05. INTERFACE WITH THE PUBLIC REALM

OBJECTIVE

Base buildings, in particular the ground floors, should be designed to convey a sense of activity and liveliness, address the human scale, provide varied experiences and facilitate the interface with pedestrianoriented uses, such as transit, retail and other active uses.

RATIONALE

The experience of public space shouldn't be restricted to stop and start at the four faces of a building; it should flow out into the public realm to create unique, intimate, two-way relationships at the human scale. There should be push and pull factors in architecture, streetscape, mix of uses, and views that entice people to interact with, and move through these spaces. Base buildings, in particular the lower floors, should be designed to convey a sense of activity and liveliness, address the human scale, provide varied experiences, and facilitate the interface with transit, parks, lanes, and pedestrian priority areas.

Ultimately, buildings should facilitate certain activities and invite people to use the surrounding public realm. There should be no neglected spaces – all opportunities for pedestrian amenity, flexible uses and accommodations for both active and passive movements (e.g. walking and sitting) should be seized. However, further than the

"If we can develop and design streets so that they are wonderful, fulfilling places to be – community building places, attractive for people – then we will have successfully designed about one-third of the city directly and will have had an immense impact on the rest."

Allan Jacobs, 1995

width and design of the sidewalk, the impact of the building's interface with the public realm has significant influence on the pedestrian experience. The goal of creating more intimate and interactive relationships between built form and the public realm must fully consider the design of ground floors. There needs to be a shift in standard practice for designing base buildings and ground floors responding to unique contexts, taking into consideration all the small character cues, context norms, adjacency typologies and different strategies for activating and animating the public realm. From increased setbacks to variations in glazing, the power of built form should not be underestimated in defining and supporting the public realm. This is also where high quality design and materiality are the most critical.

Some of the greatest opportunities to expand the public realm are along the street frontage. This expanded public realm must provide an appropriate adjacency for its context – the programming, use, scale and volume of pedestrian spaces will inform the character and size of the public space that surrounds a building. This expanded public realm will allow for increased space for pedestrians; the ability to plant street trees; the opportunity to provide weather protection; gathering spaces that are landscaped, well lit, and furnished. Where appropriate, other amenities can be provided, such as: spaces for seating, sidewalk cafes, and marketing areas. These spaces improve pedestrian mobility and encourage gathering and public life.

TRENDS & TRAJECTORY OF CHANGE

With the intensity of development Downtown increasing, the public realm must also expand to accommodate for this growth. Crowding, loss of character, reduced accessibility and detachment from the existing context are some





of the risks to the public realm that come with growth. Currently, Downtown's urban fabric is a collection of public spaces that are valued and well used, but not necessarily defined or supported well by the built environment. Buildings can respond to these challenges by ensuring that the at grade conditions are appropriately sited, massed and designed to increase the vibrancy, comfort and utility of the public realm.

TORONTO PLANNING & REGULATORY CONTEXT

The importance of the role and design of the public realm is woven throughout the Official Plan, and is emphasized in Section 2.2.1 Downtown: The Heart of Toronto. Guidelines for mid-rise and tall building typologies have identified minimum standards for sidewalk widths (from 4.8 to 6.0 metres), as well as providing guidance on the design of the building where it abuts the pedestrian realm. For Priority Retail Streets, Zoning By-law 438-86, buildings fronting onto Priority Retail Streets are identified as requiring 60% transparency at-grade.

In addition to typological guidelines, there is guidance for the interface with the public realm for within Secondary



Figure 96. Figure from City-Wide Tall Building Guidelines showing building placement impact on pedestrian realm



Figure 97. Extract from POPS Guidelines illustrating active forecourts and mid-block connections to foster pedestrian activity

Plans or SASPs. These planning frameworks generally address linear conditions only, such as overall setbacks at grade. **Refer to Appendix O for full Toronto planning and regulatory context excerpts.**

PRECEDENTS OF GUIDELINES & REGULATIONS IN OTHER CITIES

A number of cities have retail design guidelines or policies (e.g. ceiling height, square footage), which supports a very specific type of ground floor space. **Refer to Appendix O for full excerpts and additional graphics from the precedent city research.**

San Francisco, USA - Urban Design Guidelines (draft 2017)

The Guidelines provide direction for how to create a defined and active streetwall, including articulating streetwalls through the design of the sidewalk, the street front, and "inviting transitional elements between the building wall and street environment".

"Absolute consistency in streetwall presence is not always necessary. In some settings, designing a street front with a variety of forecourts, setbacks, loggias, and recesses that act as a lively counterpoint to a streetwall may be appropriate, but not to such an extent that the overall sense of urban room enclosure is eroded".

Ottawa, Ontario - Urban Design Guidelines for High-Rise Housing (2009)

Ottawa advocates for the design of the lower portion of buildings to support a human-scaled street space.

"3. Use built form to define a human-scaled street space. Different ratios of building base / podium heights to street width create different perceptions of space. Depending on the context, a 1:1 ratio is appropriate for dense downtown locations, and a ratio of 1:2 and 1:3 may be appropriate for other intensification areas such as Traditional Mainstreets, Arterial Mainstreets, and Mixed-Use Centres".

