



PLANNING FOR CHILDREN IN
NEW VERTICAL COMMUNITIES

Growing ^{Up}

URBAN DESIGN
GUIDELINES

2020

 TORONTO

City of Toronto

Growing Up: Planning for Children in New Vertical Communities
Urban Design Guidelines, 2020

City Planning Core Team

Strategic Initiatives, Policy & Analysis
Urban Design

City of Toronto Advisory Team

City Planning, Community Planning
City Planning, Graphics & Visualization
Children's Services
Parks Forestry & Recreation
Toronto Public Health
Toronto District School Board

Visit Planning for Children in New Vertical Communities online:

- Demographic research
- Case studies & best practices
- Public consultation

www.toronto.ca/growingupTO

INTRODUCTION

- i Toronto's Housing Boom
- ii Structure of the Guidelines
- iii Complete Vertical Communities
- iv A Legacy of Planning for Children
- v Policy Context
- vi Objectives of the Guidelines
- vii How the Guidelines Were Developed
- viii Long-Term Vision of the Guidelines
- ix How to Use the Guidelines
- x Where the Guidelines Apply
- xi Housing Affordability
- xii Terminology

1.0 NEIGHBOURHOOD GUIDELINES

- 1.1 Mobility
- 1.2 Parks & Open Spaces: Access & Type
- 1.3 Child Care Facilities
- 1.4 Schools
- 1.5 Shared Use & Integrated Co-Located Community Services & Facilities
- 1.6 A Complete Community to Meet Daily Needs
- 1.7 Whimsy & Design For Four Seasons
- 1.8 Ecological Literacy
- 1.9 Civic Engagement

2.0 BUILDING GUIDELINES

- 2.1 Building Configuration
- 2.2 Flexible Building Design & Construction
- 2.3 Common Indoor & Outdoor Amenity
- 2.4 Building Lobby
- 2.5 Social Circulation Spaces
- 2.6 Building Massing & Typology
- 2.7 Privately Owned Publicly-Accessible Spaces (POPS)
- 2.8 Storage & Utility Needs

3.0 UNIT GUIDELINES

- 3.1 Entrance & Storage
- 3.2 Laundry
- 3.3 Kitchen & Dining
- 3.4 Living Room
- 3.5 Bedrooms
- 3.6 Balcony & Terrace
- 3.7 Unit Flexibility

4.0 APPENDIX

- 4.1 Case Studies
- 4.2 Unit Examples
- 4.3 Image Credits

Table of Contents



INTRODUCTION

- i Toronto’s Housing Boom**
- ii Structure of the Guidelines**
- iii Complete Vertical Communities**
- iv A Legacy of Planning for Children**
- v Policy Context**
- vi Objectives of the Guidelines**
- vii How the Guidelines Were Developed**
- viii Long-Term Vision of the Guidelines**
- ix How to Use the Guidelines**
- x Where the Guidelines Apply**
- xi Housing Affordability**
- xii Terminology**

Toronto is growing up! As an integral part of the city’s landscape, vertical communities are the predominant housing type to accommodate Toronto’s growing population. A successful city is measured by its diversity. The number of children is often used as a metric to measure success – if we build a city that allows children and youth to thrive, we are inherently building an inclusive, sustainable city for everyone.

The Guidelines are rooted in Toronto’s Official Plan vision which seeks to create an attractive and safe city where people of all ages and abilities can enjoy a good quality of life. Toronto is often celebrated for its neighbourhoods and our City motto is: diversity is our strength. From a planning perspective, our diversity needs to extend to the planning of complete vertical communities. With the title of this document “New Vertical Communities” it is understood that every new mid-rise and tall building is in itself a new community of residents that becomes integrated within an existing community.

Regent Park’s large, flexible lawn is used to show movies in the summer. This event attracts local residents and draws people of all ages who come for the movie, the food vendors, or to socialize along the edges.

i TORONTO'S HOUSING BOOM

Between 2006 and 2016, over 143,000 new dwelling units were constructed in the City of Toronto, 80% of which were in buildings greater than 5 storeys. Increasingly, families with children are calling these buildings home. In 2016, 15,000 more families with children and youth lived in high-rise buildings than in 1996. While the overall number of households with children and youth will grow as the population increases, the long-term demand for family suitable housing will exceed the anticipated supply if current trends continue. This mismatch between demand and supply is exacerbated by a lack of larger units and a trend towards smaller units. The City and its development partners will need to work collectively to provide viable housing choices for larger households.



A mural painted on a condominium building in the downtown is a reminder that children's needs should not be left out of the wider city building project.

ii STRUCTURE OF THE GUIDELINES

The intent of these City-wide Guidelines is to integrate family suitable design into the planning of new multi-unit residential development. The success of new vertical communities will be measured by their ability to meet the needs of a diversity of households including those with children. The Guidelines are organized into three scales – the neighbourhood, the building, and the unit – based on the recognition that each positively contributes to how a family experiences living in vertical communities. Each scale is prefaced with the objectives.

THE NEIGHBOURHOOD guidelines focus on children's experience in the city, promoting independent mobility, access to parks, schools and community facilities, and civic engagement for the next generation of Torontonians.

THE BUILDING guidelines seek to support the social life of the building by increasing the number of larger units, encouraging the design of functional and flexible amenity space, supporting socializing and lingering in common spaces and promoting flexible building design for changing unit layouts over time.

THE UNIT guidelines seek to achieve functional spaces that accommodate a family's daily needs, layouts that provide sufficient room for families to gather and share meals, bedrooms that are comfortable for more than one child and flexibility to allow for aging-in-place.

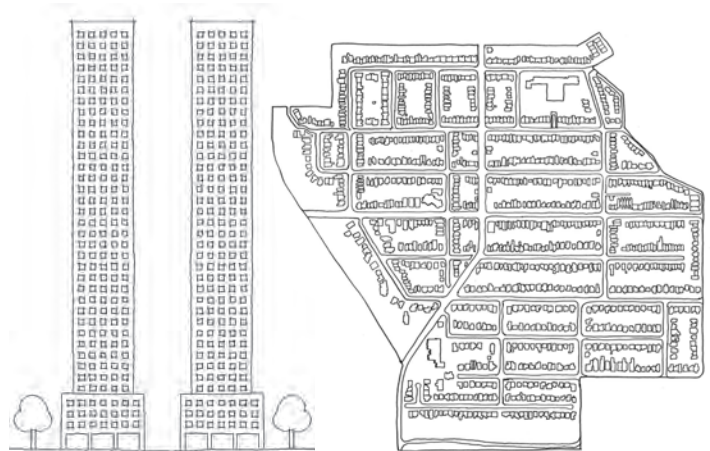


The 'Water Guardians' is a public art installation in the West Don Lands that provides a whimsical anchor for this new community which includes generous community facilities, parks and open spaces.

iii COMPLETE VERTICAL COMMUNITIES

A complete community, regardless of its form (low-rise, mid-rise or tall building), is one that meets the daily needs of its residents. It offers more than just a place to live, but a range of housing choices, access to higher-order transit, a high-quality public realm, community services and neighbourhood amenities. Many of Toronto's low-rise neighbourhoods were master planned to include schools, community centres, child care facilities, retail and services alongside new housing. Through new investments in vertical communities, the Guidelines encourage all stakeholders to continue to provide for the needs of all residents.

Toronto's continuing evolution and re-urbanization now involves master planning within a dense infill context. The provision of community facilities and parks that were typically planned along with low-rise development should also be planned as part of new vertical development. City building results in a collective responsibility for separate developments to contribute to community infrastructure. Hard and soft infrastructure needs to be delivered in tandem with new development so that the daily needs of residents are met within their communities where available land is scarce and land values are high. Through investments in the public realm, integration of community facilities in new buildings, and provision of a range of unit types and sizes, the city can meet the needs of a growing population while ensuring livability.

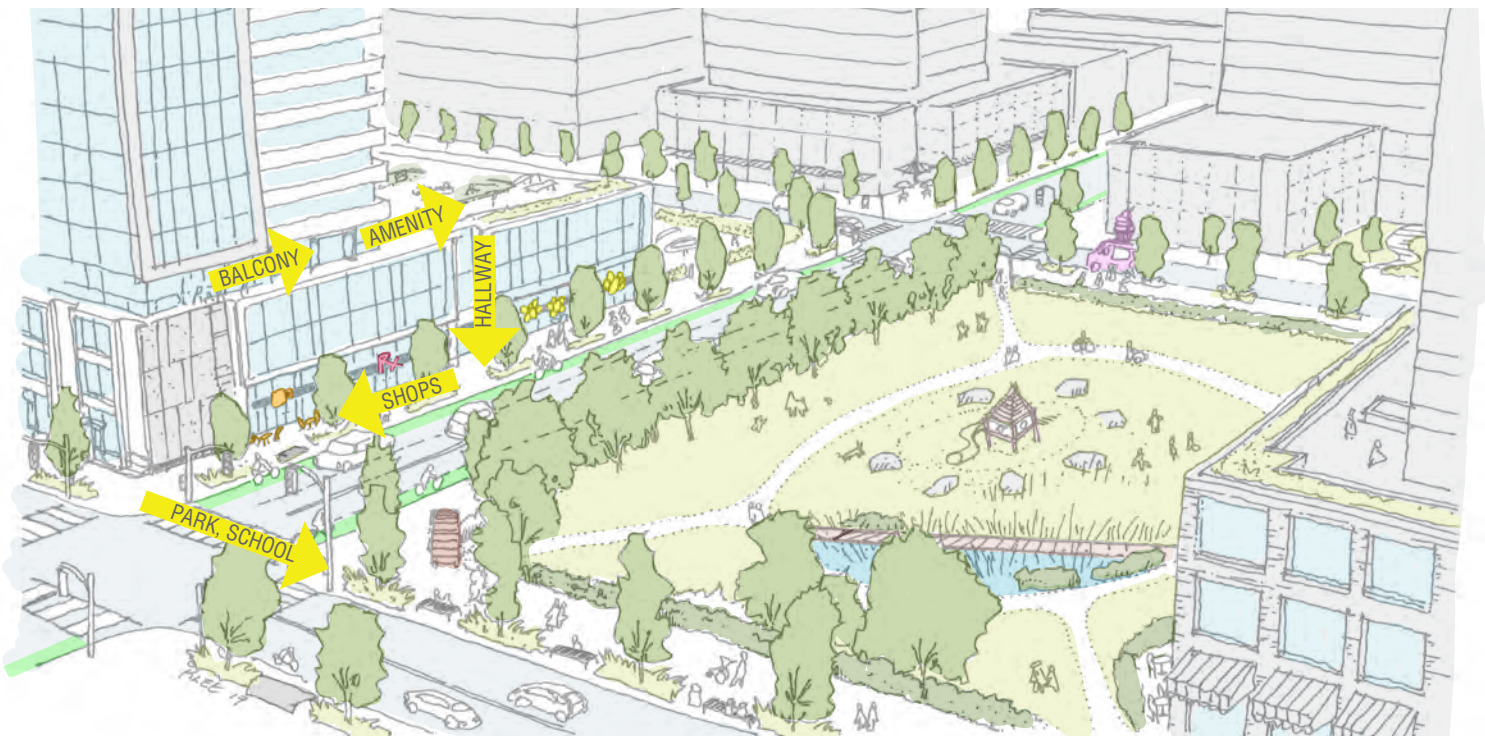


VERTICAL COMMUNITY

Area: 10,780m²
 Storeys: 25
 Units: 450

LOW-RISE COMMUNITY

Area: 150,700m²
 Storeys: up to 4
 Units: 450



Within a complete community, a child's independent range can gradually increase, as outlined in the report Vertical Living Kids, by Dr. Carolyn Whitzman. A child plays on a private terrace and graduates to the private amenity space. From there the child can venture out for errands on their block and eventually cross the street to play in a park.

iv A LEGACY OF PLANNING FOR CHILDREN



City of Toronto Archives, Fonds 1231, f1231_00537

The Elizabeth Street playground was developed in 1913 by advocates of the Playground Movement which sought to deliver play spaces for children in the city.

Children have lived in Toronto’s densest areas for over 150 years. At the turn of the 20th century, the growing urban population began to out-pace the provision of child-supportive infrastructure. Children sought informal play spaces: streets, laneways, stoops and staircases. At the time, in the vein of improving public health, these spaces were considered hostile to a child’s physical well-being. Recognizing the need for child-specific play space, the City embarked on building playgrounds that allowed for safe and sanctioned play. The Playground Movement, as it came to be known, represented a radical shift in the organization of urban space, marking the first time children were considered legitimate users of urban space, worthy of special consideration. The Growing Up study follows this tradition; taking a holistic approach that considers the needs of children and youth in city life.



One of Toronto’s ‘tower in the park’ developments at 150 Graydon Hall Drive demonstrates the open space that would have attracted families to live here.

Toronto also has a history of housing families in tall buildings. Toronto’s first tall building housing boom took place between the 1950s and late 1970s during which time approximately 2,000 modernist ‘tower in the park’ buildings were constructed. Predominately rental apartments, these buildings were marketed to families with private amenities such as generous open space, recreational space and a range of large unit types. During the 1970s, the City took a more proactive approach to community building and began housing families in master planned, dense, vertical communities. One example is the St. Lawrence neighbourhood which included a variety of building typologies, housing tenures and a range of unit types. New buildings, integrated schools and co-located community facilities, and a generous public realm were provided with comfortable parks that fostered strong community ties that continue to exist today in this desirable neighbourhood.



St. Lawrence Neighbourhood, a phased developed from the mid 1970s, is an example of one of Toronto’s first complete communities.

A key difference between the mid-to-late-century housing boom and today, is that new development is predominantly infill on sites less than one hectare. Furthermore, contemporary unit sizes, layouts and amenity space have been designed and marketed to smaller households without children. The needs of children have been outpaced by development and the intent of these Guidelines is to ensure that new development responds to all segments of the population. To meet the Official Plan objectives, new vertical development with a range of housing types, needs to be delivered in tandem with community infrastructure to ensure that we create a positive legacy for years to come.

v POLICY CONTEXT

The objectives, policy and design directions found in these guidelines implement provincial and municipal policy that seeks to improve the quality of life for all Torontonians.

PROVINCIAL POLICY STATEMENT (PPS)

The PPS provides policy direction on matters of provincial interest related to land use planning and development. The policies of the PPS seek to promote strong, livable, healthy and resilient communities and they direct municipalities to promote these goals. The PPS also requires municipalities to provide an appropriate range and mix of housing types and densities to meet the needs of current and future residents. These Guidelines recommend that city building includes a safe public realm, active transportation and high-quality community services and facilities such as schools, child care centres and parks. They also direct new development to provide an appropriate range and mix of housing types within vertical communities by recommending a minimum percentage of unit types and sizes to meet long-term projected housing need.

A PLACE TO GROW (GROWTH PLAN FOR THE GREATER GOLDEN HORSESHOE, 2019)

A Place to Grow (the Growth Plan) is a framework for implementing the Government of Ontario's vision for building strong, prosperous communities while managing growth in this region to 2041. Section 2.2.1 states that growth is to be managed by encouraging cities and towns to develop as complete communities with a diverse mix of land uses, including a mix of residential and employment uses and housing options that accommodate people at all stages of life, and accommodate the needs of all household sizes and incomes. The Growth Plan requires complete communities to be supported by convenient access to a range of transportation options, public service facilities and parks and recreation facilities, as well as a compact built form and vibrant public realm. Section 2.2.6 directs that complete communities will be supported by municipalities' use of available tools to require that multi-unit residential developments incorporate a mix of unit sizes to accommodate a diverse range of household sizes and incomes. To help achieve the vision, the Neighbourhoods section of the Guidelines encourage new buildings to contribute to complete communities through integrated community facilities, while the unit and building section of the Guidelines specifically help to ensure that multi-residential buildings provide a diversity of units as required by the Growth Plan.

CITY OF TORONTO OFFICIAL PLAN

The Official Plan supports and implements the PPS and the Growth Plan. The Official Plan articulates a vision for Toronto's future and provides a comprehensive planning framework to achieve it. Growing Up implements many of the Official Plan policies including those related to directing growth in Chapter 2, Shaping the City, and integrating social, economic and environmental perspectives to create complete communities in Chapter 3, Building a Successful City.

While the Guidelines assist in implementing many policies of the Official Plan, they specifically address the provision for a full range of housing to meet the needs of all household sizes and income levels (Policy 3.2.1.1); the inclusion of community services and facilities in private sector development (Policy 3.2.2.7) and the need for new parks and amenities in the Growth Areas (Policy 3.2.3.1). These guidelines reinforce Chapter 4 Land Use Designations where specific land use designations such as Mixed Use Areas direct us to develop livable, complete communities.



Regent Park is a phased, master planned community in Toronto with generous public facilities that anchor the public realm and animate the neighbourhood in all seasons. The central park and the pool facility were delivered in early phases.

vi OBJECTIVES OF THE GUIDELINES

DIVERSITY OF HOUSING

By recommending a critical mass of larger two and three bedroom units, the Guidelines help to implement the Official Plan's housing policies while also supporting the delivery of community infrastructure. Guideline 2.1 describes the benefits derived from a concentration of family-suitable units. The outcome is to generate a stronger sense of community amongst residents and to allow children the opportunity to have peers to play with. A range of unit types and sizes not only supports households with children but also a variety of households at all different life stages. In Toronto's vertical communities, when we design for children and for people to age in place, we design for all people.

LIVABILITY & QUALITY

Over the long-term, the livability of vertical communities will affect the livability of the city as a whole. The Official Plan highlights that the city needs to have communities where Torontonians are engaged, children are valued, diversity is celebrated and residents have equitable access to housing, support services and recreational opportunities. Large units and family-oriented buildings and neighbourhoods contribute to a diverse, thriving society. These Guidelines emphasize the importance of increasing the number of larger units; however, designing for livability is important for all unit sizes. Design elements from Section 3, for example, storage consideration and bedroom sizes, can also be incorporated into smaller units. Families who chose to live in vertical communities may sacrifice household space for greater convenience to work and amenities, as well as more quality family time. The outcome is a benefit to Toronto in that well-designed vertical communities become desirable and help to keep a diverse population in the city. When children and youth live in the city, it supports private and public investments in community facilities, schools and parks which are all foundational to a healthy city.

PLANNING FROM THE PERSPECTIVE OF A CHILD

In vertical communities, planning for children is predicated on the understanding that the public realm and community amenities become extensions of the home. Families rely on routes that are safe and that facilitate children's independent mobility as they grow up. A public realm that meets the needs of children also accommodates the population as a whole. For example: designing comfortable, safe streets that support public life, will not only encourage families to linger and socialize, but they will become an asset to all users. The presence of children in the public realm is an indicator of a healthy community.



Underpass Park in Toronto's West Don Lands provides a whimsical space for children to congregate and build community ties.



Many families in Toronto's vertical communities struggle to accommodate their needs within their units, such as the need to store a stroller at the entrance.



The separated bicycle lanes on Toronto's Queens Quay provide a safe route along the waterfront where children can gain confidence riding bicycles and gradually gain independence in their mobility.

vii HOW THE GUIDELINES WERE DEVELOPED

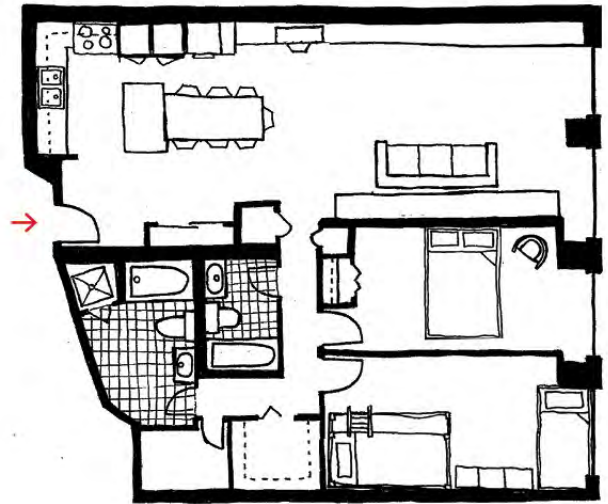
The Guidelines were developed in collaboration with City staff; the development community (including developers, planners, architects, landscape architects); families; and children and youth. The consultation process was designed to uncover the lived experience of both users (families) and producers (architects and developers) of new multi-unit residential buildings. A targeted public consultation process focused on the daily, lived experience of a number of families living in mid-rise and tall buildings: the CondoHacks. The family visits uncovered how they adapted or “hacked” their homes to meet their unique needs. The CondoHacks demonstrated that units within a building are not a commodity, they amount to a community of homes, and that designing for the end user helps ensure that we build complete vertical communities.

Additional consultation activities such as kinder-workshops, walking tours and design jams with high-school students ensured that the perspective of children and youth were intrinsic to the study. Families were further consulted through pop-up events and online surveys at different stages of the study. Consultation activities were also undertaken through workshops with architects and landscape architects as well as interviews with developers. Informed by international and local case studies, the resulting Guidelines respond carefully to the needs of families in vertical communities. These consultation activities can be explored in full on the Growing Up website www.toronto.ca/growingupTO.

