

LOCAL GOVERNMENT'S ROLES IN DESIGNING AND BUILDING CHILD CARE SPACES

Guide #3: Designing and Building Child Care Spaces provides information to local governments who are planning to develop their own child care spaces and for supporting others to design and build spaces.

More specifically, this guide includes information on:

- The importance of quality spaces for children
- Selecting a Location
- Interior and Exterior Design Considerations
- Additional considerations if the local government is the owner or operator

3.1 Introduction

Child care is a place where children experience the world, and one of the greatest influences on childhood development is the quality of settings where they spend most of their time.

“A child who attends a child care program from infancy through young school-age years will spend more time in child care than all the hours of schooling, and in their early years may spend more waking hours in child care than at home.”

Jim Greenman- Caring Spaces, Learning Places (2005)

Children need age-appropriate physical environments that promote and positively support the child's interaction with space, materials and people. A child care facility must be safe, suitable and provide a rich, diverse range of experiences that promote children's learning and development and meet the needs of all children. The location and the way a child care centre is designed, equipped and organized will determine how those spaces and resources are used by staff and children, regardless of whether the facility is stand alone, part of a mixed-use development, newly built, or a retrofit of an existing building.

Inclusive spaces that are properly designed in quality locations can also enhance the identity of the community, adjacent sites and streetscapes and can be responsive to the demographic, cultural and socio-economic makeup of the neighbourhood.

Quality child care facilities are complex to design. These spaces are highly regulated and must meet the minimum standards outlined in the [BC Community Care and Assisted Living Act and its Child Care Licensing Regulation](#), the [BC Building Code](#) and the local by-laws for the jurisdiction where the facility is located.

3.2 Selecting a Location

The best site for a child care centre is near to, or co-located on the grounds of other public community spaces such as schools, community centres and parks, and therefore offer a continuum of services for multiple age groups. This allows for coordinated services that enhance program quality, as well as construction and operating cost efficiencies gained by building facilities that can share spaces.

TIP

Create an inventory of prospective opportunities for child care development by:

- a. identifying assets (buildings and land), including those that are slated for capital redevelopment;
- b. identifying underutilized or vacant spaces or land, including parks that could be repurposed for child care; and
- c. work with other public and not-for-profit partners to identify potential land or facilities that could further explored for use for child care.

The City of Surrey, through its recent Child Care Planning work, developed a [Child Care Space Prioritization-Calculator](#) which uses a set of quality criteria to identify spaces and places that are worth further and more detailed assessments to see if they can be used for child care.

Not all sites will be suitable for child care facilities. Firstly, the location and physical context of a child care facility should be safe and healthy for children. Child care facilities should also be compatible with the surrounding land uses and be a permitted use under the zoning by law. Impacts and issues will vary depending on the location and setting of the site, the type and size of development being proposed, and surrounding land uses.

There will also be differences depending on whether the area is urban or rural. Sites should not be located near major transportation routes such as highways, heavy rail lines, or near industrial uses and should be on land that is deemed environmentally safe. Child care Licensing Officers and other public health staff can offer helpful advice early in the site selection process.

3.2.1. Site and Facility Considerations

a. Adjacent Uses

Child care facilities should be located in proximity to compatible, safe and environmentally appropriate land uses. This provides easy access, seamless services for children, convenience for busy families, builds on existing local infrastructure, and offers efficient ways to share resources and assets. It also offers opportunities for service providers to plan together, integrate services and to provide a full range of other important supports to children and their parents/guardians.

Good examples of adjacent uses include community centres, schools, libraries, museums, parks, employment centres, business centres and town centres. As well, easy access to public transit and close to pedestrian access are other important considerations.

Adjacent uses to avoid include commercial loading or service areas, large parking lots, major mechanical plants, building exhaust fans, electrical substations and major above- grade electrical lines, transformers or other noisy, noxious or dangerous environments.⁷

b. Relationship to Grade

Child care facilities should be designed to provide barrier- free, same level access from the exterior to the interior of a building (i.e., wheelchair, mobility aid accessible). This makes the space more accessible and inclusive for small children, families and people with physical support needs.