"13. Design the lower portion of the buildings to support human-scaled streetscapes, open spaces and quality pedestrian environments. This can be achieved with fine-grain architectural design and detailing, quality materials, and through the use of human-scaled elements such as landscaping, site furnishings, awnings and canopies".

New York City, USA - Retail Design Guidelines (2015)

The design of the ground-floor façade and complimentary signage, doors, height of windows, amount of transparency, and appeal of design elements all contribute to the appeal and success of at-grade retail.

1.0 FAÇADE AND SIGNAGE "A well designed ground-floor façade contributes to an active street life by engaging passersby and connecting interiors to the street. Façades that clearly and distinctly define retail and residential uses attract customers from many locations on the block and beyond".

1.1 GLAZING / FENESTRATION "Making the façade as transparent as possible allows for a two-way visual exchange between the exterior and interior. Occupants in the retail space see what is happening on the street and pedestrians outside see the activity and offerings in the retail spaces. This symbiotic relationship benefits both patrons and retailers".

Seattle, USA - Design Guidelines (2013)

Seattle guides the design of all primary entries of buildings to be "obvious, identifiable, and distinctive with clear lines of sights and lobbies visually connected to the street" (PL3.1)

ANALYSIS

Wherever a building interfaces with the street, there is a unique experience created on both the horizontal and vertical planes. Multiple built form variables are in play, which interact to create a range of adjacency typologies.

VARIABLE		WHY DO WE NEED THESE?	HOW CAN THIS BE APPLIED?	WHERE SHOULD THIS APPLY?
1	SETBACKS	A setback provides transition space between the public and private realms, especially in areas of high pedestrian volumes.	 Increase setbacks to create wider sidewalks and a larger public realm Vary in setback to create interest and frame entrances, forecourts or plazas Align with heritage to respect scale, design, and legibility Incorporate landscape elements as a buffering technique for sensitive ground floor uses (e.g. residential) Allow for unencumbered access to utilities or other below-grade services 	A: Transit Stops B: Outdoor Uses C: Parks/Open Spaces D: Forecourt/Plaza E: Lobbies F: Priority Retail Streets G: Historical Street Line H: Multi-Storey Residential I: At-Grade Residential J: Corner Uses
2	STEPBACKS	Stepbacks allow the pedestrian realm to remain human-scaled and are important for protecting vulnerable uses, especially in a high-rise context.	 For taller buildings, provide tower setbacks greater than 3 metres for more openness (sky-view) and sunlight access on adjacent open spaces and streets Set back towers when adjacent to heritage buildings to reduce impact Design podium to be consistent with the existing and planned context Use setbacks to protect lower floor privacy Ensure tower separations are followed, or increased in denser areas 	B: Outdoor Uses C: Parks/Open Spaces D: Forecourt/Plaza E: Lobbies G: Historical Street Line H: Multi-Storey Residential I: At-Grade Residential
3	OPEN SPACE	Generous open spaces facilitate high connectivity of pedestrian flows and circulation. They allow for static movements as well (such as waiting, pausing, and congregating).	 Provide generous open spaces in areas of high pedestrian volumes to prevent conflict/ overcrowding, and provide mobility choice Find opportunities for landmark placements (e.g. public art, signage) Orient and shape spaces to support adjacent open spaces and their conditions Support or create view corridors within the public realm, where feasible Ensure barrier-free design Support and accommodate multi-functionality (e.g. special events) Use open spaces to facilitate transitions between disparate scales or uses Enhance existing topography or natural systems and features to support physical identity 	C: Parks/Open Spaces D: Forecourt/Plaza J: Corner Uses
4	MID-BLOCK CONNECTIONS	Providing mid-block connections allows for a break in long city blocks, encourage activity, provide a more permeable urban fabric, allow for alternative routes of travel, and enhance ease of movement.	 Locate mid-block connections to provide clear sightlines at all access points for public safety and visibility Use mid-block connections to enhance and extend the existing fabric of the street network, especially in areas of high volume Design scale of buildings to reinforce pedestrian scales Ensure these spaces are well programmed, to encourage activity and movement, initiating larger block activity Create a seamless relationship between the street network and open spaces Align important entries with public pathways, to be inviting and visible 	A: Transit Stops B: Outdoor Uses C: Parks/Open Spaces D: Forecourt/Plaza F: Priority Retail Streets G: Historical Street Line H: Multi-Storey Residential

VARIABLE		WHY DO WE NEED THESE?	HOW CAN THIS BE APPLIED?	WHERE SHOULD This Apply?
5	ACTIVE FRONTAGES	A defined, active streetwall will define and support street-related uses, supporting spatial continuity and safety.	 Ensure entrances are wide, accessible, visible, and barrier free from the sidewalk Outdoor uses (e.g. cafes) should have high flexibility and year round adaptability Promote permeable streetwalls to activate the sidewalk realm and encourage constant activity and movement Respect design of both streets on corners 	A: Transit Stops B: Outdoor Uses C: Parks/Open Spaces D: Forecourt/Plaza F: Priority Retail Streets J: Corner Uses
6	FAÇADE DESIGN	Variation in materials or texture provides interest to draw activity. Displays and public programming can create a vibrant pedestrian experience.	 Use architecture to articulate separate units or buildings, so entrances are legible Achieve at least 70% transparency for buildings with commercial or retail at-grade to provide high visual access Canopies, cantilevers, or overhangs can project into the sidewalk realm 	B: Outdoor Uses C: Parks/Open Spaces D: Forecourt/Plaza E: Lobbies F: Priority Retail Streets G: Historical Street Line J: Corner Uses
7	ADDITIONAL DESIGN ELEMENTS	Furnishings can support uses and define or reinforce the character of the area: Signage can contribute to wayfinding and navigation; canopies provide weather protection; and external lighting enhances safety.	 Include public art to serve as anchors, to bring attention to entrances, or as wayfinding tools Ensure adequate lighting to ensure high visibility and safety Signage should be accessible, visible, and not obstructing pathways Incorporate trees and plantings to establish a strong green network 	A: Transit Stops B: Outdoor Uses C: Parks/Open Spaces D: Forecourt/Plaza E: Lobbies F: Retail Entries G: Historical Street Line H: Multi-Storey Residential I: At-Grade Residential J: Corner Uses