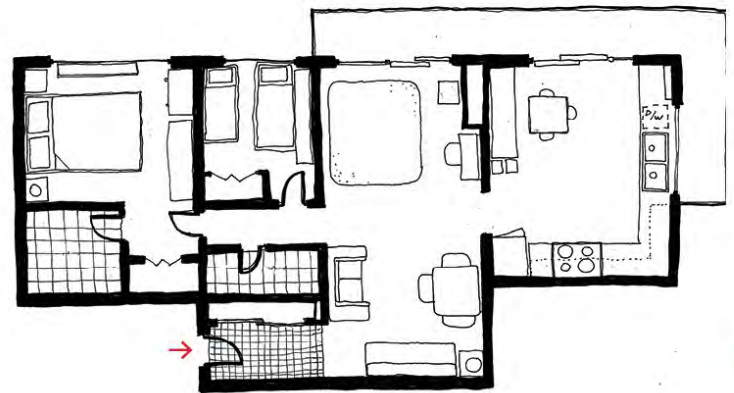
In June 2017, Toronto City Council directed that the draft version of the Growing Up Guidelines be used in the review of development applications. The final Guidelines in this document reflect over two years of practical application through the development review process and integration with larger planning frameworks across Toronto.

viii LONG-TERM VISION OF THE GUIDELINES

This document is a collection of best-practices and is intended to describe the aspirational vision for Toronto that accommodates people of all ages and abilities. This document acknowledges that city building is a shared responsibility that all stakeholders should collectively strive for. Some guidelines are easy to achieve in the near term - while the other guidelines represent long-term aspirations - which might require a culture shift as we continue to build a great city together.



Family visit in The Esplanade demonstrates a generous open-concept living area including a kitchen table off the island and a wall of built-in furniture including a homework desk. The family enjoys the local amenities and is happy knowing that they are not contributing to urban sprawl. Unit size: 129m²



Family visit in North York Civic Centre demonstrates two small beds in one bedroom. The family was challenged by the lack of space for the strollers in the entryway. They appreciate that there are other children living on their floor and they rely on social time in the building's family-friendly amenities. Unit size: 81m²



During a family visit in Liberty Village, we met eight year old Sophie, who grew up here. Sophie and her mother both enjoy the convenience of living in a vertical community where they are able to meet most of their needs on foot.

ix HOW TO USE THE GUIDELINES

The broad applicability of the Guidelines necessitates a collective responsibility in their implementation. The successful application of the guidelines recognizes their interdependence in meeting the objectives of creating a complete vertical community. Some Guidelines will result in measurable outcomes that can be secured through the development approvals process. Others, such as encouraging whimsy in the public realm, or promoting youth civic engagement, are not as easily quantified. However, taken together they can contribute to physical improvements and social cohesion that enhance the livability of vertical communities for families with children and youth.

THESE GUIDELINES ARE FOR:

- The development community and designers to use in preparation of applications for residential or mixed use buildings, community infrastructure, or elements of the public realm.
- City staff to inform new planning frameworks and in the review of development applications and new capital projects including work in the public realm, Complete Streets, parks and community facilities.
- Condominium boards, rental property managers, community groups, Business Improvement Areas, families and any other groups that are invested in better informing themselves about what they can advocate for, towards creating family-friendly vertical communities.

x WHERE THE GUIDELINES APPLY

The Guidelines will be applied City-wide to all new multi-residential mid-rise and tall building development applications that include 20 units or more. This aligns with the city-wide zoning by-law threshold for amenity space requirements. These Guidelines will also be used by City staff in the design and construction of new parks, community facilities, and Complete Streets and during public consultation activities, which should include children and youth. The Guidelines can also be used, where appropriate, in the review of infill developments proposed in *Apartment Neighbourhoods*.

xi HOUSING AFFORDABILITY

This document recognizes that livability depends on the ability of households to afford to rent or own larger units. Providing for a diversity of housing, in terms of form, tenure, and affordability are key objectives of the Official Plan. Where possible, securing the affordability of larger units will be encouraged using available planning tools. The Guidelines seek to encourage the provision of larger units and an urban context to support a high quality of life to support housing diversity over the long term.

xii TERMINOLOGY

COMPLETE COMMUNITIES

The term “complete communities” is derived from the Growth Plan and refers to a full range of housing opportunities and amenities to meet daily needs.

CHILDREN

This document refers to “children”, which is a catch-all for infants, toddlers and youth. Children are defined as dependents living in the household who are between the ages of 0 to 19 years of age.

LARGE UNITS

The term “large units” refers to two and three bedroom units that comply with the design guidelines in this document. The size of these units are indicated in Section 3.0 Unit. These units are designed for the end user, to meet the needs of households with children. However, the design may also address the needs of other household compositions such as multi-generational families, seniors with home care or groups of unrelated students and/or adults who choose to live together. The provision of large units will ultimately benefit a diversity of household compositions.

OBJECTIVES OF THE GUIDELINES:

- DIVERSITY OF HOUSING
- LIVABILITY & QUALITY
- PLANNING FROM THE PERSPECTIVE OF A CHILD



Kloden, or the Globe, is a Danish playground by the MONSTRUM design group built at a new library in Århus. Whimsy is embedded in the play areas which represent the cardinal directions and incorporate stories about nature, animals, landscapes, geology and culture. All design elements provide opportunities for play and exercise for children of all abilities.

1.1 MOBILITY

Design safe mobility networks to encourage children's independence and active transportation

1.2 PARKS & OPEN SPACES: ACCESS & TYPE

Provide a variety of types of parks and open spaces that are easily accessible and meet a range of needs

1.3 CHILD CARE FACILITIES

Design high-quality, conveniently located child care facilities

1.4 SCHOOLS

Design high-quality, conveniently located schools

1.5 SHARED USE & INTEGRATED CO-LOCATED COMMUNITY SERVICES & FACILITIES

Co-locate community services and facilities with new development to ensure shared use as well as efficient, inclusive and dynamic program delivery

1.6 A COMPLETE COMMUNITY TO MEET DAILY NEEDS

Provide an active street life with a mix of community services and fine-grained retail spaces

1.7 WHIMSY & DESIGN FOR FOUR SEASONS

Incorporate whimsical elements and design for year round enjoyment

1.8 ECOLOGICAL LITERACY

Teach children and youth environmental values to promote a resilient city

1.9 CIVIC ENGAGEMENT

Engage children and youth in the planning and design process

BUILDING GUIDELINES

2.1 BUILDING CONFIGURATION

Provide a critical mass of large units primarily located in lower portions of the building

2.2 FLEXIBLE BUILDING DESIGN & CONSTRUCTION

Design buildings to allow for future flexibility through unit organization and construction systems

2.3 COMMON INDOOR & OUTDOOR AMENITY

Provide indoor and outdoor amenity spaces to support a variety of age groups and activities

2.4 BUILDING LOBBY

Design lobbies that promote lingering and casual social interaction

2.5 SOCIAL CIRCULATION SPACES

Design common areas to support social interaction between neighbours

2.6 BUILDING MASSING & TYPOLOGY

Incorporate massing strategies that allow for a variety of unit types as well as innovative building massing and design

2.7 PRIVATELY OWNED PUBLICLY ACCESSIBLE SPACES (POPS)

Provide child-specific POPS to expand the network of open spaces within the public realm

2.8 STORAGE & UTILITY NEEDS

Provide ample, convenient and secure storage for larger items

UNIT GUIDELINES

3.1 ENTRANCE & STORAGE

Provide space to comfortably enter and exit, and store items

3.2 LAUNDRY

Provide space for laundry and utility

3.3 KITCHEN & DINING

Kitchen and dining areas should be large enough for families to cook, socialize and eat together

3.4 LIVING ROOM

Provide space that accommodates the social needs of a family

3.5 BEDROOMS

Design bedrooms as high-quality spaces with operable windows, space for homework and appropriate storage

3.6 BALCONY & TERRACE

Design balconies and terraces that extend the living space and provide access to the outdoors

3.7 UNIT FLEXIBILITY

Units should be adaptable and allow for layout change over time



1.0 NEIGHBOURHOOD

- 1.1 Mobility**
- 1.2 Parks & Open Spaces: Access & Type**
- 1.3 Child Care Facilities**
- 1.4 Schools**
- 1.5 Shared Use & Integrated Co-located Community Services & Facilities**
- 1.6 A Complete Community to Meet Daily Needs**
- 1.7 Whimsy & Design for Four Seasons**
- 1.8 Ecological Literacy**
- 1.9 Civic Engagement**

The public realm is an integral part of any neighbourhood. In many instances, components of the public realm, such as parks or the library, become an extension of the home. Vertical communities become more livable when the public realm is designed and planned to support the specific needs of households with children and youth. Vertical living then becomes a more desirable and feasible option for more households.

Healthy neighbourhoods should address mobility by providing safe streets that encourage independent and active transportation. They should provide facilities such as schools, child care and parks that meet the specific needs of children within close proximity to the home. The design of the public realm can pay specific attention to children and youth by promoting ecological literacy, play in all seasons and by incorporating whimsical features. The Guidelines that follow provide a blueprint for planning, designing and developing neighbourhoods that address the needs of children and youth.

Hammarby Sjöstad, above, in Sweden is a new community that was organized around naturalized green spaces and car-free active transportation corridors.

Retail and community facilities at the base of buildings help to animate the neighbourhood and provide convenience for residents to meet their daily needs on foot.

Centralized parks help to anchor and organize the neighbourhood by providing a flexible space with the ability to congregate during weekly or seasonal events.

Co-located child care facilities, schools and community services and facilities allow for efficiencies and synergies. These are the places that foster civic engagement in children and youth and where community ties are developed.



Safe pedestrian routes help to connect neighbourhoods to child-focused destinations.

Public art and whimsy help create a sense of place.



Naturalized gardens provide a place for children to learn about ecology which can foster a sense of stewardship.

Cycling infrastructure that is separated from vehicular and pedestrian traffic provides a safe route for children to ride independently.

BUILDING COMPLETE COMMUNITIES

The CityPlace neighbourhood (as shown above) in Toronto is master planned to include all of the ingredients of a complete community.

1.1 MOBILITY

Design safe mobility networks to encourage children's independence and active transportation

Children's Independent Mobility The ability of children to move independently through their neighbourhood fosters social and physical development and provides opportunities for play. Children are granted increasing independence when caregivers perceive a sense of safety and security in the public realm.

Safe Routes Children move differently and less predictably through the public realm than adults and require some unique design considerations. A safe route is the primary route through a neighbourhood that connects child-specific destinations. Safe routes are ideally located on local streets. These help mitigate real and/or perceived risk associated with independent mobility.

Active Transportation Walking or other forms of active transportation such as cycling or scootering, are most accessible to children and help to reduce vehicle trips, provide physical and mental health benefits and they are often the most convenient, sustainable and affordable mode of transportation for a family.

Walking/Cycling to School (Active School Travel) The daily route to school presents the most significant opportunity for active transportation which in turn reduces vehicular traffic congestion and the safety risks associated with vehicular congestion around schools.

Streets as Open Space Streets are important public open spaces that connect people and places. When they are comfortable they can support public life, allowing families to linger and socialize.



Separated bicycle lanes on Toronto's Queens Quay provide a safe route along the waterfront. This parent borrowed a tricycle cart from his children's school. Cycling is his family's preferred mode of travel.

Fig. 1 MID-RISE SECTION 4.8m minimum from curb to building face

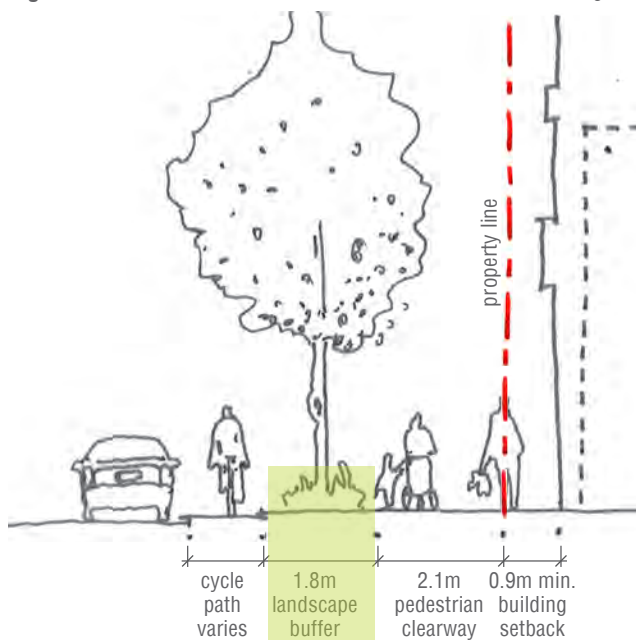
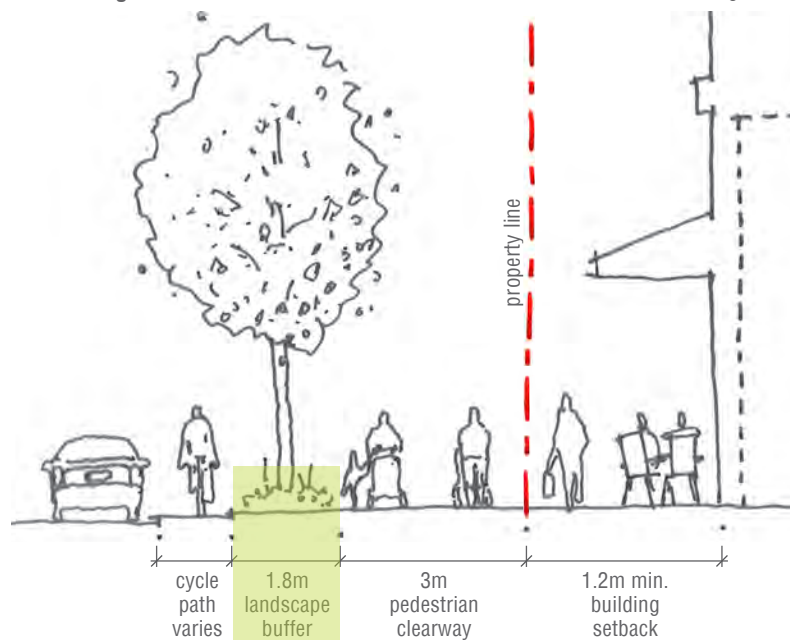


Fig. 2 TALL BUILDING SECTION 6m minimum from curb to building face

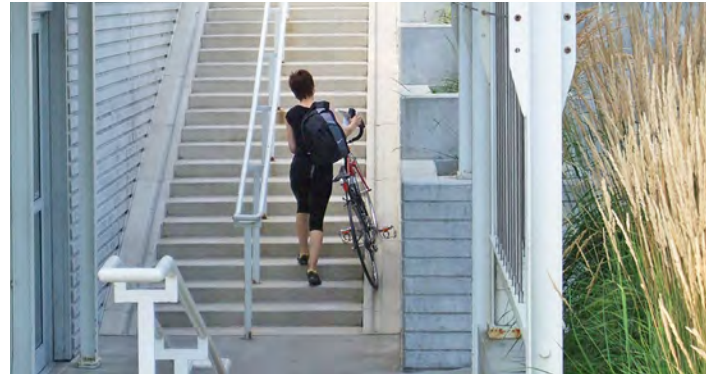


GUIDELINES

- a. Safe routes should be incorporated in new capital projects, new master planned communities, and larger development sites by:
 1. locating new child-focused destinations on safe routes;
 2. identifying routes between existing child-focused destinations such as schools, community centres, libraries, parks and playgrounds;
 3. considering existing walk-and-bike-to-school programs;
 4. congregating child-focused destinations to minimize the number of intersections children need to cross;
 5. identifying the need for (i.e. observing pedestrian desire lines), and providing appropriate traffic control devices to increase the number of protected pedestrian crossing opportunities at intersections and mid-block locations where children are expected to cross; and
 6. using signage to indicate the presence of children, as well as signage legible to children, to identify safe routes and to allow for way-finding. Signage should be located so that it is visible at a child's height and include colourful symbols.
- b. Consider reduced speed limits on safe routes that include child-focused destinations along their length.
- c. New or reconfigured streets should comply with Complete Streets and Green Streets Accessibility (barrier-free) criteria and:
 1. ensure that children are part of the user profile in the street context analysis, particularly if there are schools or other child-focused destinations nearby;
 2. all efforts should be made to minimize curb radii and lane widths, where feasible, to reduce vehicle speed; and
 3. where feasible, explore alternative street and laneway designs such as shared streets to improve safety by reducing vehicular speed and to encourage flexibility, play and initiatives such as Block Party in a Box.
 4. Provide sidewalks on both sides of streets wherever possible and consider wider sidewalks where needed to accommodate peak pedestrian activity
- d. Pedestrian infrastructure should:
 1. minimize the exposure risk of children to motorized vehicles by designing pedestrian-oriented intersections with landscaped curb extensions for shorter crossing distances, raised crosswalks and other features to provide safe crossings;



The Midtown Loop concept emerged from the Midtown in Focus planning study in Toronto. If child-focused destinations are identified a network can be formalized as a way of directing future investment to safe, green routes.



The bicycle wheel channel in Chicago's Millennium Park is generously offset from the wall to accommodate the bicycle handlebars, while providing enough space for the cyclist to push the bicycle unencumbered.



The White Center Bike Playground in Seattle was created as a partnership between King County Parks and the Cascade Bicycle Club to provide a place where children can learn skills and confidence to normalize cycling.

2. be physically separated from vehicle lanes with a planted boulevard, when it is not a shared street;
 3. be lined with street furniture as well as trees where possible to provide a shade canopy;
 4. incorporate ramps on public stairs for stroller or bicycle wheels to improve access and connectivity; and
 5. be wider, where possible, on safe routes to school for children under 14 who can legally ride on the sidewalk.
- e. When cycling infrastructure is provided, it should connect to safe routes, and to the network of child-focused destinations and be physically separated from vehicular lanes and parking to minimize risks and provide comfort for children.

1.2 PARKS & OPEN SPACES: ACCESS & TYPE

Provide a variety of types of parks and open spaces that are easily accessible and meet a range of needs

Outdoor Living Room Parks and open spaces are integral to urban living by providing outdoor social and recreation space, offering inclusive places to rest, play and socialize for both children and their caregivers, strengthening connections to nature, and deepening respect for the environment.

Safety & Convenience A child's mobility is determined primarily by age, thus distances are experienced differently as children grow. Parks and open spaces are most accessible when located close to home and on safe routes, allowing children to exercise independent mobility.

Healthy Children Convenient access to green space and play/recreational facilities results in social, physical and mental health benefits.

Independent, Experiential & Sensory Play Design enables social growth by encouraging discovery, adventure, imagination and risk taking.

Variety & Scale Different types of open spaces provide a choice of experiences to meet daily, weekly and seasonal needs. Smaller spaces provide needed resting areas while en route to destinations, while larger spaces provide areas for different activities. Open spaces include lands such as schoolyards, cemeteries, urban plazas and ravine trails.

Multi-functional Inclusive and flexible design addresses varying ages and abilities and responds to the four seasons, ensuring that parks and open spaces are usable year-round.

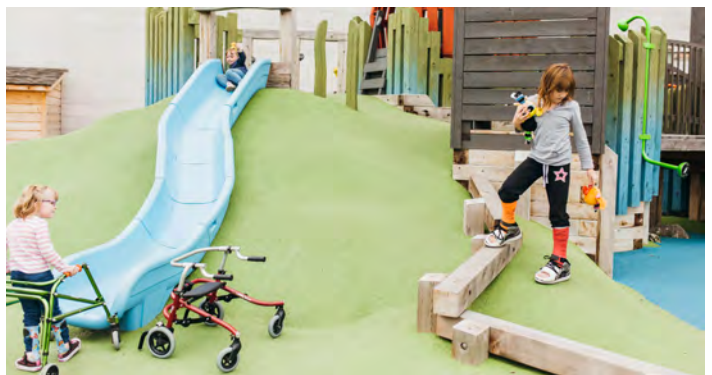
GUIDELINES

i PROVIDE EQUITABLE ACCESS

- a. Parkland investment should implement the City's Parkland Strategy and its guiding principles to expand, improve, and connect the City's parks system.
- b. New parks and open spaces should be conveniently and centrally located within 250-500 metres, or a 5-10 minute walking distance, of a new development site to meet the daily needs of families.
- c. New developments should result in no new net shadow on parks, open spaces and playgrounds.
- d. When expanding the network of parks and open spaces:
 1. where feasible, locate new parks and open spaces on safe routes and minimize the number of intersections children need to cross to access them;



This map of the downtown was created for the TO Core initiative. It shows the shortage of playgrounds within walking distance and where additional investment is needed. The blue circle overlay demonstrates a 400m radius, which is a comfortable walking distance with a child.