If a child care facility is proposed for an above-grade level, or on the upper floor of a building, concerns about emergency evacuation of the children and the safety and security of the outdoor play area must be addressed as part of the licensing process. In addition, consideration must be given to how maintenance supplies for outdoor play areas will be transported. These concerns increase with height above-grade.⁸ Locations below grade are unacceptable due to requirements for natural light and outdoor areas.

c. Relationship of indoor and outdoor spaces

Outdoor space should be at the same level as the indoor space wherever possible and contiguous with it in order to make the space easily accessible to children and their caregivers. When possible, the two areas should be planned together and ramps for wheeled equipment should be provided when a level change exists.

⁷Design Resources for Child Care Facilities -Vancouver Coastal Health

⁸City of Vancouver Child Care Design Guidelines

A strong visual and physical connection should exist between the indoor and outdoor activity area to allow children and staff to flow freely between inside and outside.

d. Environmental Considerations⁹

The availability of natural light is important for a healthy environment. For example, Vancouver Coastal Health guidelines for child care require at least 10% of the wall areas to be windows. Care should be taken to install window coverings to create a cooling affect during the summer months and additional insulation during the winter months.

It is recommended that child care areas have their own systems for heating, ventilation, and air cooling to allow staff to regulate the temperature according to the children's needs. Ventilation should be planned for children's washrooms, diaper areas, sleep areas and kitchens to reduce exposure to air borne illness and diseases.

Many studies show that noise poses a serious threat to children's hearing, health, learning and behaviour. The design of the centre should include as many ways as possible to reduce noise (i.e. natural amenities outdoors such as trees and grass, noise absorbing surface on floors, ceiling and walls).

e. Safety and security

Pedestrian access should be safe, well-lit and allow for strollers and bikes to be safely wheeled, ideally visible to many people. To ensure close monitoring, entrances and exits must be controlled.

The outdoor space must be enclosed in a manner that is suitable for the ages of the children with non-climbable fences.

f. Parking, pick up and drop off

Accessing the child care needs to be carefully considered both from an access and a safety perspective.

3.3 Interior and Exterior Design

A local government's influence on the interior and exterior of the child care centre may take different forms depending on whether it is leading a development on public land or exercising a regulatory role.

The physical environment has a significant impact on the children, the staff, parents/guardians and the broader community. The location, the type and amount of space, how the space is organized, the type and arrangement of furnishings and equipment, availability of natural light and views to the outdoors, health and safety considerations, the amount and layout of outdoor space and proximity to indoor, colours, surfaces and textures are all important aspects of designing and building child care¹⁰.

For child care projects led by local governments, the design team should be structured to include members with specialized expertise in child care and childhood development, to ensure that environments are highly functional and meet the diverse needs of children.

All licensed child care in BC must meet the provincial legislated requirements of the Community Care and Assisted Living Act and its Child Care Regulation.

However, the Provincial standards are minimum requirements that do not address all of design and building elements that research confirms is necessary for high quality functional child care programs.

⁹Design Resources for Child Care Facilities -Vancouver Coastal Health

¹⁰Friendly, M., Doherty, G., & Beach, J. (2005). Quality by design: Physical Environments

TIP

Develop a set of local government design guides for a high-quality functional facility based on research and evidence

Both the City of Vancouver and the City of Richmond have developed their own guides which exceed the provincial licensing requirements. Both municipalities require up to 7 metres squared per child for interior space and up to 14 metres squared per child for exterior spaces, nearly double the Provincial requirements. In Richmond, these guides are applied to all City required, facilitated, or built spaces. In Vancouver, the guides apply to all for conditional approval development applications involving child care facilities, including private applications.