A. Transit Stops

- 1 Setbacks
- 4 Mid Block Connections
- 5 Active Frontages7 Additional Design Elements

Figure 98. York Street and Wellington Street West

B. Outdoor Uses

- 1 Setbacks
- 2 Stepbacks
- 4 Mid Block Connections
- **5** Active Frontages
- 6 Façade Design7 Additional Design Elements

Figure 99. Market Street



C. Parks/Open Spaces

- 1 Setbacks
- 2 Stepbacks
- 3 Open Space
- 4 Mid Block Connections
- **5** Active Frontages
- 6 Façade Design
- 7 Additional Design Elements

Figure 100. Simcoe Park, Front Street West



D. Forecourt/Plaza

- 1 Setbacks
- 2 Stepbacks
- 3 Open Space
- 4 Mid Block Connections
- 5 Active Frontages
- 6 Façade Design
- 7 Additional Design Elements

Figure 101. TIFF Lightbox, King Street West



- 1 Setbacks
- 2 Stepbacks
- 6 Façade Design
- 7 Additional Design Elements



Figure 102. Peter Street (image credit: Sweeny & Co. Architects)

F. Priority Retail Streets/Retail Entrances

- 4 Mid Block Connections
- 5 Active Frontages
- 6 Façade Design
- 7 Additional Design Elements

Figure 103. Queen Street West (image credit: David Kaufman)



G. Historical Streetline

- Setbacks
 Stepbacks
 Mid Block Connections
 Façade Design
 Additional Design Flow
- 7 Additional Design Elements

Figure 104. King Street East and Sherbourne Street (image credit: Clara Romero)



H. Common Entries to Multi-Storey Residential

- 1 Setbacks
- 2 Stepbacks
- 4 Mid Block Connections
- 7 Additional Design Elements



Figure 105. Bruyeres Mews

I. Individual Entries to Ground-Related Residential

- 1 Setbacks
- 2 Stepbacks
- 7 Additional Design Elements

Figure 106. Mutual Street

J. Corner Uses

- 1 Setbacks
- 3 Open Space
- 5 Active Frontages
- 6 Façade Design
- 7 Additional Design Elements

Figure 107. King Street West and University Avenue (image credit: Loulou Downtown)

FINDINGS

- The pedestrian experience is significantly influenced by the design of the public realm and the lower floors of buildings that directly interface with the public realm.
- Current policy and practice has been successful at implementing standardized improvements to the public realm as part of on-going redevelopment. However, the design of active ground floors that support the public realm has been a challenge.
- In other precedent cities, most planning documents provide broad guidance on the design of the pedestrian realm in an attempt to not be site specific.
- The New York City Retail Guidelines are an example of how to highlight the importance of the design of the horizontal plane, which is shaped by the human experience. City of Toronto policies do not include a definition of what areas require further visual interest for pedestrians.

RECOMMENDATIONS

1. Develop guidelines for high-quality at-grade building design that is responsive to context, including:

- Expansions of the public realm through the use of setbacks that support higher volumes of pedestrian traffic and street life;
- Provision of greater setbacks and step-backs to provide openness and transition to respect the pedestrian level experience;
- Framing of important public spaces and connections through the use of building massing or design elements (e.g. canopies, arcades, entrances or recesses);
- Use of materials, proportions and design that reflects the human scale to create comfort and interest, and strengthen the identity and character of an area; and
- Careful placement of street furniture and other pedestrian amenities to enhance legibility, safety and navigation.
- 2. Develop design guidelines for various retail formats.
- 3. Clearly define the public realm elements that require higher levels of visual interest to support an active pedestrian realm.

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06. TRANSITION

OBJECTIVE

Appropriate transition to the existing and planned context should be provided, both in terms of scale and building type.

RATIONALE

Downtown's eclectic mix of built form types, its distinctive neighbourhood characteristics and range of intensities contribute to the vibrancy and liveliness. With areas of both consistent and inconsistent patterns and scales, methods to ensure compatible development must be sought. 'Compatibility' is difficult to define, measure, or ensure with new development, as geometric relationships between existing and planned contexts can be created and interpreted in a variety of ways. The dictionary definition of transition, to make a "change from one position to another³²" is not sufficient when looking for balance between different contexts. Contextual transition should seek the adoption of both the existing and planned context characteristics – including scale and form, without direct replication of adjacent forms.