The Ron Joyce Children's Health Centre in Hamilton, Ontario provides a playground that is accessible to children with different physical abilities. The space incorporates themes from the local area including representation of the colourful trees of a local naturalized area, steel smoke stacks and iconic bridges.

2. new connections can form loops or linear routes to link child-focused destinations;
3. provide opportunities for rest along daily routes; and
4. pursue opportunities to re-purpose underutilized spaces such as surface parking lots, left-over land parcels, and redundant vehicular lanes through "road diets".
- e. Continue to explore partnerships with public landowners such as School Boards to increase public, shared access to open space, playgrounds and recreational facilities.
- f. Consider providing Wi-Fi where feasible.

ii PROVIDE A RANGE OF TYPES

- a. Vertical communities should include a range of park types to meet daily, weekly and seasonal needs.
- b. Park design should consider a range of elements, including both flexible and specific elements, to allow for a diversity of activities, resting, climbing and imaginative play to suit all ages and abilities. Provide a combination of:
 1. specific elements including: play equipment for a broad range of age groups such as sandboxes, water features, play/sports courts and skateboard facilities; and
 2. flexible elements including: large boulders or other climbing/sitting features, lawn areas, mounds, concrete or stone shapes and seat walls. These elements could be sculptural and whimsical.
- c. Where feasible, provide dog amenities in appropriate locations to prevent conflicts with children and minimize damage to the public realm.
- d. Playgrounds should:
 1. be located safely within parks and away from streets;
 2. integrate physical barriers to prevent children from running into the street where required, such as fences, low walls or maze-like offsets;
 3. offer group seating and gathering space for caregivers to allow for formal and/or informal supervision;
 4. provide shade from trees or shade structures to mitigate impact from sun exposure;
 5. provide an accessible route of travel to playgrounds, ensure an accessible entry/exit point(s) are clearly demarcated and surfaces are designed to support various mobility devices, including strollers;
 6. make play inclusive to children of all abilities and various age groups, including youth;
 7. provide a variety of play types, including but not limited to experiential, sensory, seasonal, imaginative, and challenging play;
 8. include natural components for children to explore, where appropriate;
 9. involve graduated levels of risk to allow children the opportunity to go up higher, or faster, as they become more comfortable and confident;
 10. include materials and play elements that extend the play season through winter; and
 11. be designed to drain snow melt efficiently with an under-drain system and overflow routes dispersed across the site, to encourage good drainage and surface flow in freeze/thaw conditions.



Southeast False Creek in Vancouver offers flexible and specific elements such as boulders for sitting and climbing, play structures, plazas and public art as well as a naturalized landscape. This linear park also functions as a safe route.



Underpass Park in Toronto's West Donlands was created from unused land underneath an expressway. It includes elements for specific users such as a skateboard park and basketball hoops which appeal to older children and youth.



Park an der Marienburger in Berlin includes a number of flexible elements that can be used for play, seating or community events. This round amphitheater is a simple element that can provoke a child's imagination and unique use.

1.3 CHILD CARE FACILITIES

Design high-quality, conveniently located child care facilities

Accessible Child care facilities are a vital service which should be close to home or work. Families need access to child care facilities that are located near active transportation or transit routes. Locations on safe routes allow parents with children to comfortably walk, cycle or roll to their child care facility.

Early Involvement Securing child care in new developments requires early conversation with the City of Toronto and throughout the development approval process.

Equitable City Affordable and accessible child care is part of a complete community. It supports working parents and creates positive social, economic and health outcomes.



This child care centre in Tokyo has an oval rooftop that encloses an internal courtyard space. The design also includes glazed roof openings that allow direct views between the roof and classroom and a slide from the roof to the courtyard.

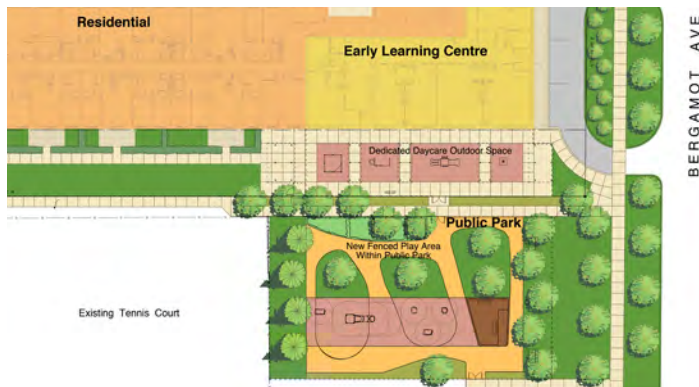


The Bayside development in Toronto shows how the child care's outdoor space was located on the 2nd level by taking a 'bite' out of the building. The covered outdoor space has the advantage of weather protection. Design features can also be added to bring light to darker areas of the space. This alternative massing solution was a response to a constrained site and involved cooperation between the developer (Waterfront Toronto), City Planning and Children Services.

GUIDELINES

i PLANNING FOR CHILD CARE IN MIXED USE BUILDINGS

- a. During the development review process, if child care is an identified need, staff from both City Planning and Toronto Children’s Services must be involved in early conversations to explore providing integrated child care facilities on site (while balancing the needs for other community infrastructure) and to support child care development details.
- b. New child care facilities will adhere to the Provincial *Child Care and Early Years Act* and the City of Toronto’s *Child Care Design & Technical Guideline R1 2016* and the *Child Care Development Guideline*.
- c. Locate child care facilities so that they:
 1. are near pedestrian, cycling and transit routes to minimize dependence on vehicles; and
 2. consider adjacencies to other community services and facilities such as schools, parks and recreation facilities.



The Bergamot child care centre in Toronto located a portion of its required outdoor space in the adjacent public park. This innovative solution on a constrained site required City and Agency cooperation. The new child care centre funded the new play equipment in the park which is open to the public outside of facility hours.

ii DESIGNING CHILD CARE IN MIXED USE BUILDINGS

- a. Child care should be located on the first floor of a building. If this is not feasible, the second floor may be considered.
- b. Children Services seeks new facilities to accommodate a minimum of: 62 children with 1 room of 10 infants, 2 rooms of 10 toddlers, and 2 rooms of 16 preschoolers.
- c. Outdoor play space should be:
 1. directly accessible to child care indoor space;
 2. located away from high-volume traffic and other vehicular areas;
 3. oriented to maximize sunlight and create favourable exterior micro-climates for environmental comfort; and
 4. protected from shadow and wind impacts caused by existing and future development.
- d. Pick-up and drop-off areas should be urbanized and prioritize pedestrian and bicycle access. Vehicular access should be located on the street (with signage), internal to the site (at the side or rear of the building) or underground in order to minimize negative impacts on the public realm with new lay-bys or drive aisles.
- e. On constrained sites:
 1. innovative building design and massing strategies are encouraged to accommodate outdoor play space that has maximum access to sunlight; and
 2. explore opportunities for shared use agreements to locate a portion of the outdoor play space on adjacent lands such as parks if space permits and if the child care operator commits to its higher standard of maintenance.
- f. Shared use agreements, including a time/use plan and detailed maintenance requirements, should be developed early on in order to maximize community spaces (such as broader accessibility on ‘off-hours’) and guarantee operational success.
- g. Given that children are uniquely vulnerable to environmental exposures and impacts, use natural, sustainable materials for play equipment and ground surfaces which do not over-heat.

1.4 SCHOOLS

Design high-quality, conveniently located schools

Social Hub The role of the school goes beyond the classroom. Flexible design and programming allow schools to function as civic hubs of community activity. Schools are where social skills are developed and where children make friends. Schools support social cohesion and a sense of belonging in the community.

Daily Routine Schools are one of the most important daily destinations in a child's routine. Active transportation becomes a viable option when schools are within a convenient walking distance from home.

Quality of Life The quality and proximity of schools have immediate and long-term impacts on a family's well-being and choice of neighbourhood.

School Distribution Families rely on access to high-quality local public schools within their neighbourhood, which minimizes the need for student busing. The availability of local schools allows new parents to remain in their neighbourhoods. As Toronto intensifies schools will have to adopt an urban model to meet the needs of local populations.

GUIDELINES

- a. New schools should be located near major transit routes.
- b. Schools and school sites should be retained where possible to meet future enrollment or community space needs.
- c. Continue to explore opportunities to co-locate schools, parks and child care facilities as well as other community services.
- d. City divisions, developers, school boards, local school staff and community groups should form partnerships to:
 1. facilitate early discussions to integrate schools into new development or on stand-alone sites; and
 2. normalize the practice of using school yards for passive community access outside of academic hours.
- e. When developing new master planned communities:
 1. build new co-located schools in early phases to attract families and improve livability, where feasible;
 2. maintain flexible building layouts to allow for future retrofit and/or expanded facilities to accommodate enrollment growth and program changes while promoting shared use and service integration; and
 3. School Boards should consider inviting local community agencies or groups to lease school space to off-set costs until the school has reached optimal pupil enrolment.
- f. Pick-up and drop-off should be:
 1. urbanized to limit the need to provide land-consumptive vehicle associated functions on site; and
 2. located on the street (with signage) or internal to the site (at the side or rear of the building) in order to minimize negative impacts on the public realm which result from new lay-bys and drive aisles.



The North Toronto Collegiate Institute is integrated into the base of two residential towers. School amenities, including a theatre, classrooms and sports fields, are available to the community outside of school hours.



Through a participatory design process, schoolyards across New York City were transformed into playgrounds. By the summer of 2007, 69 playgrounds were open at a cost of \$50,000 per school.

1.5 SHARED USE & INTEGRATED CO-LOCATED COMMUNITY SERVICES & FACILITIES

Co-locate community services and facilities with new development to ensure shared use as well as efficient, inclusive and dynamic program delivery



This facility in Toronto's Rexdale neighbourhood is one of three City-run seniors' facilities that also house City-run early learning / child-care centres. The lounges at each floor overlook the courtyard which allow seniors to watch the children play.



The co-location of the Waterfront Neighbourhood Centre, St. Stephen's Waterfront Child Care Centre, Waterfront School (elementary), and City School (Secondary) allows for the sharing of resources.



The North Toronto Collegiate Institute's entrance is combined with the cafeteria to create a social space that can be used after-hours by the community.

Convenience & Efficiency The co-location of services and facilities can minimize trips and travel time and address a family's daily needs through various stages of life.

Synergy Co-location brings together compatible uses in a single building and supports interaction between people of differing backgrounds, ages and socioeconomic conditions.

Adequate and Equitable Access Maximizing resources by grouping services in the same facility improves access and allows for more efficient use of land and resources.

Strong Communities Shared use of multi-service facilities strengthens communities, improves public health and achieves positive socio-economic outcomes.

GUIDELINES

- a. Early in the development review process, City divisions, developers and community groups should continue to discuss forming partnerships to advance integrated co-located facilities in order to:
 1. identify sites to develop co-located facilities in an urban format at the base of buildings;
 2. support and encourage the practice of sharing space, such as schools providing recreation space for community programs outside of academic hours; and
 3. fully program the facility throughout the day for community functions.
- b. Explore smaller, alternative urban formats to provide space for facilities when larger spaces are not available.
- c. Explore opportunities to co-locate community facilities with housing to enable synergies such as those between children and seniors.
- d. New facilities should be designed with adaptable layouts to provide flexible programming space.
- e. Long-term operational viability of co-located community services should be considered during early planning stages.

1.6 A COMPLETE COMMUNITY TO MEET DAILY NEEDS

Provide an active street life with a mix of community services and in-grained retail spaces

Convenience, Access & Variety Flexible and diverse retail allows families to meet their daily needs on foot, maximizing time for other activities. Families generally require access to pharmacies, convenience stores and fresh, healthy and affordable food.

Informal Supervision Active and animated building frontages allow for eyes on the street and informal supervision of children.

Animated Building Frontages Buildings lined with active uses, such as retail and lobbies, generate a vibrant, healthy street life. This is especially important during winter months.

Social Interaction Fine-grained retail and community services such as community health centres, cafés and bookstores allow for chance encounters that encourage a sense of community.

GUIDELINES

- a. The design of non-residential uses at-grade should:
 1. be flexible over time to support a diversity of both large and small-scale retailers by providing multiple entrances at-grade, generous floor to ceiling heights and adaptability through demising walls;
 2. provide building setbacks for active uses such as patios or plazas;
 3. use clear glass to provide eyes on the street with street-related retail display, service uses, lobbies and social spaces; and
 4. be animated by limiting the at-grade frontage of large stores and lifestyle graphics that obstruct the windows.
- b. Space secured by the City for community tenancies should be designed consistent with the terms of the City's Community Spaces Tenancy policy or equivalent, and should be accessible and visible from the street.
- c. Planners, developers, Business Improvement Areas and community groups should work together to:
 1. secure space for community-based groups and not-for-profits, such as food co-ops using available planning tools;
 2. avoid vacant retail space by accommodating community services and facilities or short term alternatives, such as community groups, in retail spaces that have difficulty attracting established retailers.



The reconfigured Market Street in Toronto introduced fine grain retail and patio seating. The shared street is a flexible design (which uses bollards instead of a curb) that better accommodates special events or pedestrians on market days.



The active elevations at-grade at the Wellesley Community Centre in Toronto animate the public realm throughout the dark winter months.



A 12-storey building at 297 College Street in Toronto includes a medium-scale food store (with direct access from the residential lobby), a bank, and two small-scale shops facing the laneway, which was designed as a shared street.

1.7 WHIMSY & DESIGN FOR FOUR SEASONS

Incorporate whimsical elements and design for year round enjoyment



The Giraffe Child Care Centre in Paris is a nexus of family activity, providing a day nursery, outdoor playgrounds and healthcare facility. The playful design appeals to children and attempts to make the health care experience less intimidating.



The Natrel pond and rink at the Harbourfront Centre in Toronto attracts families by allowing the space to function all year long as a recreational destination.



This skateboard park in Roskilde, Denmark functions as a floodwater drainage tool: the basin stores water when it rains and skaters can use the space when it's dry. The basin raises awareness about the need for storm water management.

Sense of Joy Playful design elements foster a sense of delight. They can allow for pause from daily routines and provoke play.

Landmarks & Civic Pride Whimsical forms can become way-finding elements and help orient children by creating a sense of place, inclusivity and a feeling of belonging.

Year Round Use Transportation and recreational needs of families remain consistent throughout the year.

Flexible The public realm should be designed and maintained to adapt to seasonal change to enhance year-round usability.

GUIDELINES

INCORPORATE WHIMSY

- Encourage a sense of joy and playfulness by incorporating whimsy in public art, building design, streetscapes, street furniture and parks and open space features.
- Design child-friendly elements at a scale that responds to children that provoke the imagination and are fun, interactive, educational, musical and brightly coloured in fantastic sculptural forms.

EMBRACE THE FOUR SEASONS

- Winter maintenance is critical near transit stops and is encouraged on routes in parks that are heavily used.
- Where feasible, public washrooms should be provided and open all year.
- Design for four seasons should:
 - be flexible for year-round use and events;
 - be transformable, such as a walking trail that becomes a skating trail in the winter;
 - incorporate animated patterns, colour and light;
 - be designed to prevent freeze/thaw conditions with an under-drain system and dispersed overflow routes;
 - able to address extreme weather through resiliency (public spaces should retain storm water, include shade structures and feature extensive tree planting); and
 - consider how structures can be massed to create micro-climates and use materials to create comfortable environments in extreme heat/cold.

1.8 ECOLOGICAL LITERACY

Teach children and youth environmental values to promote a resilient city

Foster Environmental Stewardship When children develop an understanding and appreciation of ecological processes they become citizens who make more sustainable choices.

Resiliency Children are most vulnerable to climate change impacts and less able to withstand extreme climate events. Green building practices future-proof cities against climate events.

Nature & Health Contact with nature, the ravine systems and food gardens provides physical and emotional benefits. It has been demonstrated that nature-play leads to developing a stronger immune systems in children.

GUIDELINES

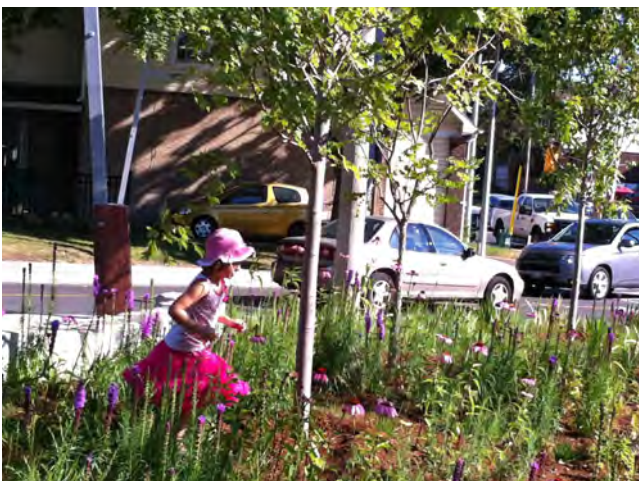
- Explore opportunities to integrate sustainable design into new development, school curriculum and the public realm. Provide learning opportunities for children through elements such as visible stormwater management, using spillways that flow into landscape beds.
- When developing new streets, consult the Green Streets Guidelines to maximize access to nature and green infrastructure in the public realm.
- Explore opportunities to develop community gardens in open space or food gardens on rooftop amenity space.
- Neighbourhood plans should be developed to examine how systems (such as transportation, food resources and utilities) can better adapt during extreme climate events.



The design of the Tumbling Bay Playground at Queen Elizabeth Olympic Park in London promotes adventure play and ecological education with play structures made of pines and felled oaks, which represent the local woodland ecology.



The Table community food centre provides opportunities for children to learn to grow and prepare healthy food, while increasing access to nature.



Fairford Avenue Parkette in Toronto was created by reducing the adjacent vehicular traffic lanes. The new parkette captures storm water runoff from the adjacent street, and provides furniture for resting while providing children access to nature. The storm water inlets are designed to be visible, to provide a learning opportunity.

1.9 CIVIC ENGAGEMENT

Engage children and youth in the planning and design process



The 'I live in the city' campaign was launched by 11 year old Sako Ghanaghounian who wanted to raise awareness about children growing up in the city. He has spoken publicly about the topic, produced and sold T-shirts online.



The 'Maximum City' program in Toronto offers inquiry-based, hands-on learning experiences on urban topics. This public life exercise taught children how to map people using Victoria Square and allowed them to suggest improvements.

Inclusive Cities A city that embraces all its citizens will involve children and youth in the planning and design process.

Children as Active Citizen Engaging children and youth can foster long-term active citizenship, leading to enhanced civic commitment, social cohesion and a sense of belonging.

Children's Unique Perspective Children as young as age four experience the city at a different scale than adults and maneuver through the city in unpredictable ways, which should inform new planning and design initiatives.

Children as a Resource Children and youth can offer insight and unfiltered perspective on how urban spaces can be planned and designed to meet their needs.

GUIDELINES

- a. Ensure city initiatives and consultation processes incorporate the perspectives and smaller scale of children.
- b. Public engagement should be:
 1. integrated into the school curriculum through programs like 'Planners in Classrooms';
 2. in locations where children congregate including schools, libraries, community centres and parks;
 3. scheduled during/after school and on weekends;
 4. fun! and use child-focused tools such as mental mapping, hands-on workshops, computer-based tools and social media for older children and youth; and
 5. designed to help children challenge traditional ways of using public space.
- c. Establish community partnerships that engage students and seeks their advice on local planning matters.
- d. Use public events in public spaces to demonstrate to children alternative and flexible ways to use the public realm such as Open Streets TO (where streets are temporarily opened to people and closed to cars) and Winter Stations (where temporary, interactive installations and furniture were built on Toronto's beach).



2.0 BUILDING

- 2.1 Building Configuration**
- 2.2 Flexible Building Design & Construction**
- 2.3 Common Indoor & Outdoor Amenity**
- 2.4 Building Lobby**
- 2.5 Social Circulation Spaces**
- 2.6 Building Massing & Typology**
- 2.7 Privately Owned Publicly Accessible Spaces (POPS)**
- 2.8 Storage & Utility Needs**

The design of new buildings should consider the needs of families at various life stages to ensure that residents can remain in their communities. Within the building, the choice of amenities should anticipate the change of demographics over time and particularly address activities for young and middle-years children and youth. A critical mass of large units can enrich the social life of the building by fostering community and social interactions. A range of unit sizes also ensures that Toronto's housing stock will be more dynamic and better able to respond to changing demographic needs.

These Guidelines address how buildings can better accommodate families through recommendations on the siting, configuration and typology of buildings. Building construction is also examined in order to ensure flexibility within the floor plate, so that smaller units may be combined over time. Buildings make contribution to the neighbourhood through how they frame the public realm, dedication of open space, and provision of community facilities and retail. Within the building, special attention is paid to circulation areas and shared spaces, as well as their adjacencies and access.

The image above shows the rooftop amenity courtyard at Via Verde in New York. The large, flexible open space includes elements that promote play and socializing. The balconies overlook the courtyard, which enables supervision.