- [City of Richmond Child Care Design Guidelines](#)
- [City of Vancouver Child Care Design Guidelines](#)

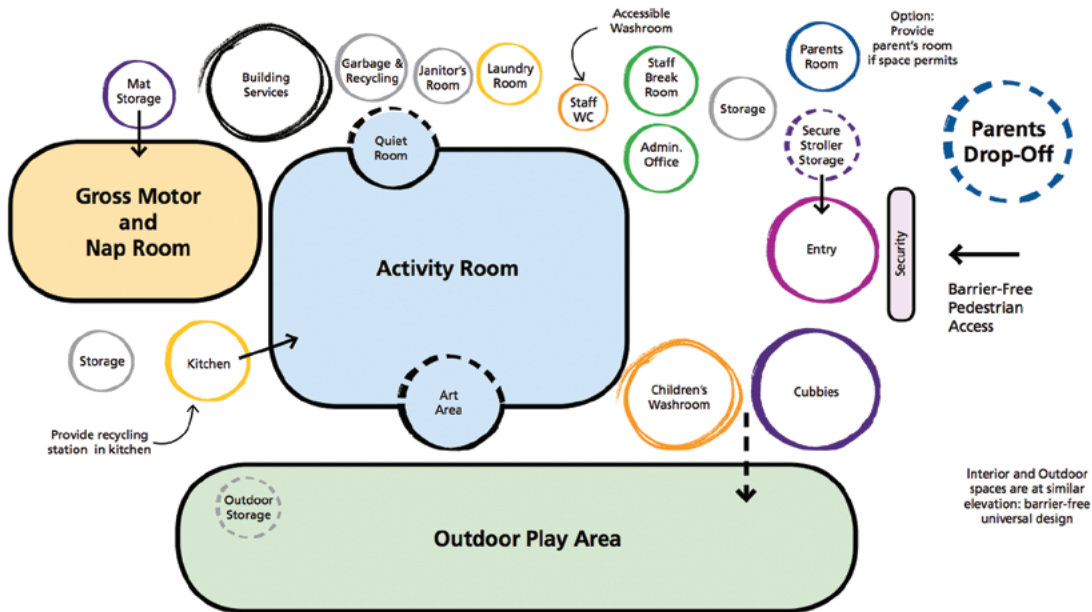
3.3.1. Interior:

The Provincial Child Care Licensing Regulation require 3.7 metres squared of useable floor area per child and have requirements for maximum group sizes. These minimums are for spaces that are used for activities only and do not include storage, washrooms, nap rooms, staff rooms, offices, kitchens, hallways, cloakrooms, and janitorial closets¹¹. In addition, consideration in design must be given to allow for building inefficiencies, circulation and services.

Large, open designs are preferred with an emphasis on flexibility to accommodate the diverse, developmental abilities of children and to be responsive to emerging community needs. All play areas (inside and out) should be accessible to all children, safely constructed, free from hazards and in good repair. Equipment, furniture and play materials must be suitable for the age and developmental levels of the children and accessible for children with diverse support needs.

An example of child care guides that are based on research are the European Commission Network on Childcare and Other Measures to Reconcile the Employment Responsibilities of Men and Women (1996)¹². This guide confirms internal space of at least 6 metres square for each child under three years and of at least 4 metres square for each child 3-6 years old excluding storage and corridor or through-way space, plus an additional 5% of internal space for adult use.

Example of 'Optimal Spatial Inter-relationships for Interior Space': [City of Richmond Child Care Design Guidelines - page 17](#)



¹¹Design Resources for Child Care Facilities -Vancouver Coastal Health

¹²European Commission Network on Childcare and Other Measures to Reconcile the Employment Responsibilities of Men and Women. (1996). Quality targets in services for young children: Proposals for a ten-year action programme (1996) <https://www.childcarecanada.org/sites/default/files/Qualitypaperthree.pdf>