It is crucial for adjacencies of disparate heights, scales and types to minimize impact on the more sensitive areas within Downtown – its parks, low or mid-rise buildings, and areas of heritage character. Privacy, beauty, views, and light are just some of the elements that built form "transition" methods, such as setbacks, stepbacks, separation distances and angular planes should address. In the infill context Downtown, new buildings require detailed direction to allow for intensification that protects the character and scale of existing developments and the current liveability of Downtown.

TRENDS & TRAJECTORY OF CHANGE

Growth in a primarily infill context creates the need to provide further direction for Downtown's building typologies, and how new developments should respond to the existing and planned contexts. Along with housing and office demands, a greater attraction to Downtown living, improvements to transit, and new economic opportunities, as well as smaller sites and inflation of land values, there has been a trend for development to be taller,



Figure 108. Simplified transition typologies (illustration by Perkins+Will)

COMFORT

DIVERSITY

BEAUTY

³² Dictionary.com

bigger, and denser. How can policies protect for 'smart growth', 'compatible design', and 'contextual transitions' between new and old? Design guidelines and regulatory direction exist, in the Official Plan, the City-Wide Tall Building Guidelines, and the Avenues and Mid-Rise Buildings Study, but the range of adjacencies result in a variety of possible interpretations.

TORONTO PLANNING & REGULATORY CONTEXT

Official Plan Policy 3.1.2.1 provides general direction for how new development should "fit" into its existing and planned context, as well as direction in the sidebar on creating appropriate transitions in scale. The sidebar speaks

to different methods of transition, as well as reinforcing that "the larger the difference in scale of development the greater the need for transition." The Official Plan includes policies that direct new development to be located and massed to provide a transition between areas of different intensities and scales. These policies apply to various land use designations where mid-rise or taller buildings may be appropriate (e.g. Apartment Neighbourhoods, Mixed-Use Areas), typically through setbacks and/or stepbacks. Local planning frameworks such as Secondary Planes or SASPs often provide detailed transition direction. Typological guidelines for mid-rise and tall buildings also provide direction for transition. **Refer to Appendix P for full Toronto planning and regulatory context excerpts.**

PRECEDENTS OF GUIDELINES & REGULATIONS IN OTHER CITIES

Other cities studied offer guidance for how transitions between differing contexts depend on area character, form, design and scale. Some municipalities have more prescriptive direction whereas others have looser definitions of 'transition' and ideal fit and compatible forms. **Refer to Appendix P for full excerpts and additional graphics from the precedent city research.**

Sydney - Central Planning Strategy (2016)

The Central Sydney Plan acknowledges a number of areas that have special and distinctive character (Special Character Areas). To ensure that development in each special character area can respond to both existing and planned contexts, provisions respecting Street Frontage



Figure 109. Extract from City-Wide Tall Building Guidelines - conceptual illustrations of aspects of "fit and transition"

Height and Street Setback designations are included. Since this method is prescriptive and restrictive, new developments must adhere to site-specific requirements.

Auckland - Design Manual (2017)

This design manual recognizes that new development must 'blend' into the neighbourhood, by understanding character, form, and scale of the surrounding urban environment.

GUIDANCE FOR MIXED USE DEVELOPMENT: 2.1 MASSING, HEIGHT AND PLACEMENT: "Relate to the mass, scale and setbacks of adjacent buildings. New buildings should reflect the existing or intended character (where major changes are anticipated) of the surrounding area. This means referencing the setbacks, heights, massing and architectural features of adjacent buildings. Where buildings are intended to be of a greater height or mass than existing developments they should be designed to blend into the neighbourhood".

Ottawa, Ontario - Urban Design Guidelines for High-Rise Housing (2009)

Specific design guidelines for tall residential buildings acknowledge many of the same tools as Toronto - setbacks, stepbacks, scale and massing. However, they also apply buffers such as landscaped open spaces, parking, circulation, as a transition technique. The City of Ottawa guidelines also outline the sensitivity of heritage buildings and the need to understand the area's planned function.

"Guideline 4: Locate and orient other building components, such as the base and tower, and various site elements, to create a sense of transition between high-rise buildings and existing, adjacent lower profile areas. Choose transition techniques appropriate to the context including:

- Stepping down incrementally changing the building height, often using 45 degree angular planes to adjacent lower development;
- Setbacks & Buffers separating adjacent development with landscaped open space, parking, site circulation or service areas;
- Scale / Massing placing the tall building components strategically on the site to reduce visibility; wrapping the higher rise building with low rise development or with a building base that defines the street scale;
- Design & Character establishing the design qualities and treatment of the lower component or building base based on a human scale and ensuring that the ground floor is active, relevant and a well-designed pedestrian experience".

New York City - Zoning Regulation

As a city built strictly to the zoning provisions, transition is encouraged in special districts. Due to the development nature of New York City, it is very detailed. For example:

For the 'Special Harlem River Waterfront District', under 87-30 Spacial Height and Setback Regulations, c) Transition heights outlines: "all street walls, except for parcels 5 and 6, may rise to a maximum transition height of 115 feet, provided that, except on parcel 7, not more than 60 percent of the aggregate width of street walls facing a shore public walkway exceeds a height of 85 feet".