2.3 Common Indoor Amenity Spaces

2.3 Common Outdoor Amenity Spaces

2.8 Storage & Utility Needs

2.5 Social Circulation Space

2.1 Building Configuration

2.6 Building Massing & Typology

2.4 Building Lobby

2.7 Privately Owned Publicly Accessible Space (POPS)

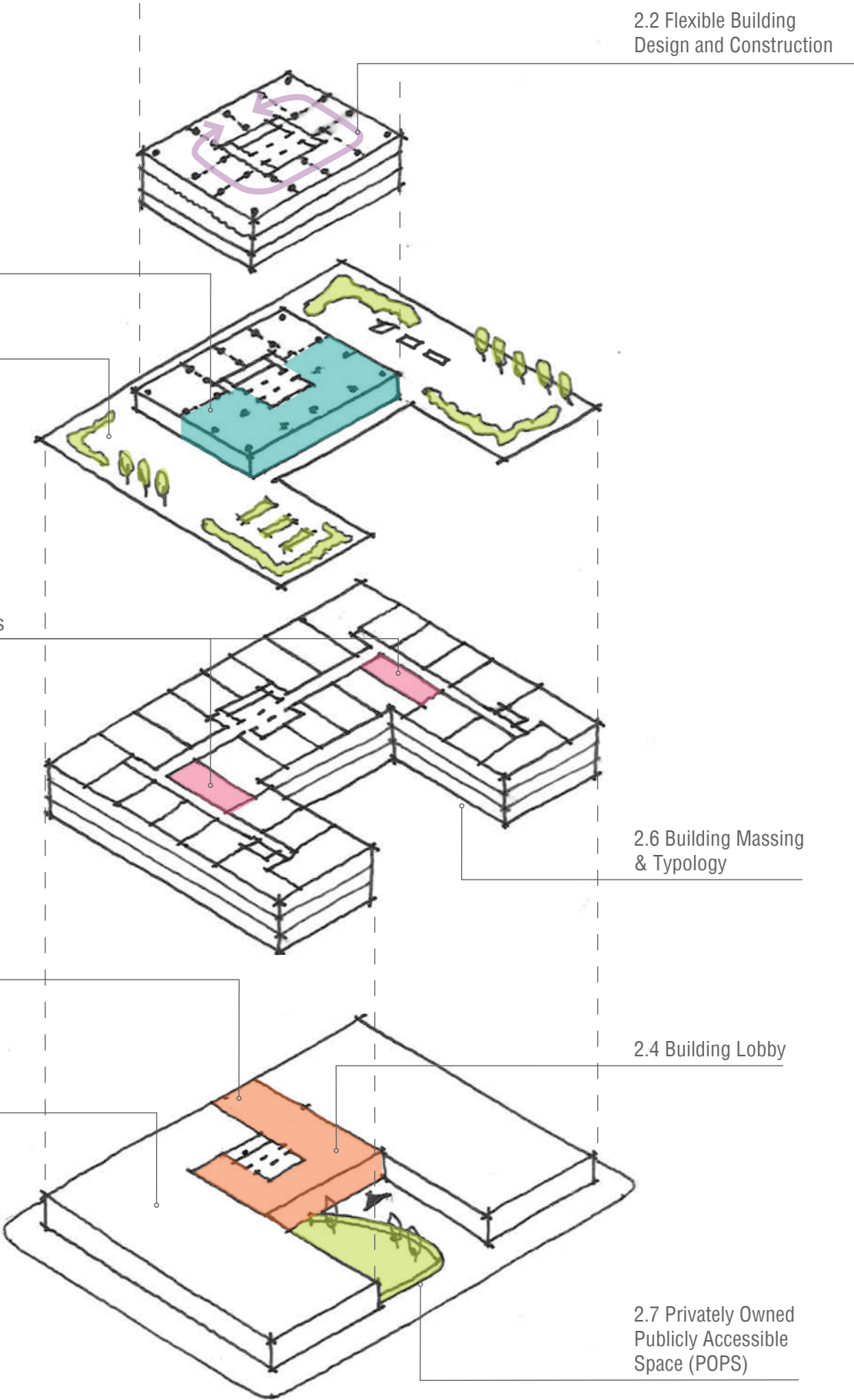


ILLUSTRATION OF AN IDEAL BUILDING

The tower's base building configuration incorporates all of the ingredients that make a family-friendly vertical community.

2.1 BUILDING CONFIGURATION

Provide a critical mass of large units primarily located in lower portions of the building

Sense of Community Increasing the number of large units creates a sense of community within the building.

Outdoor Access Units in lower portions of the building can have direct access to the outdoors (including rooftop amenity space) while reducing dependency on corridors and elevators.

Informal Supervision Children playing outdoors can be more easily supervised from the units above.

GUIDELINES

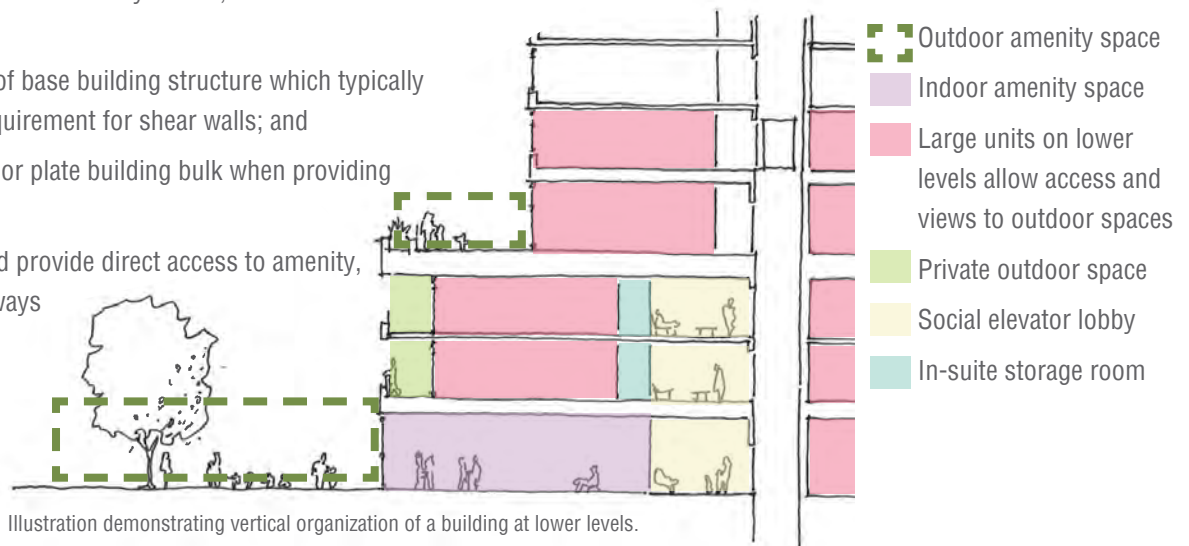
- a. A building should provide a minimum of 25% large units:
 - 10% of the units should be three bedroom units and 15% of the units should be two bedroom units. See Guideline 3.0 for overall unit size and the size of each unit element.
- b. Group the majority of large units together to encourage socializing and create a sense of community.
- c. Locate large units primarily in lower portions of the building to:
 1. reduce elevator dependency and facilitate efficient access to the outdoors, especially during emergencies;
 2. overlook public open space and/or private outdoor amenity areas to allow informal supervision;
 3. be closer to amenity areas and, where feasible, have direct access outdoors from the unit;
 4. take advantage of deeper floor plates and provide wider common corridor space, enable layout flexibility and maximize unit size for laundry rooms, entrances and storage areas;
 5. take advantage of base building structure which typically has less of a requirement for shear walls; and
 6. reduce tower floor plate building bulk when providing large balconies.
- d. At-grade units should provide direct access to amenity, local streets or laneways for convenience.



The third level of 150 Dan Leckie Way in Toronto opens onto a rooftop amenity space that features a variety of play spaces including a lawn and splash pad. Some units flow out into the space while others can informally supervise from above.



The two-level units facing the laneway at B Street Condos in Toronto have terraces and direct access to the laneway. Pedestrian activity animates the public realm and families can informally supervise children playing in the laneway.



2.2 FLEXIBLE BUILDING DESIGN & CONSTRUCTION

Design buildings to allow for future flexibility through unit organization and construction systems

Change Over Time Buildings that are flexible become future-proof and allow for alterations, such as adding or removing partitions. This can better accommodate a household's need for space during varying life stages. Purpose-built construction prevents opportunities for modification.

Alternative Construction Alternative construction systems are encouraged as they can easily be re-purposed, such as wood-frame construction up to six storeys.

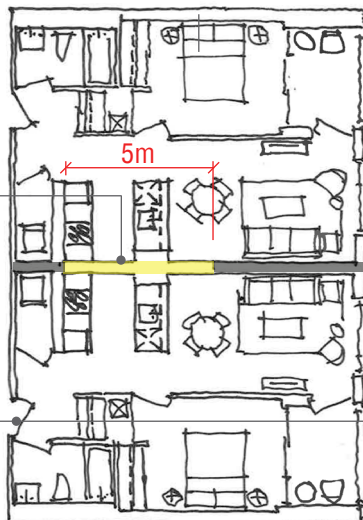


The T3 Building in Minneapolis is a 7 storey building made of heavy timber and nail laminated timber, which results in a flexible floor plate. Post and beam construction avoids shear walls, which maximizes flexibility over time.

GUIDELINES

- Design flexible buildings to allow for unit consolidation by:
 - prioritizing columns over shear walls; and
 - providing 3-5m demisable partition near the corridor if shear walls are unavoidable.
- Design flexible units to anticipate change by:
 - locating vertical risers in the core (not within units) and distribute services along each corridor; and
 - grouping the unit's services close to the corridor.
- When designing a mid-rise building, consider wood-frame construction up to six storeys to provide flexibility.
- Consider increasing the height and size of the moving elevator so that it can accommodate building materials for unit renovations.
- Ensure there is sufficient power in each unit's electrical panel to allow for a change of items such as appliances or lighting.
- Condominium corporations are required to retain dimensioned, as-built drawings for residents who wish to undertake renovations. Toronto Buildings provides this information through their routine disclosure request service.

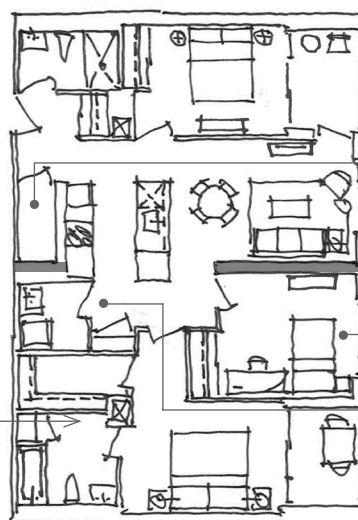
TWO ONE BEDROOM UNITS



Colour area denotes a 5m demisable partition which allows the kitchen areas to be combined

The second entry can be converted into a more spacious master bedroom

ONE THREE BEDROOM UNIT



The second laundry room can become a bulk storage space near the entryway

The second living room can be converted into a third bedroom

A larger laundry room and a pantry can replace the second kitchen

This plan illustrates two adjacent 51m² one bedroom units converted to a 102m² three bedroom unit.

2.3 COMMON INDOOR & OUTDOOR AMENITY SPACES

Provide indoor and outdoor amenity spaces to support a variety of age groups and activities

Support Social Interaction Amenity space offers a venue for children to meet, socialize and play. It provides residents with an inclusive space to interact and form community ties.

Flexible & Durable Amenities can be used throughout the day by any age group by de-emphasizing luxury materials and furniture. Multi-purpose spaces with limited fixed equipment provide the greatest flexibility for all users.

Age-Specific A portion of the required amenity space should be designed to accommodate the needs of targeted age groups through flexible rooms and rooms for specific activities.

Sharing Economy Amenity space can include collective toys, tools and equipment to reduce the need for personal storage.

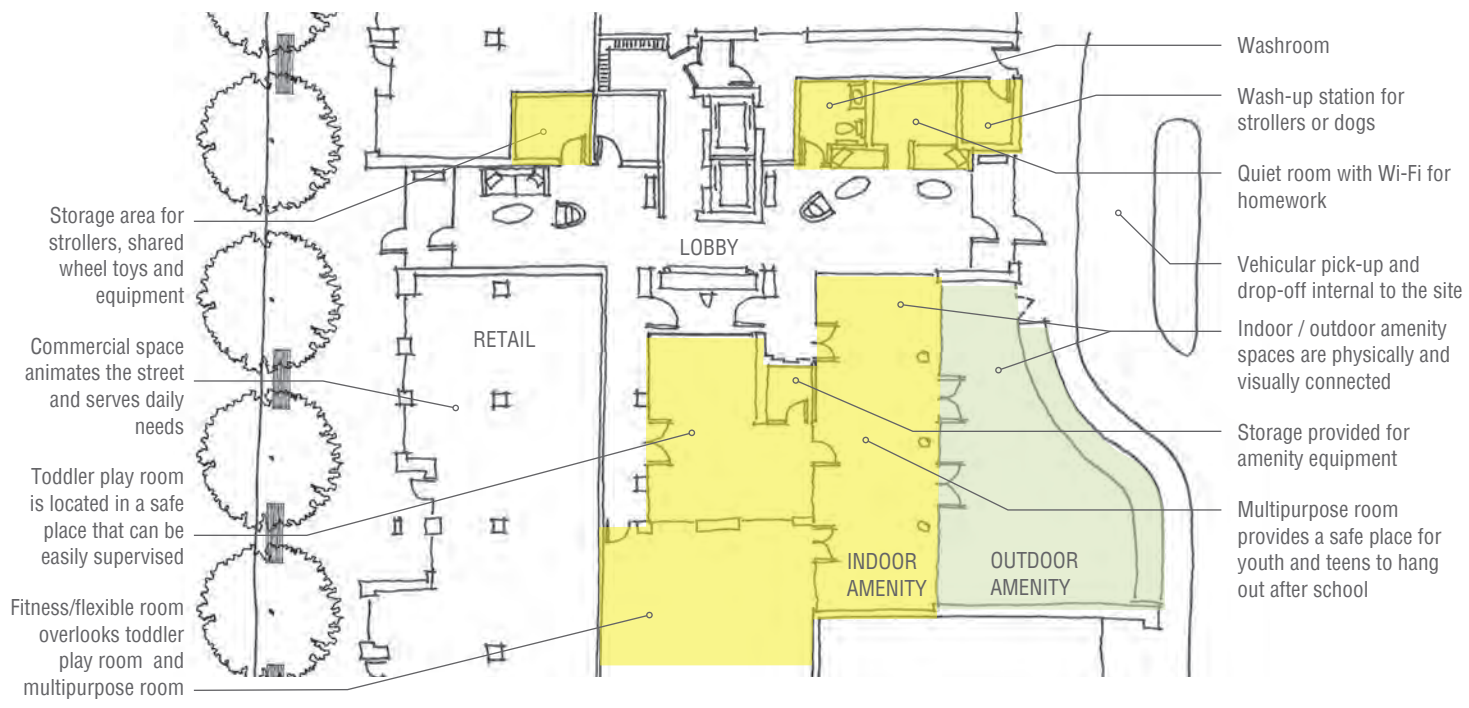
GUIDELINES

- The minimum amount and location of amenity space should be in compliance with Zoning By-Law 569-2013.
- Design a portion of the required amenity space for children and youth. Flexible space can be included in that area. The proportion should relate to the number of large units in the building (~25%).
- Secure amenity space that can be used at no additional cost to residents above condominium maintenance fees.
- Locate and protect outdoor amenity space from shadow and wind impacts of existing and future development.
- Enable passive supervision by locating child-specific amenities adjacent to other amenities.



A Community Food Centre 'The Table' builds a sense of community while educating children about food preparation and healthy eating. Indoor amenity flexible spaces that include kitchen equipment enable these activities.

- Locate amenities vertically throughout the building to minimize vertical distances to some types of amenity space.
- Indoor amenity space designed for children and youth:
 - should be high-quality space above grade with access to natural light where feasible;
 - should include a number of flexible and specific spaces for different activities throughout the day:
 - multi-purpose flexible rooms and generous storage for: toddler play, craft activities, youth fitness and homework groups, as well general use for all residents.
 - specific rooms for: music lessons, food education, tools and messy activities;
 - could include flexible, furnished areas adjacent to the lobby area to encourage socializing;
 - should include storage areas, movable furniture and soft furnishings that are durable and easy to maintain; and
 - should address resiliency and function as a refuge area during an emergency to accommodate first responders and be powered by alternative energy sources.
- Outdoor amenity space designed for children and youth:
 - should be located to maximize access to sunlight while providing opportunities for shade in the summer;
 - should be directly accessible from private terraces if located on the same level; and
 - could include durable landscape planting for flexible outdoor play, which can be counted towards no more than 25% of the required outdoor amenity area.
- Consider locating amenity space so that it is adjacent to, and visible from circulation space to increase opportunities for socializing and passive supervision.
- When planning a site with multiple buildings, consider grouping a portion of the amenity space in a shared complex.
- Consider the community-building potential of food by:
 - providing indoor/outdoor furniture to enable communal meals and gathering;
 - providing roof-top gardening opportunities; and
 - including a functional community kitchen or event kitchen for collective activities like cooking and dining, or for food-based after-school programs.



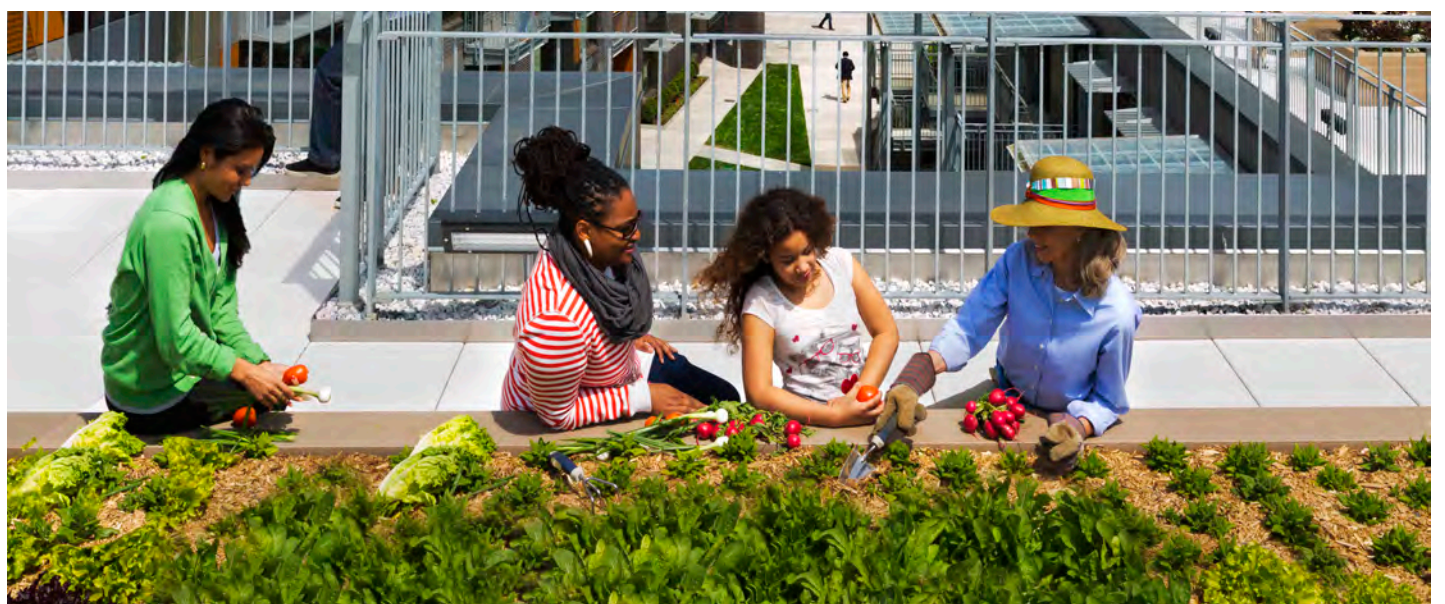
Plan diagram illustrates amenity adjacencies off a ground floor lobby. The space is designed for a variety of ages and connects to an outdoor play area. Amenity areas are visually connected to allow for informal supervision and to animate the social life of the building.



A roof top amenity playground in Seattle, uses turf grass as a surfacing material which functions as a green roof and provides a flexible play surface.



This rendering of a brightly lit craft room at The Wyatt in Toronto demonstrates how a flexible room with a sink can support a variety of activities.



The rooftop community garden at Via Verde in New York, provides an opportunity to socialize while learning about growing food and healthy living.