3.3.2. Exterior

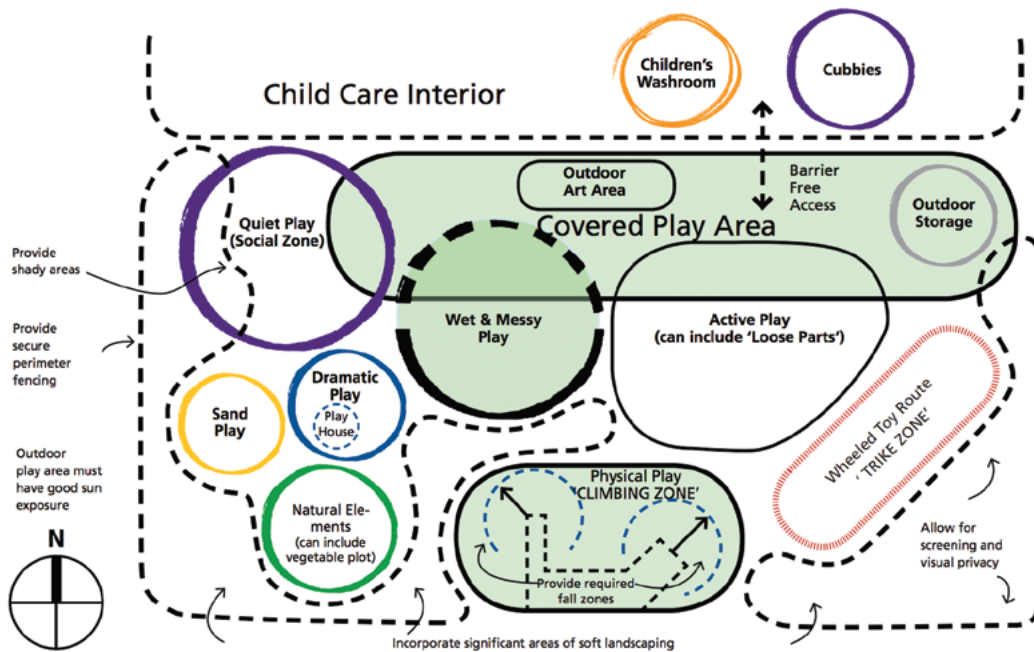
BC's Child Care Licensing Regulation requires a minimum of 6 metres square per child of outdoor play space. This is less than half the size of a standard parking space for a car. This open space is reduced even further once landscape elements, play structures and walkways are installed. Outdoor play areas must be accessible for children with diverse needs (i.e. mobility needs).

Empirical research indicates children benefit from more outdoor spaces than the current minimum standards in the provincial Child Care Licensing Regulation. For example, a 1999 Canada wide safety assessment of outdoor play spaces in child care centres recommended 13.5 metres square outdoor space per child in order to provide children “with the diversity of experiences needed outside for their development while respecting safety standards.”¹³ Other studies recommend between 7 and 25 metres square per child.¹⁴

In addition to the amount of space, the nature and organization of the space is also important. Every effort should be made to link outdoor play space with the inside play space. Centres that had direct physical and visual connection to their outdoor play space from inside, use the outdoors more frequently than those centres that lack this connection.¹⁵

While licensing standards permit a single outdoor child care area to be shared by multiple programs through scheduled rotations, shared outdoor spaces can decrease practical access by each program, and eliminate spontaneous access, thereby reducing children’s outdoor time. If local government standards permit shared access to outdoor spaces, reducing the number of sharing programs contemplated to no more than two can support children’s access to nature and outdoor exercise.

Example of “Optimum Spatial Inter-relationship for Outdoor Play Area”:



¹³Maufette, A.G., Frechette, L., & Robertson, D. 1999. Revisiting Children Outdoor Environments: A Focus on Design, Play, and Safety.

¹⁴The U.S. National Association for the Education of Young Children recommends per child. Britain recommends 9m2. Australia recommends for 25 children, 20m2 per child for 40 children, 15m2 per child for 75 children (1996).

¹⁵The City of Vancouver and the City of Richmond have established guidelines that require 8 – 14 m2 per child.