TRANSITION METHODS INTERPRETATION AND APPLICATION

There are several guidelines or policies outlined in the Official Plan and City-Wide Tall Building Guidelines, that may provide various directions on how new development should fit to its existing and planned context. Built form adjacencies require more specific guidance for a harmonious, high-quality, and liveable "contextual transition".



Figure 110. Matrix of diagrams depicting various interpretations of transition guidelines from the City-Wide Tall Building Guidelines or Official Plan (illustrations by Perkins+Will)

Below are some examples of how transition, in reference to changes in scale and/or height, can be interpreted, or applied. There are some standards for transition in the City's typological guidelines for mid-rise and tall building guidelines, which are appropriate Downtown. However, transition at the Downtown-wide scale should remain general so as to allow for flexibility in application in the vast number of contexts across Downtown. For transition to be meaningful, the application should be significant and noticeable, as illustrated in the top row of the examples below.

"[...] Surrounded by other tall buildings, relate the height and scale of the proposed tower to the existing context"

(1.3.b, subpoint 2)

"[...] Angular planes are a common measure to provide transition in scale from tall buildings down to lower scale areas"

(Figures 1 and 4, angular planes rationale)

"[...] Angular planes are a common measure to protect access to sunlight and skyview for streets, parks, etc."

(Figure 4, 1.4, angular planes rationale)



Mississauga, Ontario - Downtown Core Built Form Standards (2013)

Similar to Toronto, Mississauga standards note that where a significant difference in scale exists between building heights, "development will be required to deploy transition strategies through massing and built form, to achieve a harmonious relationship between proposed and existing development, and/or adjacent open spaces". The City of Mississauga outlines different contexts and scenarios, and how built form should appropriately respond.

It also encourages a variety of heights, or a layering of built form masses to "articulate and define the highest and most intense use of land, to the least intensive of uses".

"T28. Consider the size of the development area and the planned intensity of the use".

"T29. Consider the context of adjacent low scale development and other aspects such as the street width or adjacent open space".

"T30. Where a proposed development incorporates multiple buildings, design the buildings to step down in height from high to low, and where it abuts lower scale development".

"T31. For large properties, use an angular plane of 45 degrees from the closest property line of lower scaled residential development, or open space, to determine the minimum setback and height of a building within a development".

"T32. For single properties, deploy a stepping down of the building height and mass to achieve a transition to adjacent lower scale development or open space".

"T33. Design the development to address the impacts of shadow, sky-views and how sunlight can be maximized on the private and public realm".

"T34. Where a group of buildings and/or spaces act collectively to create a special architectural context (i.e. related by similar scale, heights, materials, colours, architectural character, landscaping and open space patterns or qualities) ensure that proposed infill development respects the context by deploying a strategy for building height that is compatible, and which positively contributes to the existing and/or anticipated pattern of development".



Figure 111. Appropriately scaled buildings, through lower height street frontage and set back taller built forms is an example of how design can respond to the form, scale and character - Te Aro, Wellington, New Zealand (image credit: Auckland Design Manual)



Figure 112. Built form that steps down using an angled plane allows the building envelope to be defined, creating compatible transitions to adjacent buildings or the street - Montreal (image credit: Ottawa Urban Design Guidelines)

FINDINGS

- Downtown's built form is not homogeneous in age, scale or typology. In some areas there is a consistent pattern and scale, while in other areas, there is a mix of building types and scale, even within a single block. Each of these areas has its own distinct character, which can be respected and reinforced through a transition in built form.
- In "as-of-right" cities, transitions are mostly controlled with maximum heights and regulatory setbacks; other precedent cities regulate transitions by using more qualitative policies, using concepts of scale and fit. When not explicitly described using metrics or standards, the application of transition can be misinterpreted.
- The City's Official Plan provides general direction only on how new development should 'fit' into its existing and planned context. Typological design guidelines for mid-rise and tall buildings provide further detail on what transition means for each building type, and how to achieve such transition to various scales of development as well as to parks, open spaces and streets. Secondary Plans and SASPs may provide additional site specific details for certain locations and conditions.
- In Downtown, most conflicts around transition occur either between different land uses (e.g. Mixed Use Areas adjacent to Neighbourhoods), or within a Mixed Use Area (e.g. tall buildings adjacent to main street typologies), as defined by the Land Use Map in the Official Plan.
- The City of Mississauga provides more general language, and defines and ensures 'transition' through the proposed development's composition or attributes (e.g. size of area, street width, adjacent open space, etc.) rather than by building typology.

RECOMMENDATIONS

- 1. Develop a policy definition that: defines transition; rationalizes the importance of 'transition'; and identifies various methods to achieve transition.
- 2. Identify an approach to transition that allows buildings to adopt characteristics from both the existing and planned context and heritage character if applicable, without necessarily replicating the form or design precisely.
- 3. Provide further built form direction for Downtown's Mixed Use Areas through site-specific studies.
- 4. Demonstrate different built form adjacencies or typologies and identify tools (e.g. angular planes or setbacks) for creating transitions.
- 5. Translate existing typological transitions from guidelines into policy where appropriate.

07. SKY-VIEWS

OBJECTIVE

Buildings should be located and designed to preserve and provide openness and sky-views.