2.4 BUILDING LOBBY

Design lobbies that promote lingering and casual social interaction

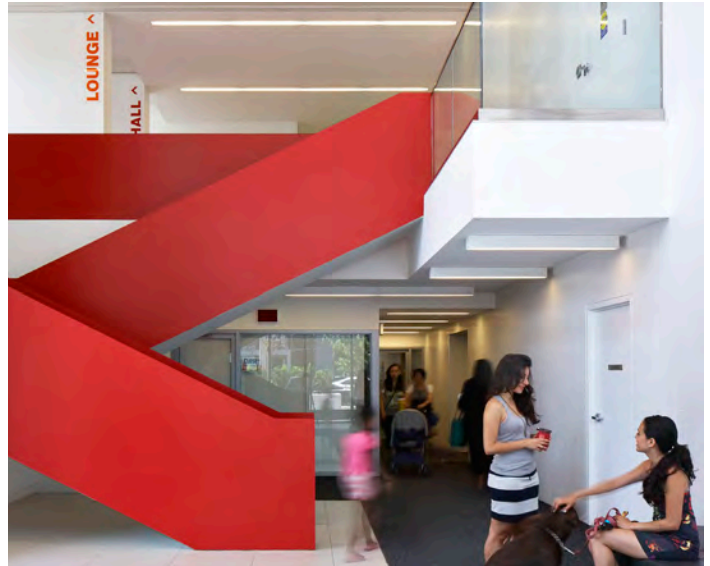
Dynamic Spaces Lobbies can be more than places to walk through, they can facilitate impromptu interactions.

Social Life A casual, welcoming atmosphere provides children and youth with a sense of belonging and the opportunity for parents to linger and socialize informally.

Functional Space Lobbies can provide convenient access to building amenities, storage rooms and wash-up stations.

GUIDELINES

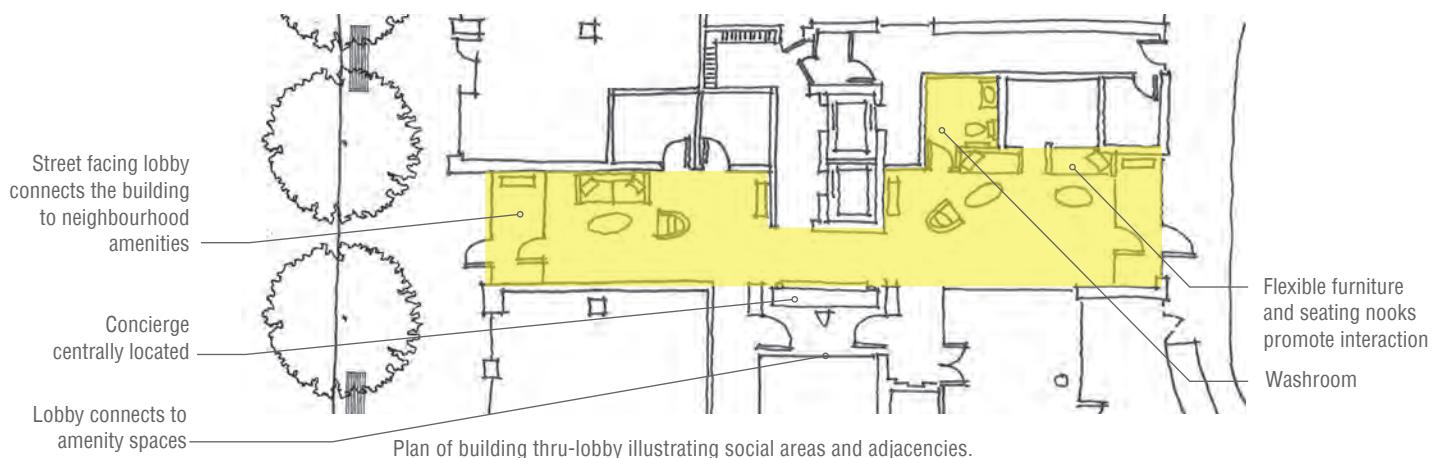
- a. Locate lobbies to animate the public realm and provide eyes on the street.
- b. Where feasible, provide a thru-lobby to connect to the rear where pick-up and drop-off areas should be located.
- c. Lobby design should:
 1. be dynamic and sized to anticipate a variety of activities;
 2. be visually connected to vehicular pick-up and drop-off;
 3. be visually and physically connected to amenity space such as multi-purpose rooms, wash-up stations and play areas to maximize social encounters and informal supervision of children playing independently;
 4. incorporate a variety of hard and soft movable seating that encourages lingering and socializing;
 5. provide a washroom for convenience; and
 6. provide space for stroller storage and bulky items.
- d. Consider providing free Wi-Fi access.



The lobby at 150 Dan Leckie Way is a dynamic space that is day-lit, which encourages people to linger. The stair connects the lobby directly to the building's amenities. Way-finding is large, colourful and legible to children.



This indoor amenity space at RMIT Bundoora West Student Accommodations in Victoria, Australia, demonstrates a flexible layout and furnishing to support a number of purposes like play, group or independent study and events.



2.5 SOCIAL CIRCULATION SPACES

Design common areas to support social interaction between neighbours



Hallways at 150 Dan Leckie Way in Toronto function as a social, play space. The building used the skip-stop typology which resulted in fewer corridors, providing them with the opportunity to become wider and naturally lit.



The elevator lobby at 230 Sackville Street in Toronto promotes socializing: it is spacious, brightly lit and provides a view overlooking the central courtyard.

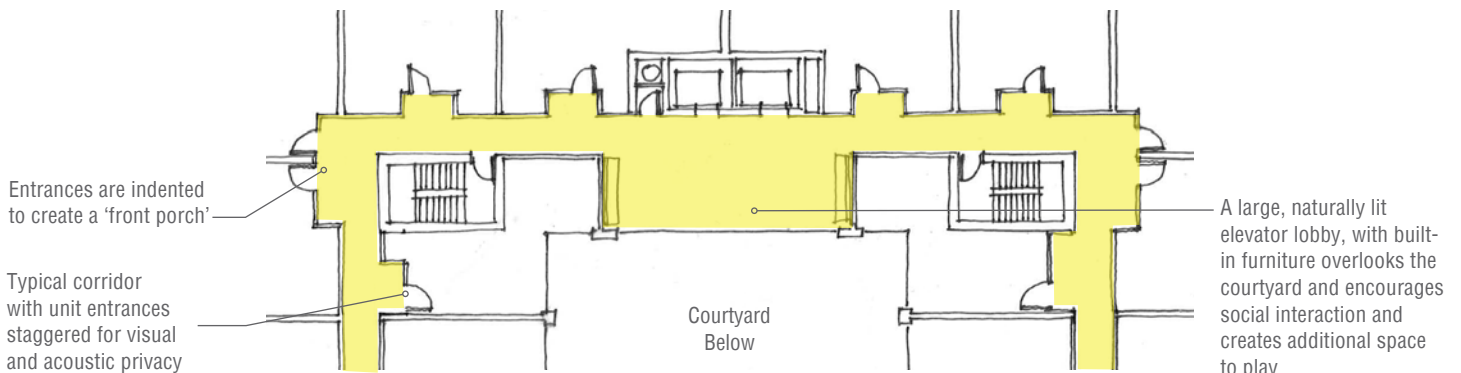
Social Interaction Circulation spaces can be designed as indoor streets to encourage opportunities for casual, social interaction.

Community Building Impromptu interactions foster a sense of community and promote children's social skills.

Active Circulation Stairs that are well designed and day-lit, encourage families living on the lower floors to take the stairs which promotes active living (and relieves elevator congestion).

GUIDELINES

- Provide wide hallways or common nooks near elevator cores to foster play and socializing.
- Consider providing access to natural light in areas, such as stair cores, elevator lobbies or at the end of corridors.
- Additional social spaces within corridors should be prioritized where large units are grouped.
- If indoor amenity space is distributed vertically throughout the building, stairs and elevator lobbies that connect these spaces could be designed to encourage socializing while facilitating informal supervision to address Crime Prevention Through Environmental Design (CPTED) principles.
- Provide furniture that is built-in and has non-flammable fabric.
- Floor and wall materials should be durable and washable, especially in areas designed for socializing or play.
- Where feasible, unit entries should be:
 - Staggered to maximize acoustic and visual privacy; and
 - Indented within hallways to create more space, like a front porch.



Plan illustrating social space at corridors and elevator lobby overlooking a courtyard in a mid-rise building

2.6 BUILDING MASSING & TYPOLOGY

Incorporate massing strategies that allow for a variety of unit types as well as innovative building massing and design

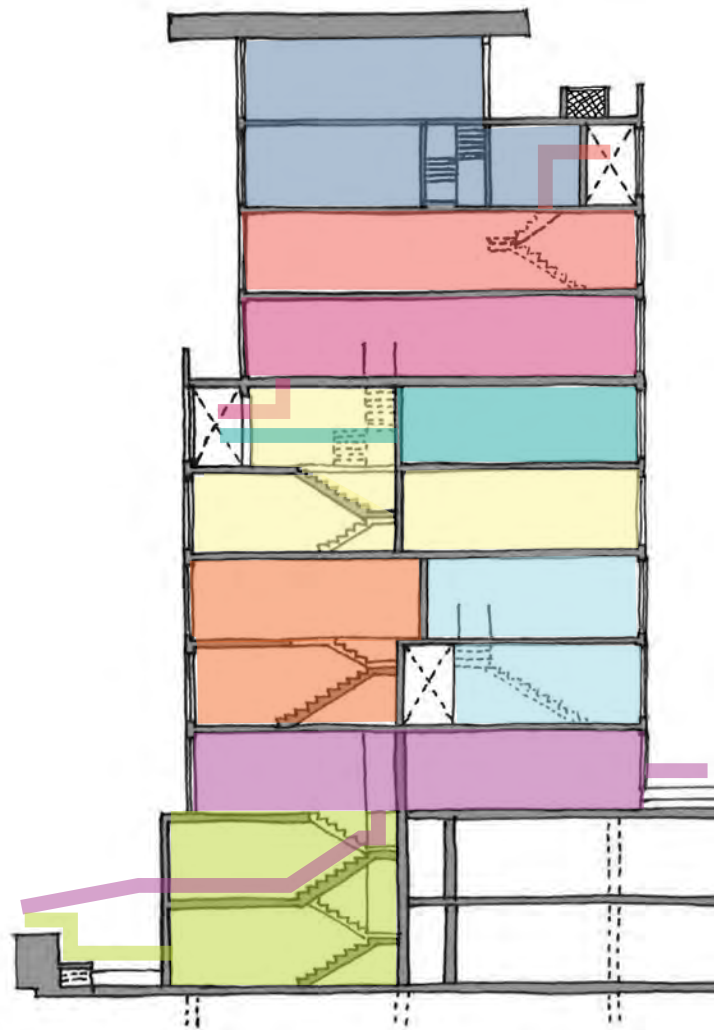
Within Toronto's Built-Form Toronto's mid-rise and tall building typologies can achieve the objectives of the Growing Up guidelines.

Beyond Toronto's Typologies Alternate typologies such as "L" or "C"-shaped buildings, as well as incorporating the skip-stop section, can result in unique design solutions.

Design Quality Emphasis on high-quality design results in a larger stock of units and buildings that are more livable.

GUIDELINES

- Mid-rise or base building massing should frame outdoor space and maximize corners, such as "C" or "L" shaped buildings which facilitate the layout of larger units and which allow outdoor space to be overlooked by the units above.
- Orient the building and its outdoor space to maximize access to sunlight on outdoor space while ensuring separation distances maximize access to light, views and privacy between units.
- Where feasible, the majority of the large units should be ground-oriented and lower in the building, see Guideline 2.1(c) Building Configuration.
- Where feasible, consider innovative massing strategies in order to accommodate outdoor space, see Bayside example in Guideline 1.3 Child Care Facilities.
- Consider multi-level units which separate living and sleeping areas, improving acoustic privacy. Ensure that no space in the unit is further than 18m from an exit as per the Ontario Building Code.
- Consider a skip-stop building section that favours multi-level units; increases access to natural light; provides through-unit ventilation; and eliminates the need for a common corridor on alternate floors. Where feasible, consider day-lighting and widening the remaining corridors so that they are able to function as social areas
- When designing a master-planned community, consider sizing the block plan to suit alternative massing typologies.

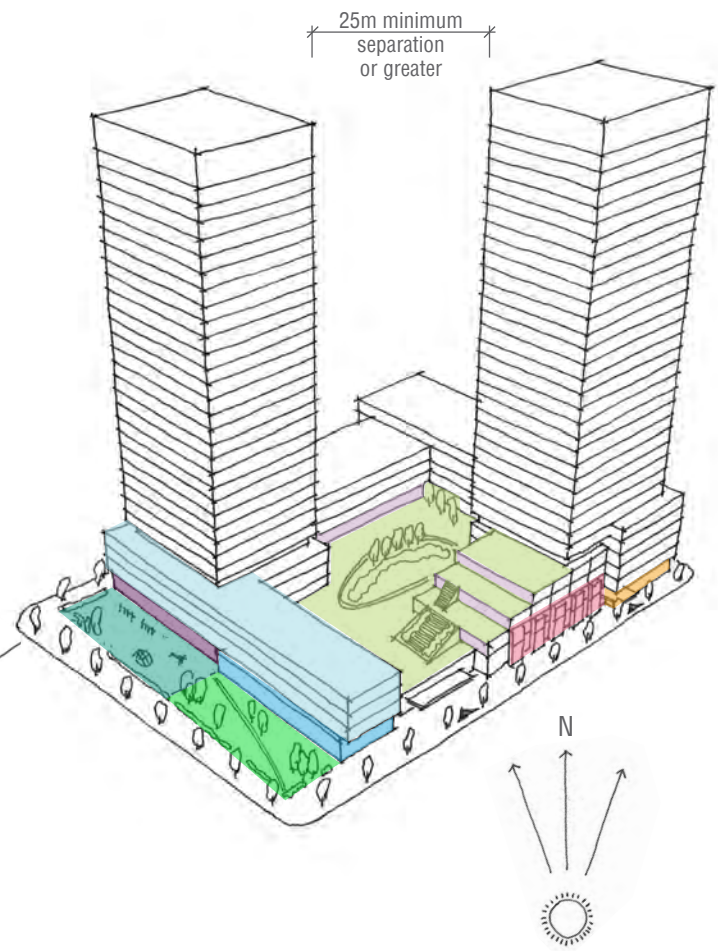
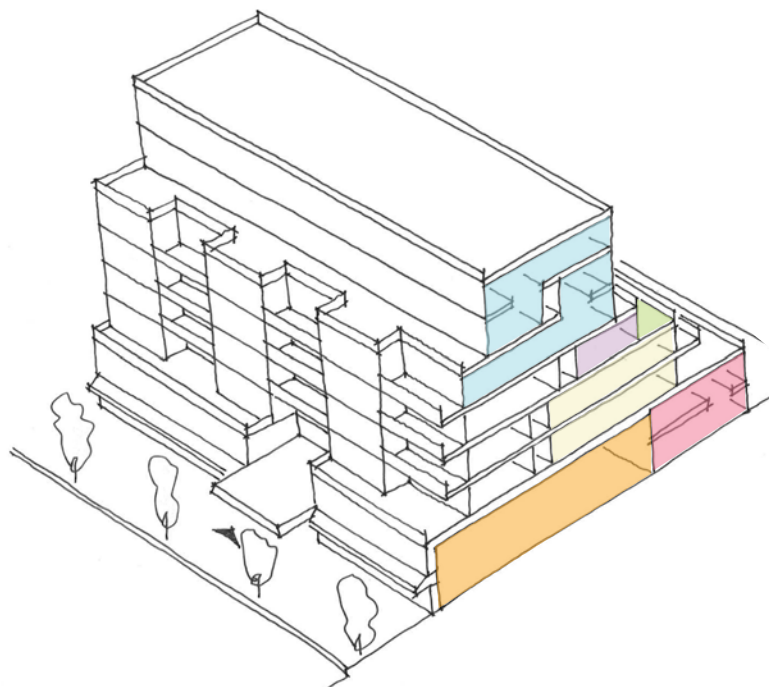


The podium section from 150 Dan Leckie Way demonstrates how two level units can be stacked. The three corridors (annotated above with an 'X') demonstrate how units with two levels eliminate the need for a corridors on every floor.

Skip-Stop Section

Skip-stop is a building typology where corridors do not occur on every level, reallocating common space and/or sale-able area to units. Units are multi-level and typically separate living areas from bedrooms. This innovative design allows for light on both sides of the unit and cross ventilation through the unit. In the Appendix, Unit example 8A and 8B demonstrate the interlocking plans.

- Outdoor amenity space
- Community Centre
- Indoor amenity space
- Park
- Deep large unit
- Child care
- Skip-stop units
- Child care outdoor play area open to the public after hours
- Retail
- Two-level unit (direct access to the lane where feasible)



Mid-Rise Buildings

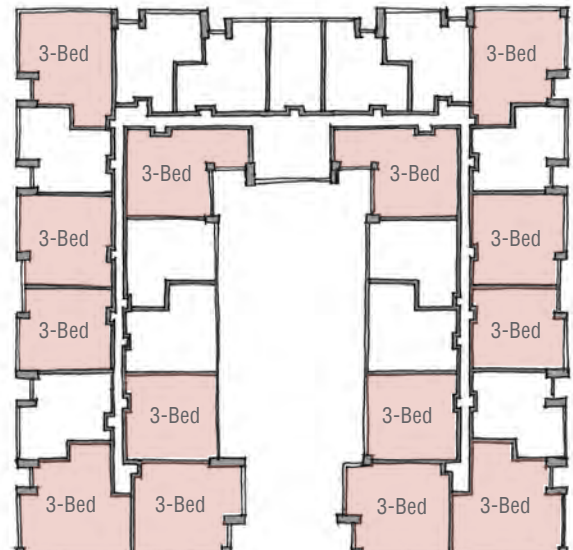
Mid-rise buildings provide a comfortable scale and relationship to the street, allow units to be closer to the ground and ensure all units are located close to amenity space which improves access for families.



The "C" shaped Ramona building in Portland frames the central courtyard to create a safe, intimate open space which is visible from the street. Children playing in the courtyard can be supervised by the units overlooking this space.

Tall Buildings

Tall buildings result in a larger amenity space requirement, providing a more diverse range of spaces which can be tailored to children. The roof of the base building provides a large, flexible area to design a variety of amenity spaces, some of which can be child-specific.



The six-story, "C" shaped Ramona building in Portland demonstrates how three bedroom units can be located on corners. The facing distance of the wings is 16m which could have been increased to maximize sunlight penetration.

2.7 PRIVATELY OWNED PUBLICLY-ACCESSIBLE SPACES (POPS)

Provide child-friendly POPS to expand and connect the network of open spaces within the public realm

Network of Spaces POPS contribute to the network of open spaces and provide alternative pedestrian connections in a neighbourhood. They provide both a memorable destination for children or resting places for families passing by. POPS should complement and not replace the City's overall parks and open space networks

Social Interaction When a development provides at-grade open space, the opportunity for neighbours to engage with each other and develop stronger social bonds is enhanced.

Flexibility The size and design of the POPS should accommodate a range of uses and programming opportunities such as temporary art installations or performances.

GUIDELINES

- New POPS should adhere to Toronto's *Urban Design Guidelines for Privately Owned Publicly Accessible Space*.
- Provide a POPS if on-site parkland dedication is not feasible and if there is no park within 250-500m, or 5-10 minute walking distance of a new development site.
- New development that is not within 250-500m of a playground should prioritize flexible child-friendly features such as whimsical, playful landscape elements.
- The design and location of POPS can include courtyards, forecourts and gardens to provide resting places for families en-route to destinations.
- Use POPS to provide mid-block pedestrian connections to nearby child-specific destinations, where feasible.



A POPS playground at the Unilever corporate forecourt in Hamburg allows for children's play, as a way of animating their publicly accessible frontage.

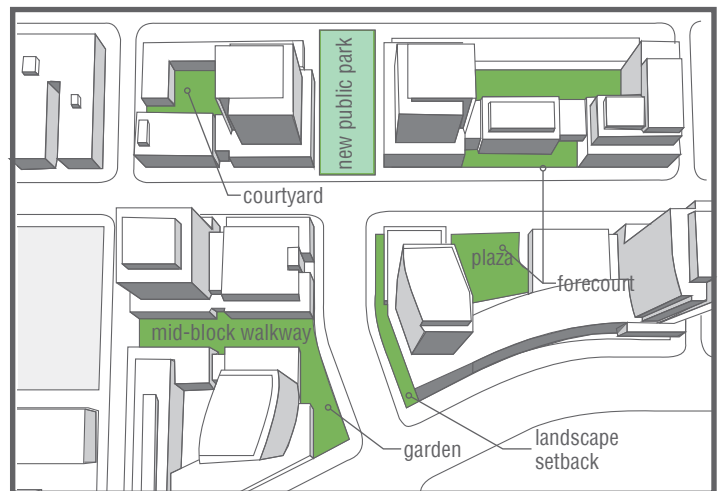


Illustration from the City of Toronto POPS Guidelines demonstrates different types of open spaces and their potential relationships to each other.