Herrington, S., Lesmeister, C., Nicholls, J., & Stefiuk, K. (N.D.). 7Cs: An Informational Guide to Young Children’s Outdoor Play Spaces. Retrieved from <https://sala.ubc.ca/sites/sala.ubc.ca/files/documents/7Cs.pdf>

3.4 Additional Considerations if Local Government will be the Owner of the Spaces

As noted in [GUIDE #4: LOCAL GOVERNMENT REGULATIONS AND PROVINCIAL LICENCING PROCESSES](#), local governments have an important regulatory role for child care development in their communities, which includes zoning approvals, building inspections, and business licensing. And in BC, local governments may be owners, landlords, and operators of licensed child care spaces and play critical leadership roles in planning and facilitating new child care developments. Although standards for child care facilities are regulated provincially, those are minimum standards. Some local governments have established their own criteria for designing and building spaces that are more in line with best practices and what the evidence says makes for good quality environments.

3.4.1 If Owner -Landlord

The local government may be the owner/ builder of child care, and the landlord of spaces negotiated as part of new developments or publicly owned assets like a community centre. As an owner-landlord, it is in the best interest of the local government to:

- a. Build spaces that are financially sustainable, ideally with multiple programs and co-located with other public services that meet the highest needs in the community.
- b. Build quality spaces to ensure long -term durability in the most accessible and safe locations possible.

The best site for a child care centre is near to or co-located on the grounds of other public community spaces. This provides easy access, coordinated services for children, builds on existing local infrastructure, and offers efficient ways to share resources and assets. It also offers opportunities for service providers to plan together, to integrate their services, and to provide a full range of other important supports to children and their parents/guardians.

Child care facilities have daily, year-round high usage. In order to ensure safe, high quality infrastructures for many years and multiple generations of children, investing more capital resources up front to construct spaces that can withstand this intense use which can result in a longer lifespan with fewer renovation expenses over time.

- c. Select an architect and/ or designer who has experience with designing licensed child care and involve an experienced child care operator early on in the design process to ensure a quality environment. (refer to [GUIDE #5: WORKING WITH CHILD CARE OPERATORS](#))
- d. Involve local licensing officials early to ensure that the facility meets all necessary requirements.

3.4.2. If Owner – Operator

The local government entity may choose to directly operate the child care spaces. It is then recommended that:

- a. Time is spent to fully understand the legislation and regulation governing child care ([BC Child Care Rules and Regulations](#))
- b. Internally, work is completed to assess financial and operational impacts to

Both the City of Vancouver and the City of Richmond have specific technical requirements for child care which outline the expected building details, the required quality of materials, finishes, equipment and other key building and design details. The City of Richmond has included these details in their design guides documents while the City of Vancouver created a companion document. It can be downloaded here: [City of Vancouver Child Care Technical Guides](#)

ensure long-term sustainability. (For example, human resource requirements including collective agreements, administration and infrastructure requirements for items like fee collection and reporting to the Province.)

- c. Consider 3.4.1 a, b and c above.
- d. Identify and secure a subject matter expert (either a lead staff person internally or secure external support) to manage and provide oversight to the licensed child care.

3.5 Helpful Tools and Resources

Below is a list of helpful tools and resources that can be used when designing and building child care spaces.

1. Government of BC: Child Care in BC is governed by the rules and requirements in the:
 - a. [Community Care and Assisted Living Act](#); and the
 - b. [Child Care Licensing Regulation](#)

In addition, the Director of Licensing has a set of Standards of Practice that provide further regulations and requirements specifically for:

- a. [Family Child Care: requirements for private residences](#)
 - b. [Safe Play Space: design, materials and supervision requirements for outdoor play spaces](#)
 - c. [Active Play: requirements for active play and physical movement in child care programs](#)
 - d. [Water Safety: recommendations to prevent drowning in child care programs](#)
2. Health Authority Design resources
 - a. [Design Resources for Child Care Facilities -Vancouver Coastal Health](#)
 3. [Quality by Design: Child Care Centre Physical Environments](#)
 4. [7Cs: An Informational Guide to Young Children's Outdoor Play Space](#)