RATIONALE

Anchoring all of our city views, the sky holds the power to inform the perception of time, space, and scale in the universe. "Being able to take a pause in the busy city life to look up – gives us a moment to breathe, creates a communion with nature, nourishes a global consciousness, promotes general environmental awareness, and prevents us from becoming 'irresponsible' to our surroundings"³³. The sky is the most accessible part of nature in Downtown's urban setting. It is proven that nature helps diffuse stress, especially in dense urban environments for residents and workers that spend the majority of their day indoors, as natural features, including the sky, can alleviate brain fatigue³⁴. The changing nature of the sky allows for a cognitive break – it puts the mind to rest.

For these reasons, sky-views should be accessible from the public realm, both above and between buildings, particularly as experienced from adjacent streets, parks and open spaces. Loss of sky-view is an issue in dense urban environments that are becoming denser. Loss of sky-view also reduces access to light, which affects the comfort, quality, and usability of public spaces. By recognizing the importance of sky-view, and protecting for openness between tall and mid-rise buildings through siting, massing and design, the character, usability, and quality of streets, parks and open spaces – can be maintained and improved upon. Reduced sky-views can

also negatively affect the micro-climate and sense of pedestrian scale at grade.

TRENDS & TRAJECTORY OF CHANGE

The tension between sky-view and growth will continue for as long as the city continues to grow and expand. Downtown, tall buildings dominate the skyline with numerous buildings that have been sited close to each other, in the form of 'point' towers with small floor plates. The complexity of small sites and irregularly shaped lots throughout Downtown makes the achievement of sky-views difficult through siting, massing and design regulations. As tower-podium typologies continue to be the dominant built form typology, loss of sunlight, views, and privacy are becoming a larger concern.

³⁴ Green, Jared. *Research shows nature helps with stress.* American Society of Landscape Architects, 2011.



Figure 113. Commentary in New York City on the constant adaptation and response to context that is required to protect for sky-views and sunlight (image credit: Alex Lucas, from Next City)

³³ Brogan, Jan. *Looking at the sky may change your entire POV.* Boston Globe, 2013.

TORONTO PLANNING & REGULATORY CONTEXT

The Official Plan refers to the importance of sky-view in relation to both street and building design. Official Plan Amendment 352 and Zoning By-law 1107-2016 provides for a minimum separation between tall buildings (12.5 metres from the centre line of the abutting street and 25 metres between tall buildings) as well as minimum tower setback requirements for tall buildings from the lot line (3 metres) which help to maintain sky-view and openness. This is emphasized again in the City-Wide Tall Building Guidelines, which encourages all new developments to be evaluated on the ability to "secure the greatest amount of sunlight and sky-view in the surrounding context (1.4 a).

3.2.2 TOWER PLACEMENT: "a. Coordinate tower placement with other towers on the same block and adjacent blocks to maximize access to sunlight and sky-view for surrounding streets, parks, open space, and properties".

The built form recommendations for the Lower Yonge Precinct Plan included percentages for Tower Area Ratios (TAR). The Lower Yonge urban design report tested that a "wall of condos" had a TAR of at least 27%; thus in order to protect for open sky views and access to sunlight, the TAR for tall residential developments should be below 20%. These recommendations advocate for using additional tower separation (greater than the 25 metres in the Tall Building Design Guidelines) as a tool to limit negative impacts on the public realm and protect loss of sunlight and views. **Refer to Appendix Q for full Toronto planning and regulatory context excerpts.**

PRECEDENTS OF GUIDELINES & REGULATIONS IN OTHER CITIES

Although not explicit in many policies, cities still have regard for the impact that tall buildings have on sky-views. **Refer to Appendix Q for full excerpts and additional graphics from the precedent city research.**

Ottawa, Ontario - Urban Design Guidelines for High-Rise Housing (2009)

Ottawa's guidelines suggest determining if a new high-rise building should be designed as a background building, which usually "creates view corridors and frames the views to neighbouring significant places, as well as sky-views" (Guideline 2b).

London, Ontario - Official Plan (2016)

Views are promoted where possible to "minimize the obstruction of views of natural features and landmarks" (11.1.1 iii).

New York City, USA - Zoning Regulation

An article titled "Do Taller Buildings Have to Mean Darker Streets" notes that New York's city wide zoning code in 1916 included a requirement for developers to keep at least a minimum level of natural light and air reaching the street. This was a result of an attempt to keep New York "from becoming a dark nest of brick and stone".³⁵



Figure 114. Excerpt from Lower Yonge Urban Design Report -Tower Area Ratio (TAR) impact on massing

³⁵ Laskow, Sarah. Do Taller Buildings Have to Mean Darker Streets? Next City, 2015.

TESTING

A massing model was prepared to test a variety of step-backs on sites that were deep enough to allow for a typical tall building footprint and provide the necessary separation distances. The testing looked at how openness and sky-view affect the character of a street. The modelling illustrates how increases to the minimum 3 metre step-back from the front property line can significantly impact the openness and sky-view in a predominantly mid-rise context. Three scenarios were considered with different tower step-back depths: 3 metres minimum setback (as identified in Zoning By-law 1107-2016), 6 metres and 9 metres. The model below, illustrates that by providing increased step-backs that respond to the existing conditions of a given area, a significant impact on the sky-view and openness can be perceived from the street level.