The POPS at 5435 Yonge Street features a playground for residents and neighbours. A pedestrian mid-block walkway is also provided to connect the playground directly to Yonge Street. The fencing provides a physical barrier to enclose children, but the walkway leading into the POPS is left open to clearly articulate public accessibility.

2.8 STORAGE & UTILITY NEEDS

Provide ample, convenient and secure storage for larger items



Stroller parking and cubby shelving at the Pluche Ukkel Nursery in Belgium.

Utilitarian Needs Families need utilitarian space for messy activities and to address their dog's needs, where required.

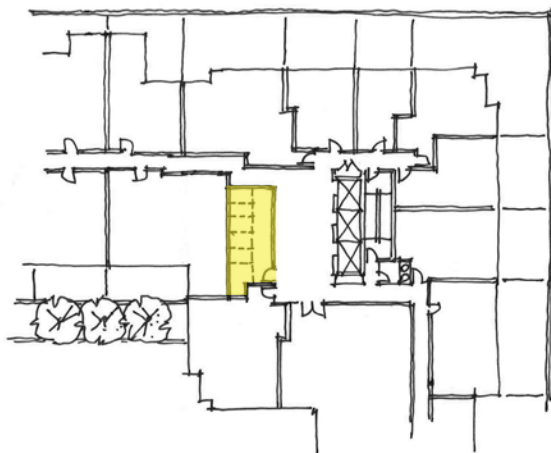
Convenient Stroller Storage In vertical communities the stroller is often the primary family vehicle. Storage rooms allow families and their guests the ability to easily store strollers.

Seasonal Storage Families require additional storage space for seasonal clothing and gear such as sports equipment. Additional storage can be provided on floors with large units or in unused space within the building's parking garage.

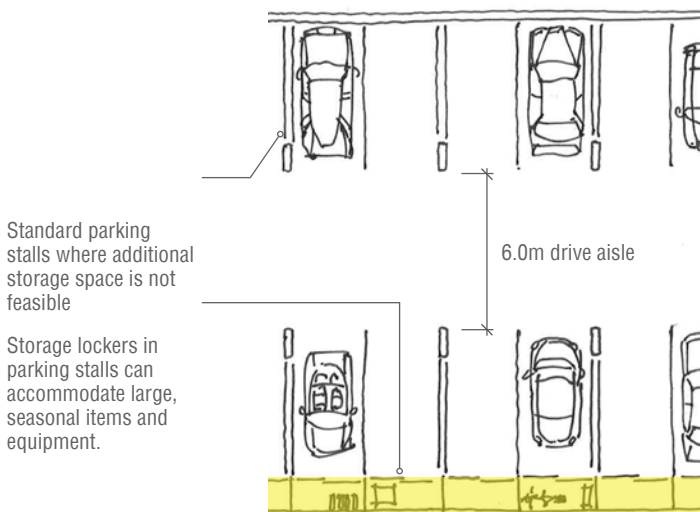
Extra Equipment Families often have multiple bicycles as well as equipment such as trailers or cargo bikes. Residents can also allocate storage space for shared wheeled toys or shopping carts.

GUIDELINES

- Provide a wash-up room for bicycles, pets and strollers.
- Provide an outdoor pet relief area for dogs in order to address impacts on the public realm.
- Provide a work room with necessary tools to support messy activities such as bicycle and furniture repairs.
- Provide a storage room for strollers or wheeled toys near the concierge/lobby, ideally adjacent to elevators or on residential floors throughout the building.
- Consider a storage/flex room adjacent to the outdoor amenity space for strollers and shared wheeled toys.
- Where feasible, provide communal storage or individual storage lockers above the minimum requirement, prioritizing floors with larger units. The full vertical height should be accessible. Explore locations in the base of buildings with deep floor plates.
- Where parking garage layouts result in unusable area, consider individual storage adjacent to the required minimum parking space. Lockers should be a minimum of 1.2m deep; fill the width and height of the parking stall; and be fire separated and ensure sprinkler coverage.
- Explore opportunities for storage in unusable areas in the parking garage, such as corners. These spaces can be enclosed to store large equipment such as bicycle trailers or cargo bikes.



Plan illustrating private storage lockers within a deep floor plate.



Standard parking stalls where additional storage space is not feasible

Storage lockers in parking stalls can accommodate large, seasonal items and equipment.

Plan illustrating personal storage in parking stalls that are deeper than required.



3.0 UNIT

- 3.1 Entrance & Storage**
- 3.2 Laundry**
- 3.3 Kitchen & Dining**
- 3.4 Living Room**
- 3.5 Bedrooms**
- 3.6 Balcony & Terraces**
- 3.7 Unit Flexibility**

GUIDELINES

- a. The ideal unit size, based on the sum of the unit elements is:
 1. two bedrooms 90m² (969sf); and
 2. three bedroom 106m² (1140sf).
- b. The following ranges represent a diversity of bedroom sizes while maintaining the integrity of the common space to ensure their functionality:
 1. two bedrooms 87 - 90m² (936 - 969sf); and
 2. three bedroom 100 - 106m² (1076 - 1140sf).
- c. Unit size floor area is to be measured from the interior side of the walls, excluding mechanical space.

Any unit larger than one bedroom should be thoughtfully designed to accommodate children. The design of a unit that is suitable for families relies not only on size, but on functional, good design. As children go through their stages of development, they have distinct needs, including safety and the desire for varying levels of independence. For example, appropriately sized bedrooms can adapt to various configurations and can comfortably accommodate two people. The ability for the unit to respond to changing spatial needs ensures that families can invest in, and remain in their units through various life stages.

The Guidelines recommend minimum areas for each unit element to ensure that a family's needs are provided for comfortably and efficiently. While overall minimum unit sizes are recommended, there is flexibility in how designers can arrange unit elements, resulting in a variety of unit sizes, depending on the layout and the efficiency of the connecting spaces such as corridors, or, in the case of multi-storey units, stairwells.

The unit above in Manhattan, designed for a family of Japanese origin, was inspired by a 'bento box'. It addresses the needs of the family through flexible partitions, built-in furniture and by stacking an office on top of a walk-in closet.

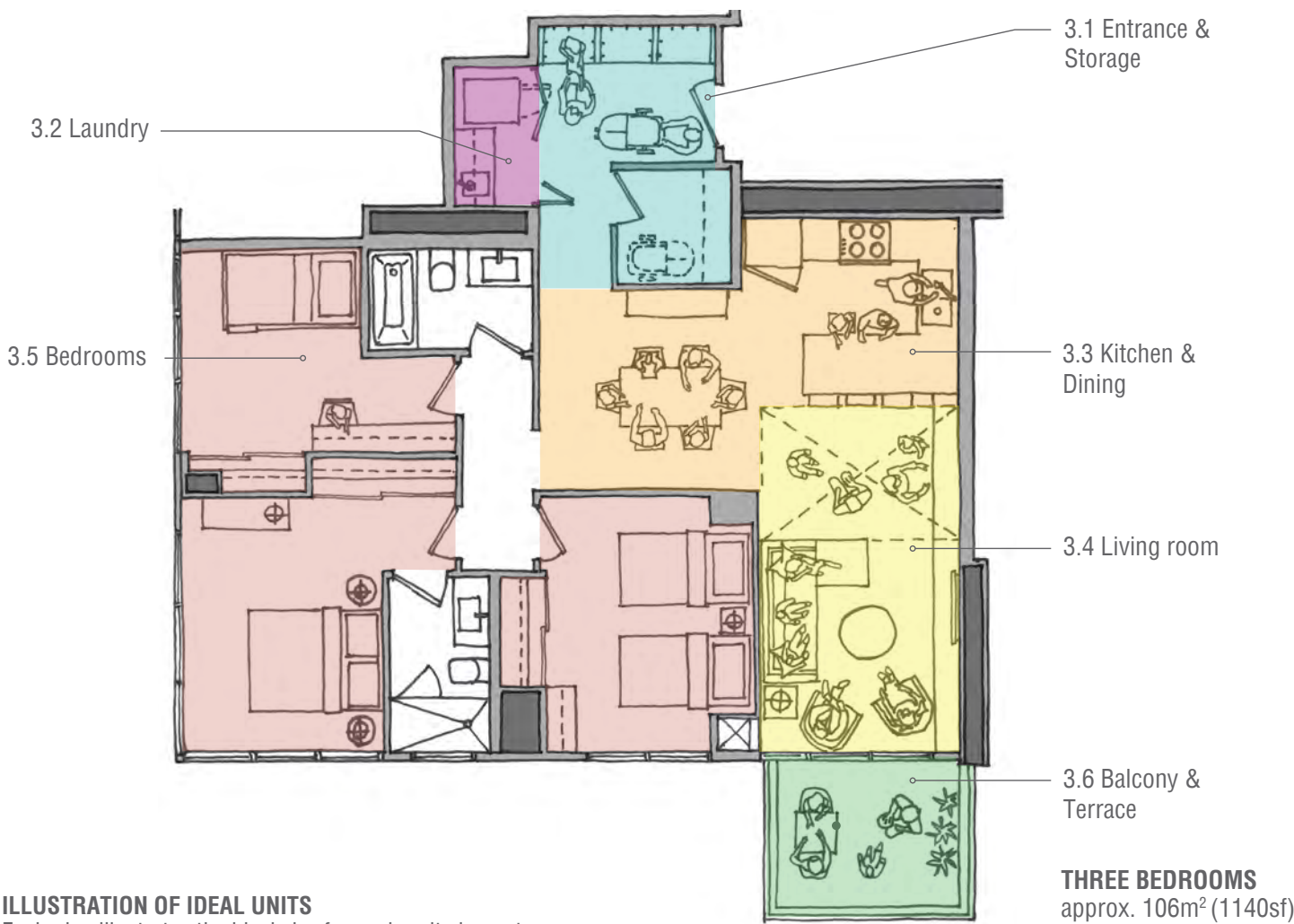


ILLUSTRATION OF IDEAL UNITS
Each plan illustrates the ideal size for each unit element.

3.1 ENTRANCE & STORAGE

Provide space to comfortably enter and exit, and store items

Multi-functional Entries are the landing or launch pad where families get ready or unload items that might be messy. They are also places to store large items that are used on a daily basis.

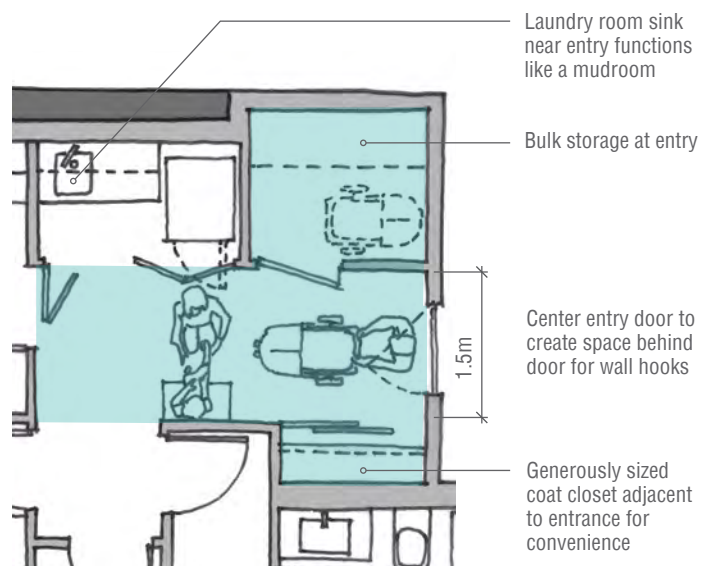
Gateway Entrances function as the transitional space between private units and shared corridors, therefore acoustic and visual privacy are important considerations.

GUIDELINES

- Provide a minimum area of 4m^2 and a minimum width of 1.5m to accommodate four people, a stroller and room for circulation and seating. A clear area of $1.5\text{m} \times 1.5\text{m}$ meets accessibility requirements.
- In buildings with double-loaded corridors, stagger entrances to increase privacy and minimize acoustic impacts.
- Consider acoustic ratings above the minimum required to provide greater privacy and comfort.
- Consider recessed entrances to provide personalization and to offer additional transitional space for people to linger.
- Provide a coat closet with a minimum width of 0.3m per occupant, based on 2 people per bedroom: 1.2m for two bedroom units and 1.8m for three bedroom units.
- Provide storage closets for outerwear and large seasonal items with a minimum area of 2.5m^2 with a minimum depth of 1.4m to allow for 0.45m deep shelving and 0.9m space in front of shelving.
- Maximize vertical space by using full height closet doors.
- Provide a bathroom for quick access to a toilet or sink.
- Provide a laundry room with a sink which can double as a mud room for washing up.
- Include blocking to anticipate wall hooks and shelving.
- Storage areas should be made of durable materials to withstand frequent use.
- Maximize usable wall space to accommodate built-in storage walls or furniture.



Generous entrance with full-height storage and hooks provides space for large items, such as a stroller, as well as a place to sit when getting ready.



Plan diagram illustrates entryway and adjacencies.

Provide space for laundry and utility



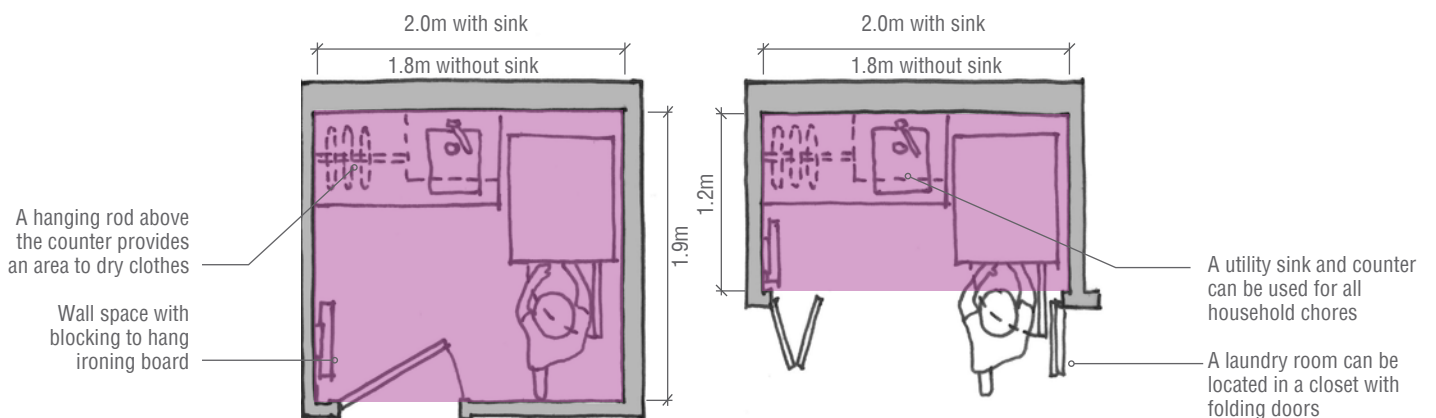
Shelving, fold-out drying racks and counter space above the appliances efficiently provide all the necessities of a laundry room.

Daily Chores Children generate a significant amount of laundry.

Utility A generous laundry room provides additional space to repair items and store household cleaning supplies.

GUIDELINES

- Locate the laundry room in a convenient location in the unit, such as adjacent to the entrance so that the laundry room can function as a mudroom.
- If located in a room, provide a minimum area of 3.4m² with a minimum depth of 1.9m. If located in a closet, provide fully operable doors, a minimum depth of 1.2m and a minimum area of 2.2m².
- Include an outlet for an iron or steamer.
- Maximize vertical space for storage and to hang-dry items.
- Provide space for a folding table, hamper, ironing board and a high shelf or cabinet for safe detergent storage.
- Provide space for standard-size-appliances.



Plan diagrams illustrate a laundry room and a laundry closet

3.3 KITCHEN & DINING

Kitchen and dining areas should be large enough for families to cook, socialize and eat together

Social Nucleus The kitchen is the family hub. It is more than an area for food preparation, but is also where the family gathers.

Family Time A generous dining area accommodates the whole family and is also flexible for other uses. There are proven health and social benefits associated with eating together as a family.

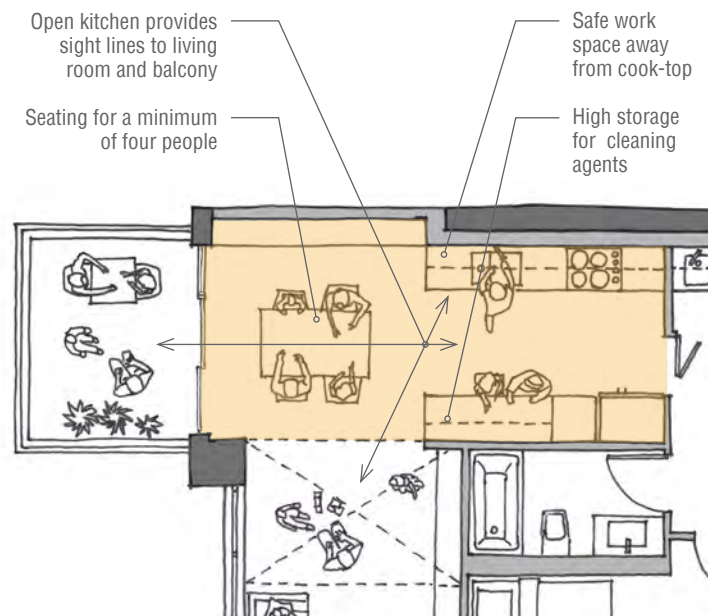
Teaching Opportunity Cooking with children teaches the importance of nutrition and skills such as math and planning.

GUIDELINES

- The kitchen area should be a minimum of 9m².
- Where feasible, the kitchen should be visually connected to the living area and balcony to allow for supervision.
- Where possible, include a window in the kitchen to provide visual access to outdoor play space.
- Provide counter space away from the cook-top for safety.
- Maximize vertical space for storage.
- Include standard-size-appliances and a large format sink.
- The dining area should accommodate seating at a rate of two dining spaces per bedroom and have a minimum area of 9m² in order to allow for communal eating. Furniture such as a dining table, chairs and storage should fit in the dining room, in addition to circulation space.
- Explore built-in kitchen furniture such as islands that can transform and extend into a table to seat a family.
- The dining area should be flexible to accommodate other functions such as homework, games and crafts.
- The dining area should include electrical outlets, USB ports and storage for electronics.



Seating nooks provide a comfortable place for children to sit and safely help with food preparation offering learning opportunities.



Plan diagram illustrates kitchen, dining area and adjacencies.

Provide space that accommodates the social needs of a family

Social Space Generous living rooms provide space for families to relax, study, play and connect.

Adjacent to Kitchen When living rooms are visually connected to kitchens, caregivers can supervise children at play.

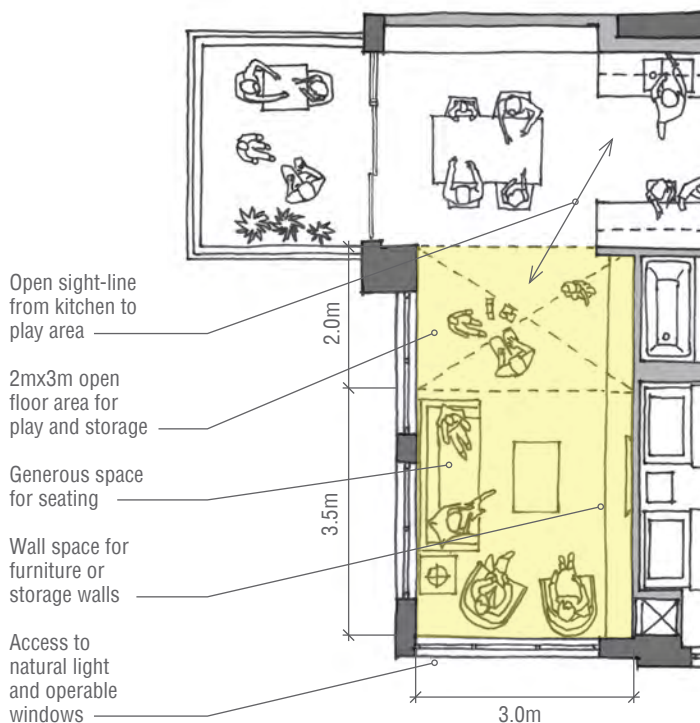
Separation from Bedrooms Acoustic and visual privacy is provided when bedrooms are located away from the living room.

