a podium.



2.2 COMMON INDOOR & OUTDOOR AMENITY SPACES

Indoor and outdoor amenity spaces should be flexible to allow for multiple uses and users, including children.

Units are generally small and children need a variety of areas to play. Although amenity spaces should accommodate every age, the provided space should be designed to withstand use by children and to support everyday activities that tend to be messy. Opportunities exist for addressing various requirements. For example, the green roof requirement can be turf to allow a play area and be counted towards outdoor amenity space.



Indoor playrooms can provide a sale place for children to socialize. This brightly coloured playroom at Garrison Point in Toronto has ample natural lighting and chall-board walls to encourage creativity.

TYPICAL CHARACTERISTICS

- Provide flexible multi-use amenity space that can be used for different activities throughout the day.
- Spaces should be lined with durable materials to withstand wear and tear
- A portion of the required amenity should be specifically designed for different age groups: toddler and children's play, youth socialization, homework areas with wifi.
- Required amenity space should be proportional to the amount of family units provided in the building.
- Maximize opportunity for passive supervision by locating indoor and outdoor amenities adjacent to each other.
- Outdoor amenity space should maximize access to sunlight while providing areas of shade in the summer.

The staircase doubles – as seating, a great place to socialize and a possible platform for performance

Surrounding fencing for safety

> Durable materials used will hold up over time



The open space allows for access to sunlight and the foliage will provide shade as it grows.

Balconies overlooking this space can allow for informal supervision of older children while ample seating provides for more attentive supervision on the ground floor



Neighbourhood Design Guidelines

- Mobility networks that are safe, secure and meet the needs of children, youth and their caregivers – increases Children's Independent Mobility (CIM)
- Safe and convenient access to parks and open space that support a diversity of activities
- Protect sunlight on parks and open space
- Design and maintain the public realm for the four seasons
- Fine grain of commercial services so that daily needs are met within walking distance



Neighbourhood Considerations con't

- Access to high quality schools and community facilities
- Location and access to child care
- Co-location of community services and facilities
- Reflect the presence of children in the design of the public realm (whimsical design)
- Engage children and youth in the planning and design process