Figure 115. Built form demonstration of additional setbacks to provide greater sky-view (testing by Perkins+Will)



There are typically four scenarios that warrant potential increases to minimum separation distances or tall building step-backs and set backs, these include:

- Infill within apartment building neighbourhoods where the open space context and openness should be retained;
- In areas where there is a low- to mid-rise streetwall that should be retained;
- On deep lots that do not have a pre-existing tall building character; and
- Development applications that include or are adjacent to a heritage building/structure.

Each of the scenarios allow for additional sky-view.



FINDINGS

- Sky-view is an important consideration for the evaluation of tall and mid-rise buildings.
- The setbacks and stepbacks required by Updating Tall Building Setback in Downtown provide a minimum best practice, but do not embody an absolute standard that will suffice in all contexts. As well, the street wall and step-back proportions are defining features of the character of a street or area, and the sky-view contributes to that character. There are examples in other local studies that have expanded on the separation to increase openness and sky-views, including:
 - The North Downtown Yonge SASP: included a 10-20 metre step-back to maintain the consistent low-rise quality of Yonge Street; and
 - The Lower Yonge Precinct Plan: identified Tower Area Ratios as a method of prescribing a fixed amount of openness while maintaining for a collection of towers as part of a larger master plan. Tower Area Ratio is a useful tool for analyzing or quantifying openness as an indicator of sky view, independently from other factors such as tower separation or setbacks.
- In other precedent cities, view regulations generally focus on the protection of views and view corridors to a particular monument, building or geographical feature.

RECOMMENDATIONS

- 1. Identify opportunities to provide increased sky-views or openness. Suggestions for appropriate locations include:
 - Infill within apartment building neighbourhoods where the open space context should be retained;
 - In areas where there is a low- to mid-rise streetwall that should be retained;
 - On deep lots that do not have a pre-existing tall building character; and
 - Development applications that include or are adjacent to a heritage building/structure. Develop a standardized approach to assess sky-view as part of the development application review process.
- 2. Develop a standardized approach to assess sky-view as part of the development application review process.
- 3. Identify the appropriate level of sky-view and openness for different blocks or neighbourhoods through local area plans.

PART II RECOMMENDATIONS

OBJECTIVE

The composition of the overall Downtown skyline should be considered through the review of tall building location and design.

RATIONALE

Film, television, postcards, calendars, and even a simple Google image search of any city will focus on skyline views. As iconic storytellers, skylines symbolize a city's urban identity, its societal and cultural values are a utilitarian device, and as a visual entity, provide aesthetic pleasure³⁶. Kevin Lynch's "The Image of a City" explains the power of imageability and the opportunity to analyze environmental imagery through lenses of identity, structure, and meaning³⁷. It is crucial to understand how landscape perception reflects the influences and cultures of the city.

Skylines have, since ancient times, served as symbols of a culture, and has re-emerged as a 20th century concern, as skyscrapers have grown to be a dominant typology in many urban environments. What should a downtown skyline reflect? Architectural styles can indicate status and variety, whereas height can boast economic success or assert dominance. Uniqueness in built form can be a direct representation of a city "where you can do anything because so many [building] types are present"³⁸.

Downtown's skyline is ever evolving. With each new tall building built, the form and composition changes. There are many easily recognizable tall buildings within the skyline, distinct because of their height or unique architectural features, and there are many others that are background buildings, fitting into the skyline without calling out for attention.



Figure 118. Detail of map 7a of the Official Plan: Views from the public realm to prominent buildings, structures, landscapes and natural features

One such way the City has recognized the importance of the Downtown skyline is through Official Plan 199 (adopted by City Council April 2013), which recognized important views of Downtown's skyline as viewed from important public realm vantage points.

B1. Downtown/Financial District Skyline

- a. Gardiner Expressway (eastbound) at Kipling Avenue
- b. Gardiner Expressway (eastbound) at Humber Bay Shores
- c. Fort York
- d. Toronto Islands (north shore)
- e. Jennifer Kateryna Koval's'kyj Park
- f. Broadview Avenue at Bain Avenue
- g. Prince Edward Viaduct
- h. Don Valley Parkway (southbound) south of Leaside Bridge
- i. Sir Winston Churchill Park
- j. Top of Baldwin Steps (east of Casa Loma)
- k. Casa Loma (south terrace)
- I. Parc Downsview Park (top of The Mound)

³⁶ Booth, Christopher G. Revisiting the Image of the City: Exploring the Importance of City Skylines. University of Waterloo, 2012.

³⁷ Lynch, Kevin. The Image of the City. MIT Press, 1960.

³⁸ Participant response from interview executed in Revisiting the Image of the City: Exploring the Importance of City Skylines by Christopher Booth, 2012.

TRENDS & TRAJECTORY OF CHANGE

For over 40 years, the First Canadian Place building at the intersection of Bay and King Streets had been the tallest building (aside from the CN tower), at 298 metres³⁹. Then in 2014, the Aura building at the northwest corner of Yonge and Gerrard Streets topped off at 273 metres, beginning to close the gap between tall residential buildings and the "tallest" commercial building. Currently, there are about a dozen development applications for buildings in this 300 metre tall range.