GUIDELINES

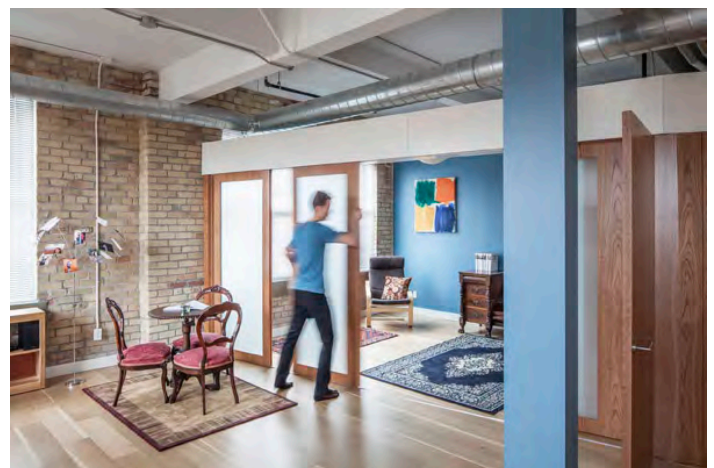
- a. Provide a minimum area of 16.5m² to accommodate a standard size sofa, a chair, a coffee table and a storage cabinet, in addition to a 2mx3m flexible play space that includes storage furniture.
- b. Living rooms should:
 1. have visual and acoustic separation from bedrooms to maximize privacy;
 2. have access to natural light and operable windows;
 3. have visual access from the kitchen to allow supervision of young children; and
 4. maximize wall space for furniture placement such as linear storage walls.



A brightly lit living space at Hicks Street Residence in New York provides a flexible area for a family with views from the kitchen to allow for informal supervision.



Plan diagram illustrates living room and adjacencies.



The Chocolate Loft in Toronto demonstrates how flexible walls allow the user to adapt their space to their changing needs throughout the day.

3.5 BEDROOMS

Design bedrooms as high-quality spaces with operable windows, space for homework and appropriate storage

Livability & Functionality An ideal bedroom is a high-quality space with access to light and air; space to play and do homework; and adequate space for storage.

Privacy The need for visual and acoustic privacy increases as children age.

GUIDELINES

- In large units, one bedroom should be a minimum of 11m², not including the closet. The remainder of the bedrooms are encouraged to be 11m², but a variety of bedroom sizes could be provided, ensuring that no bedroom is smaller than 8m².
- The bedroom size should accommodate a closet and bed as well as a full-height storage wall that could include a desk.
- Each bedroom should accommodate a minimum of two people in various sleeping configurations.
- Bedrooms should be physically separated from and not open directly onto living areas for visual and acoustic privacy.
- Bedrooms should have exterior windows to provide direct natural light. Where feasible, windows should be operable, with that portion higher up for safety, and to prevent objects falling out.
- Consider raising windows 76cm above floor level to allow furniture to be placed against the window wall.
- Maximize vertical space:
 - anticipate bunk beds when designing the perimeter wall, provide outlets / switches higher up on the wall;
 - closets should provide access to full wall height; and
 - consider built-in furniture and integrated storage.

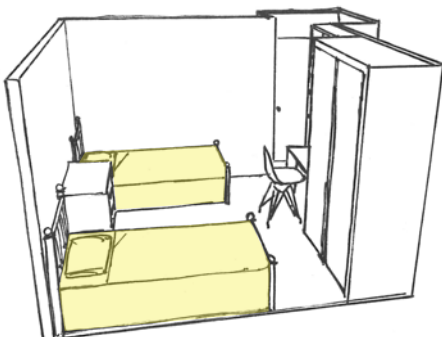


Quintana 4598 in Buenos Aires innovatively maximizes vertical space with built-in storage and furniture.

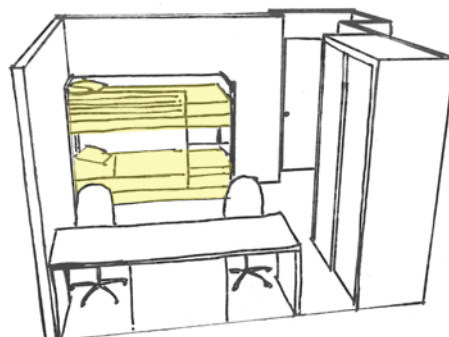


Additional storage space is made by raising the bed off the floor in the Mills Toy Management House in Melbourne Australia.

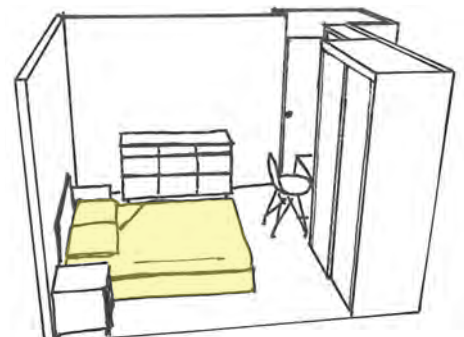
TWO SINGLE BEDS



BUNK-BED



DOUBLE BED



An adequately-sized bedroom can accommodate multiple bed configurations in addition to a closet, dresser, table and appropriate circulation space.

3.6 BALCONY & TERRACE

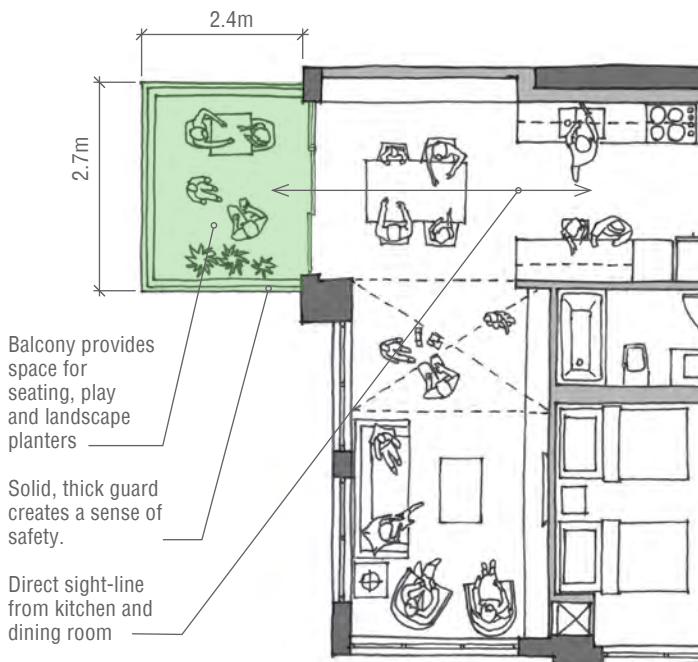
Design balconies and terraces that extend the living space and provide access to the outdoors



Wyckoff Street Townhouse in New York demonstrates how a large outdoor space can extend the living space.



The private balcony of a unit in Kent Vale, Singapore animates the living room with a movable perforated metal screen incorporated into the building facade. The screen provides safety and the ability to control sunlight.



Plan diagram illustrating a balcony and its adjacencies

Outdoor Space An appropriately sized balcony or terrace can be used for family dining and socializing, extends the living space and provides access to fresh air.

Independence Private outdoor space is one of the first experiences of independence for a child.

Safety An appropriately designed balcony or terrace provides a sufficient level of comfort to allow children to play outdoors.

GUIDELINES

- A private outdoor space should be a minimum of 2.4m deep by 2.7m wide and be designed to maximize sunlight access, safety, flexibility and adaptability and be free of uncomfortable wind conditions.
- Provide guardrails with minimal gaps or no gaps to increase safety and prevent small items from falling.
- Where possible, provide inset balconies to provide a more comfortable space, reduce building bulk and limit overlook.
- Design balconies to support planters, which provide children with learning and food growing opportunities.
- If the terrace is adjacent to outdoor amenity space, provide access through a gate for convenience.
- Where feasible, consider loggias and enclosures to extend the usability of balconies throughout all seasons as well as movable screens to maximize safety and provide opportunities for shade, if desired. Ensure that these elements are incorporated into the building's structure and that they are designed for wind loads.

3.7 UNIT FLEXIBILITY

Units should be adaptable and allow for layout change over time

Daily Space Needs Units with movable furniture and walls allow families to use space more efficiently and for multiple purposes.

Long-term Space Needs Units that are flexible adapt to a family's varying life stages allowing them to expand and contract the private space within the unit. For example, space for toddler play can be transformed into a teenager's bedroom.

Putting Down Roots If residents remain in their neighbourhoods, they may feel more invested in their community.

Affordability Units that can respond to a family's changing needs save the cost of relocation. Ideally adaptations should be easy, inexpensive and anticipated through the original design.

Alternative Construction New technologies can allow for adjustability through demountable partitions or built-in furniture. Walls can be flexible if designed as a system of movable furniture rather than using drywall construction. This type of adaptability can be provided in both rental and ownership tenures.

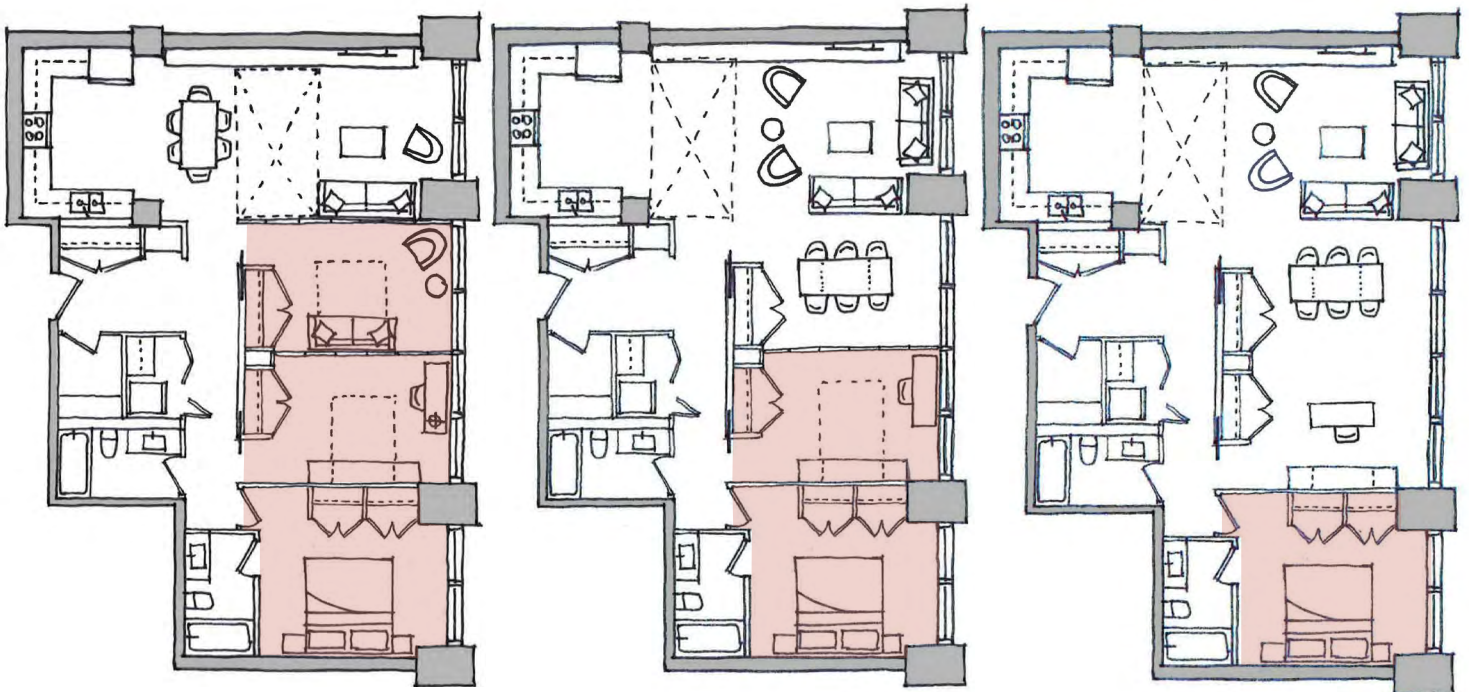


IKEA and PKMN Architects are testing movable walls and fold-away furniture for modifying small spaces. This emerging technology offer an inexpensive solution for adding flexibility to the unit.

THREE BEDROOM UNIT

TWO BEDROOM UNIT

ONE BEDROOM UNIT



Plans illustrate how daily or long-term space needs are accommodated in a 106m² unit: plans adapt into 3 configurations using folding walls and sliding pocket doors.

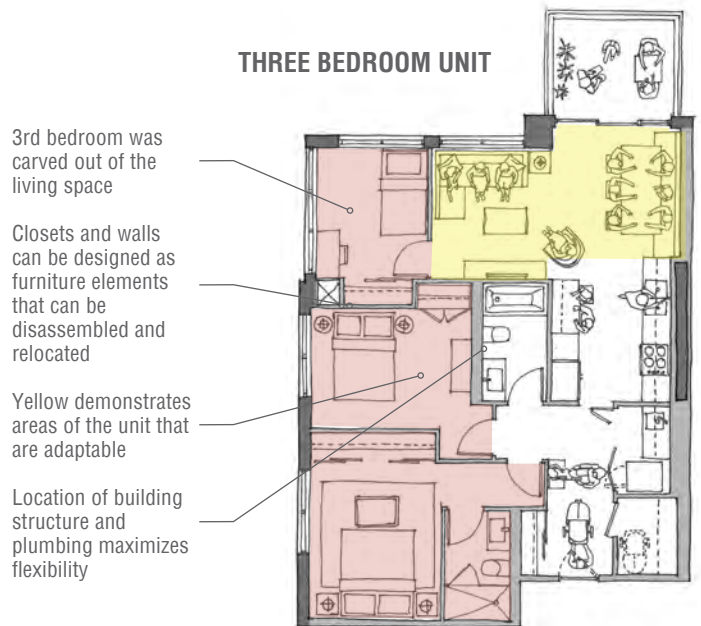
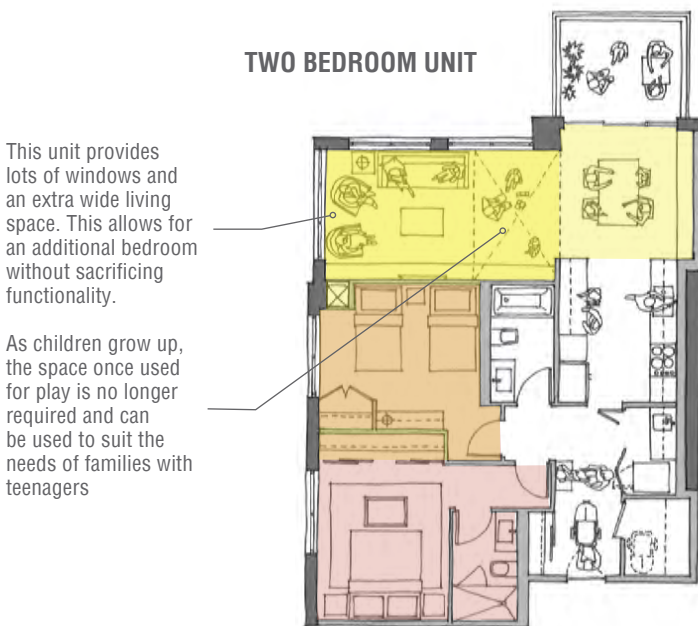


In Le Corbusier's Unite d'Habitation, sliding doors between two rooms provide flexibility for the rooms to function as playrooms, bedrooms or an office. Rooms fully connect to private outdoor space with large glass doors.

The ability of a homeowner to adapt their space (using pre-fabricated building components) rather than undertake a more traditional demolition/renovation avoids the condominium board approval process. For example, designs for new buildings can anticipate the location of future walls and doors so that when a layout change is needed, there is no need to attach permanent framing to common element surfaces.

GUIDELINES

- a. Design adaptable units for daily needs by using movable walls and fold-away furniture for easy space modifications.
- b. Design adaptable units for long-term needs by:
 1. using alternative construction methods such as demountable partitions, pre-fabricated elements or modules rather than drywall and framing; and
 2. designing elements such as closets as movable furniture that can be relocated.
- c. Additional bedrooms should follow the Ontario Building Code and Guideline 3.5 Bedroom in this document.
- d. Units should be adaptable and avoid shear walls, see Guideline 2.2 Flexible Building Design & Construction.
- e. Condominium corporations are required to retain dimensioned, as-built drawings for residents who wish to undertake renovations. Toronto Buildings provides this information through their routine disclosure request service.



Plans illustrate how a 2-bedroom unit can be easily converted to a 3-bedroom unit, without decreasing functionality



4.0 APPENDIX

- 4.1 Case Studies
- 4.2 Unit Examples
- 4.3 Official Plan Policy References
- 4.4 Image Credits

4.1 CASE STUDIES

AVAILABLE ON-LINE ONLY

www.toronto.ca/growingupto

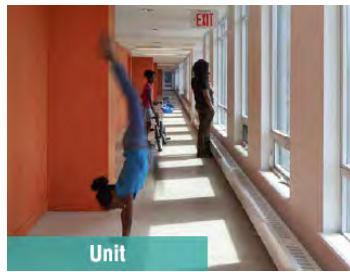
There are a number of projects, across Toronto and internationally, which demonstrate good planning for children and youth. The projects showcased online illustrate how good design at the unit, building and neighborhood scales can improve the livability for current and future families residing in vertical communities.

The Toronto case studies were selected from areas across the city to demonstrate current success in planning for children. The international examples demonstrate best practices in other contexts, and while not every element of these projects could work in Toronto, the case studies highlight elements that could be replicated. Read together, the case studies show the full spectrum of possibilities that have helped inform the Growing Up Guidelines and that should guide future development which considers the perspective of the child.



Growing Up

Case Studies Compilation



Unit

150 Dan Leckie Way, Toronto, Canada



Unit

Kent Vale, Singapore



Unit

Unité d'Habitation (The Radiant City),
Marseille, France



Unit Elements

Balconies and space efficiency



Building

Bâtiment Home, Paris, France



Building

150 Dan Leckie Way, CityPlace,
Toronto, Canada



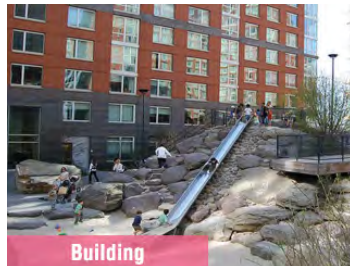
Building

NXT & NXT2 at Windermere By the Lake,
Toronto, Canada



Building

Ramona Apartments, Portland, USA



Building

River & Warren, New York City, USA



Building

Via Verde, New York City, USA



Building Elements

Circulation and flexible space



Building Elements

Storage, lobbies, courtyards
and work spaces



Neighbourhood

Concord Park Place, Toronto, Canada



Neighbourhood

The Giraffe Child Care Centre, Boulogne-
Billancourt, France



Neighbourhood

Hammarby Sjöstad, Stockholm, Sweden



Neighbourhood

North Toronto Collegiate Institute &
Residential Towers, Toronto, Canada



Neighbourhood

Parkway Forest, Toronto, Canada



Neighbourhood

Waterfront Neighbourhood Centre,
Toronto, Canada



Neighbourhood

Lee Centre, Scarborough Centre,
Toronto, Canada



Neighbourhood

Paris Rive Gauche, Paris, France

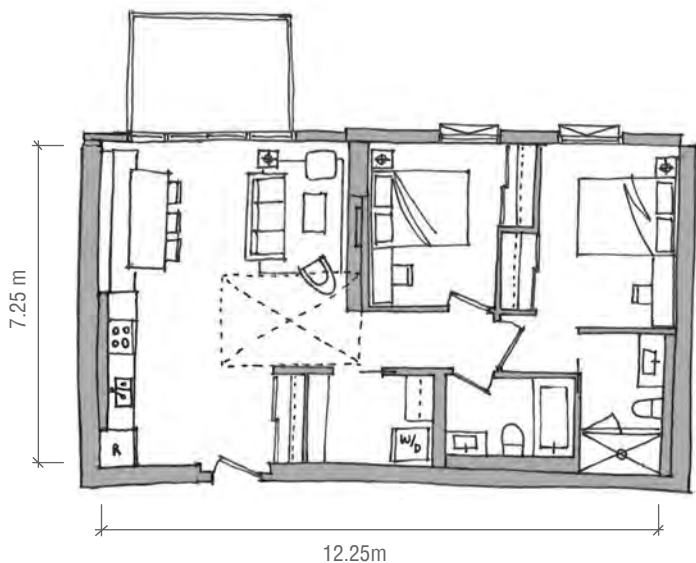


Neighbourhood

Schoolyard to Playground Initiative, New
York City, USA

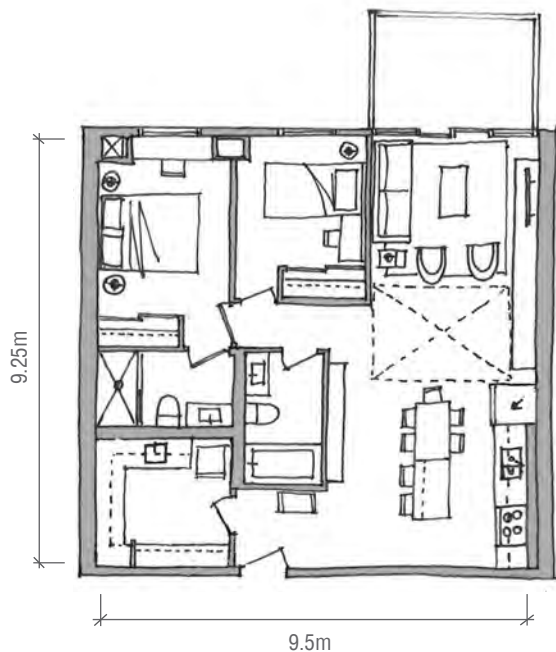
4.2 UNIT EXAMPLES

The following sample unit plans illustrate various configurations of larger units in mid-rise and tall building formats. Other sample plans can be found throughout the document: 2.2 Flexible Building Design & Construction; 3.0 Unit Intro Section; 3.7 Unit Flexibility. The dash line rectangle shows an area for flexible play.



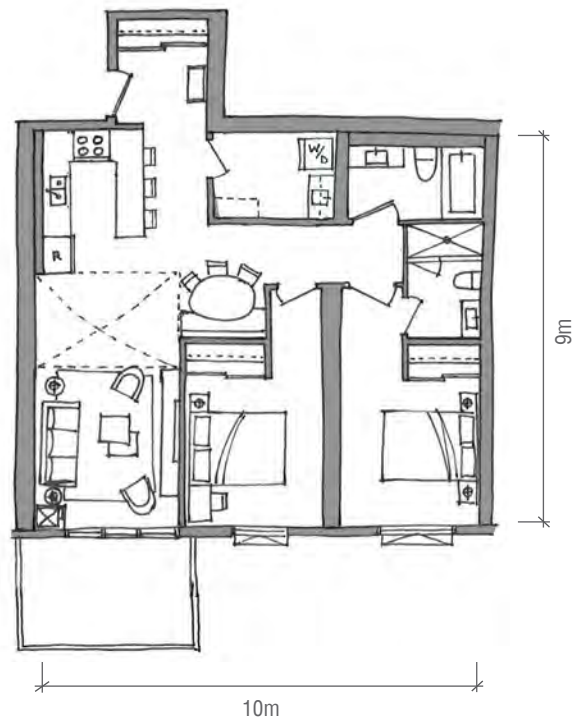
Unit 1 - two bedrooms - 85m²

This unit provides an open, flexible space where the entrance area is combined with the galley kitchen. The kitchen table includes a built-in bench



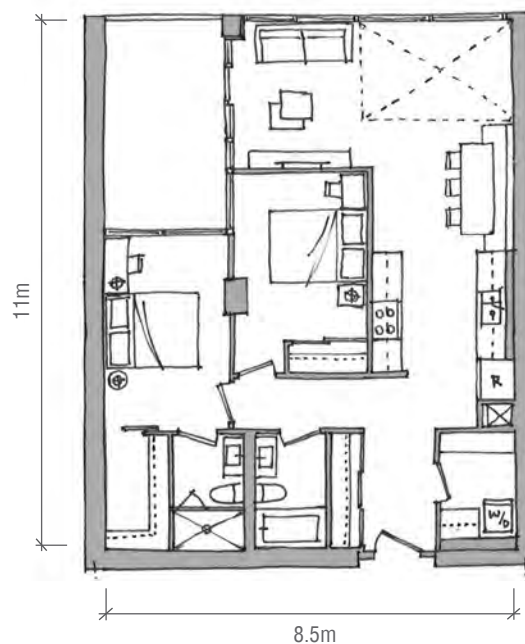
Unit 2 - two bedroom - 88m²

This unit's kitchen includes an island attached to a table, for multiple seating options. The entrance closet is combined with a laundry room which can accommodate stroller storage.



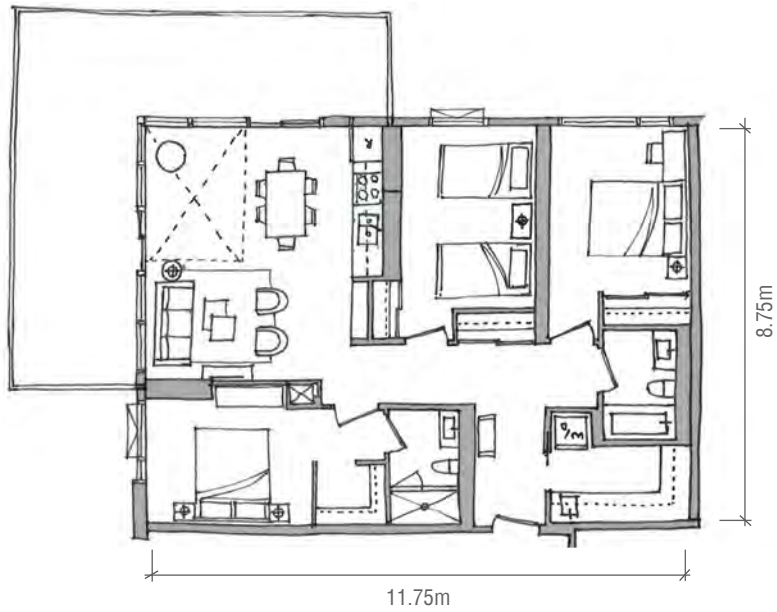
Unit 3 - two bedrooms - 90m²

This unit's kitchen table includes a built-in bench. The kitchen counter includes additional seating for children to participate in food preparation.



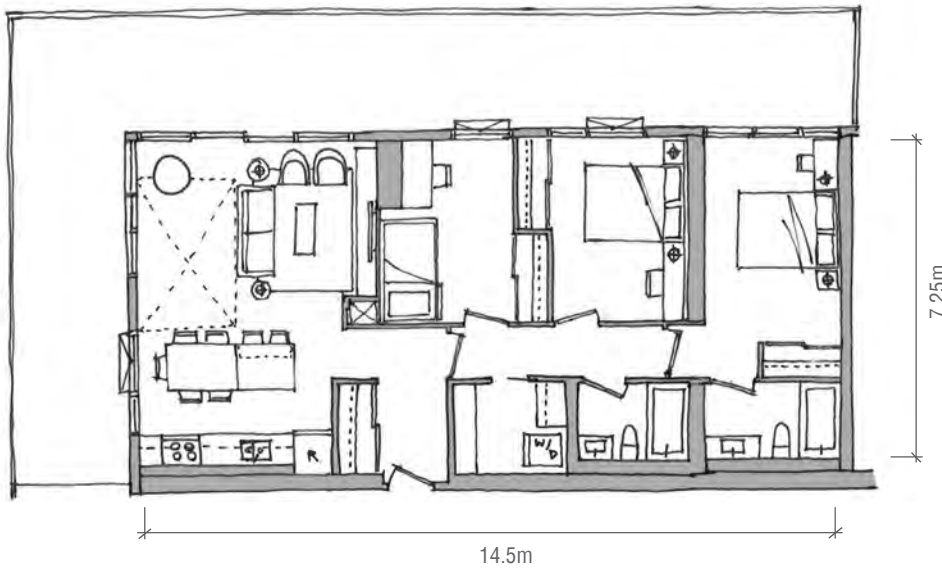
Unit 4 - two bedroom - 87m²

This unit is deeper than a typical unit, and would be located in the lower levels on a deep floor plate. The bedrooms have been located deeper in plan, and they have windows which front onto the balcony which is inset. The living room is tucked around the corner from the kitchen for acoustic privacy.



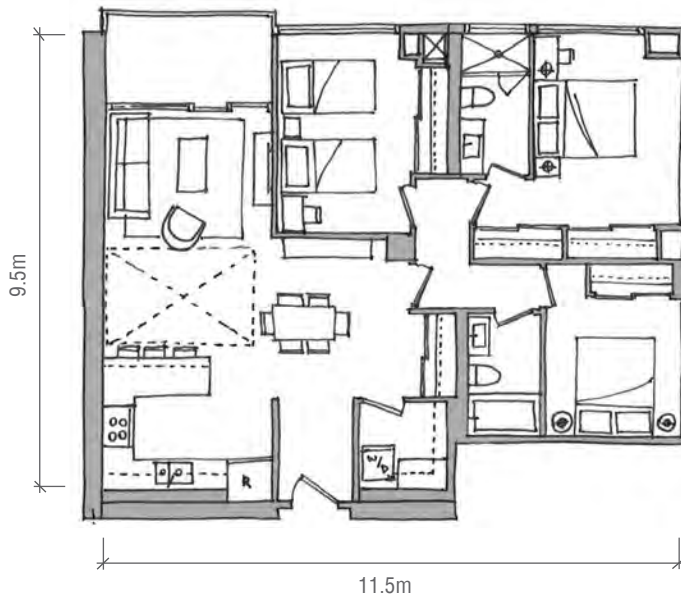
Unit 5 - three bedroom - 102m²

This unit accommodates the kitchen and living room in an efficient square shape. The entrance is adjacent to a long laundry room which can accommodate stroller storage.



Unit 6 - three bedrooms - 105m²

This unit features a shallow plan, typical of the upper levels of a mid-rise building. The bedrooms are separated from the living areas with a door, to increase acoustic privacy. The kitchen island is attached to the table, for multiple seating options.



Unit 7 - three bedrooms - 101m²

This unit demonstrates a variety of seating areas at the kitchen table or counter. The bedrooms are separated from the living areas with a door, to increase acoustic privacy.

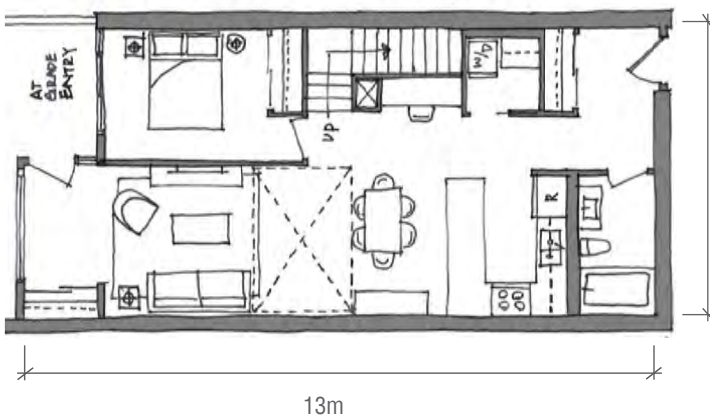
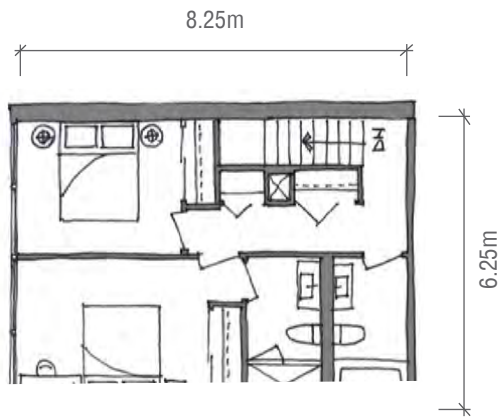
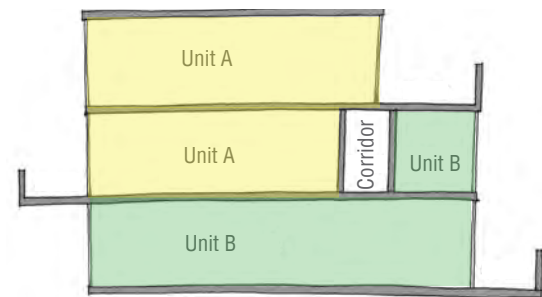
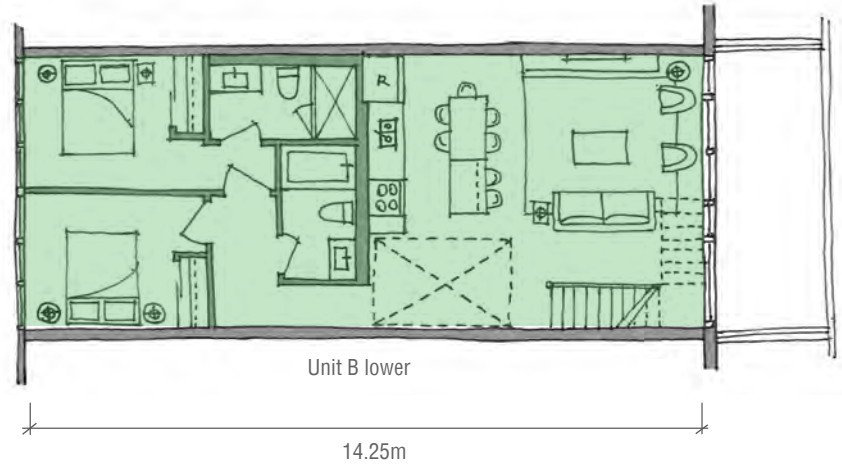
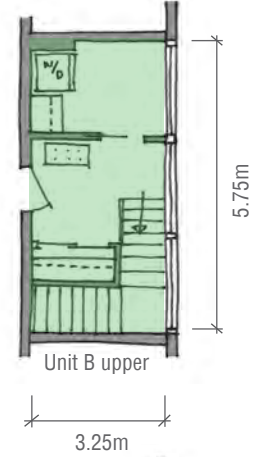
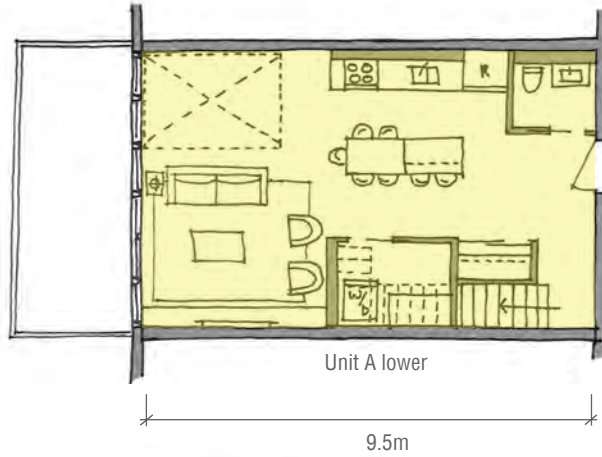
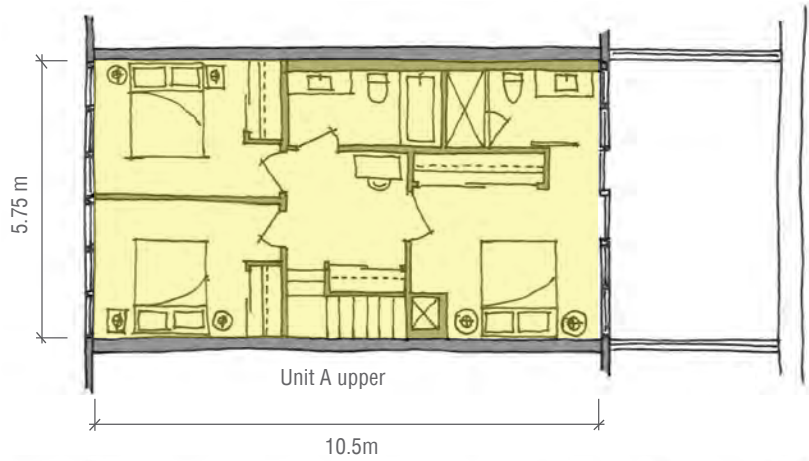
(Right column) Unit 8A and 8B, as seen in the section below, are interlocking and demonstrate a skip-stop design (see Guideline 2.6 Building Massing and Typology).

Unit 8A - three bedroom - 113m²

This unit is located at the top of a mid-rise building. It is laid out on two floors and the top floor does not require elevator access or common corridor space. The lower floor features a generous entrance area that overlaps with the kitchen area. The upper floor has windows on both sides which improves natural ventilation. The landing between the bedrooms could accommodate a desk or additional storage.

Unit 8B - two bedroom - 101m²

This unit is accessed from the common corridor where there is an entrance closet and a large utility closet for stroller storage. The remainder of the living space is all on one floor that has windows on both sides which improves natural ventilation.



(Left) Unit 9 - three bedroom - 129m²

This unit features an at-grade entrance for convenient access to the street. The bedroom on the ground floor can be converted into a larger living space or remain a bedroom.

4.3 IMAGE CREDITS

Note: images not listed here belong to the City of Toronto.

INTRODUCTION

- P.1 Kid draws, Project Team
- P.5 Mural on a condominium building, Jake Tobin Garrett
- P.5 Water Guardians, Nicola Bentts
- P.7 Elizabeth Street Playground, Toronto Archives
- P.7 Tower in the park, Jesse Colin Jackson
- P.9 Separated bicycle lanes, Jennifer Hyland
- P.12 Playground, Monstrum

NEIGHBOURHOOD

- P. 14 Neighbourhood cover page, Hans Kylberg
- P. 17 Midtown loop, Public Work
- P.17 Bicycle wheel channel, Steven Vance
- P.17 Bike playground, Cascade Bicycle Club
- P.18 TO Core Playground Map, Public Work
- P.18 Ron Joyce Children's Health Centre, Earthscape/Chance Faulkner Photography
- P.19 Southeast False Creek, PWL Partnership
- P.19 Underpass Park, Nicola Betts
- P.19 Park an der Marienburger, Kamila Crigo
- P. 20 Child care in Tokyo, Tezuka Architects
- P. 20 Bayside child care, Tridel
- P. 21 Bergamot child care plan view, Hilditch Architects
- P.21 Bergamot child care photo, Hilditch Architects
- P.22 North Toronto Collegiate, CS&P Architects
- P.22 Playground, Trust for Public Land
- P.23 Seniors/child care, Bernard Weil/Toronto Star via Getty Images
- P.23 North Toronto Collegiate interior, CS&P Architects
- P. 24 St. Lawrence Market, DTAH
- P.24 297 College, Condos.ca
- P.25 Giraffe Child Care Centre, Philippe Ruaut
- P.25 Harbourfront Pond, Agropur Cooperative
- P.25 Harbourfront rink, Opérations Canada
- P.25 Skateboard park, SNE Architects
- P.26 Tumbling Bay, David Grandge
- P.26 Community Food Centre, Community Food Centre
- P. 27 'I LIVE IN THE CITY', Rafi Ghanaghounian

BUILDING

- P.28 Via Verde, David Sundberg/ Esto
- P.30 150 Dan Leckie Way, Maris Mezulis
- P.31 T3 Building, Blaine Brownell
- P.32 Community Food Centre, The Table
- P.33 Rooftop, Tod Bookless
- P.33 Craft room, The Daniels Corporation
- P.33 Rooftop community garden, David Sundberg/ Esto
- P.34 150 Dan Leckie Way lobby, James Brittain
- P.34 Indoor amenity, Dianna Snape
- P.35 150 Dan Leckie Way hallway, James Brittain
- P.35 230 Sackville St, Toronto Community Housing
- P.37 Ramona building, Sally Painter Photo
- P.38 POPS Playground, Public Work
- P.39 Stroller Parking, Pluche Ukkel

UNIT

- P.40 Akiyoshi residence, KOKO Architecture
- P.42 Entrance, Elissa Crowe Photography
- P.44 Seating nooks, IKEA.ca
- P.45 Living space, Francis Dzikowski/ OTTO
- P.45 Chocolate loft, Steven Evans
- P.46 Quintana 4598, Federico Cairoli
- P.46 Raised bed, Peter Bennett
- P.47 Large outdoor space, Michael Moran
- P.47 Private balcony, MKPL Architects PTE LTD
- P.48 Movable wall, by Ikea & PKMN Architects
- P.49 Unite d'Habitation, Michel Bonvin

APPENDIX

- P.55 Ward Circa 1922-1920, Toronto Archives
- P.57 Elizabeth Street and Louisa Street 1912, Arthur Goss, Toronto Archives
- P.57 Elizabeth Street and Louisa Street 2015, Mary Anderson
- P.58 Crowd of children at playground, Toronto Archives



Children play and socialize independently in a Toronto neighbourhood formerly called the Ward circa 1922-1920.

The two photographs below were displayed in an exhibition at the City of Toronto Archives titled *From Streets to Playgrounds: representing children in early 20th century Toronto* (2016-2017).



The photograph on the left, taken in 1912 by photographer Arthur Goss, shows Toronto at the south-west corner of Elizabeth Street and Louisa Street. Goss was commissioned by the Public Health and Public Works Departments. It captured independent children playing in Toronto’s public realm - a neighbourhood formerly known as “The Ward”. Toronto’s Playground Movement emerged around this time to better address the social and physical needs of local children.



The photograph on the right, taken in 2015 by Toronto artist Mary Anderson, is a re-shoot of the photo of the left. Local children assisted the artist in recreating the image from 1912. The image shows that the city has been built up (City Hall now sits on the block to the south), but the children remain idle as play space and amenities for children have not kept up with the growth of the city. Their calm stare is a reminder that the needs of all residents should be addressed in city building.



Corktown Commons in Toronto’s new West Don Lands neighbourhood. This master planned neighbourhood demonstrated up-front planning for children. New development was built alongside generous public investments in Parks, public art, transit, streets, a YMCA and social housing.



Growing Up

planning for children
in new vertical communities



'Crowd of Children at Playground' at the Canadian National Exhibition grounds in Toronto, 1938

A3588