"Manhattanization", a term assigned to Toronto for the first time in 1988 by the Globe and Mail to describe a booming real estate market, has re-emerged to describe Downtown's rapid approval and construction cycles⁴⁰. This time around, the word is associated with tall buildings that seem to stand out within the existing ensemble of the skyline and are not necessarily indicative of the urban structure. Isolated, out-of-place tall buildings create unintended and highly visible landmarks that do not relate to the characteristic skyline of Toronto, and that confuse the collective image and interpretation of the urban fabric.

TORONTO PLANNING & REGULATORY CONTEXT

The Official Plan recognizes Downtown's 'dramatic skyline' as "Toronto's image to the world and to itself: comfortable, cosmopolitan, civil, urbane and diverse. It is the oldest, most dense and most complex part of the urban landscape, with a rich variety of building forms and activities" (Chapter 2.2.1). It also states that the Financial District is the prime location for "landmark buildings that shape the skyline", and to "design the top of tall buildings to contribute to the skyline character". OPA 199 established a framework for assessing the impact of new buildings with regards to views, including in particular views to the Financial District from important public realm vantage points within the city, by identifying points of reference for evaluation. **Refer to Appendix R for full Toronto planning and regulatory context excerpts.**



Figure 119. View of north-south skyline on east side of Downtown (image credit: City of Toronto)



Figure 120. Toronto's night time skyline (image credit: City of Toronto)

³⁹ Hall, Joseph. Toronto's skyline is about to join the big-leagues: What the city could look like in 2020. Toronto Star, 2016.

⁴⁰ Warzecha, Monika. Manhattanization: A history of the term in San Francisco, Toronto, Seattle and Miami. BuzzBuzzNews, 2014.

PRECEDENTS OF GUIDELINES & REGULATIONS IN OTHER CITIES

There are a variety of ways in which other cities consider their evolving skylines. **Refer** to Appendix R for full excerpts and additional graphics from the precedent city research.

"We love the iconic Manhattan skyline, because what we're really doing is associating that with what we know happens on the streets."

Ken Greenberg, 2015

New York City, USA

Design requirements pertaining to skyline for developments are contained in the New York City Zoning Resolution. New York City is an "as-of-right" city, meaning the Planning Department does not review most development proposals unless there is a need to change the underlying zoning controls. Most development, including tall skyscrapers, are built through additional provisions that allow development to exceed zoning permission (e.g. transfer of development rights or bonusing).

An exhibition and study, titled the "Accidental Skyline" by the Municipal Art Society of New York City, examined the new "hyper-tall, super-slender towers that are, for the most part, as-of-right"⁴¹. This study focused on the shadowing impacts of new skyscrapers on Central Park, raising awareness of the outdated zoning process that is permitting these buildings. It is clear that New York City is struggling to balance growth and redevelopment with the impacts on the public realm. Some provisions within the Zoning Regulation speak to the assembly of the skyline, specifically within districts like Midtown and Lower Manhattan:

"81-641 (3) Building Design: ...any development or enlargement proposed under the provisions of this Section shall demonstrate particular attention to the building design, including, but not limited to, the proposed uses, massing, articulation and relationship to buildings in close proximity and within the Midtown Manhattan skyline".

"91-00 General Purposes (b): facilitate maximum design flexibility of buildings and enhance the distinctive skyline and streetscape of Lower Manhattan".



Figure 121. New developments proposed as of 2013 that have shadow impacts on Central Park (image credit: Municipal Art Society of New York City)

⁴¹ The Municipal Art Society of New York. The Accidental Skyline. MASNYC, 2013.

Paris, France

In light of the absence of a height restriction, the Tour Montparnasse was built at a height of 689 feet, emerging out of the skyline⁴². Subsequently, in 1977, Paris set a height limit of 121 feet on all new buildings. However, in 2010, in acknowledgement of a new vision for the city, Paris City Council voted to raise the maximum height limit from 121 feet to 590 feet (approximately 60 storeys).

Soon after the revised height limits were approved, the Tour Triangle, or Projet Triangle, was proposed as a tall glass pyramid at a height of 590 feet, with completion planned for 2020. The Tour Triangle serves as an example of outcomes based on a singular built form standard such as height.



Figure 122. Tour Montparnasse, Paris (image credit: treehugger)

Figure 123. Tour Triangle, Paris (image credit: Herzog & de Meuron)

London, United Kingdom

Beginning in the 1930s, London has created a rigid series of policies that identify where tall buildings can be located in the city. From policies that protected views of St. Paul's Cathedral and the Monument to the Great Fire to areas of historical or architectural conservation, these layers of protection limited where taller and higher density structures are permitted within the skyline. What remains is a small restricted area where tall buildings can be accommodated. Today, a cluster of towers are constructed or are proposed (Figure 124) up to 305 metres, which is the Civil Aviation Authority height limit for flight paths. The Guardian comments that "as soon as you define what the biggest possible development could be, developers will come and build it"⁴³.



Figure 124. New towers rise up to the civil aviation authority "safeguarded surface" of 305 metres (image credit: the Guardian)

⁴² Davies, Alex. Newly Freed from Height Limits, Paris Skyline Ready to Rise. Tree Hugger, 2010.

⁴³ Wainwright, Oliver & Ulmanu, Monica. 'A tortured heap of towers': The London skyline of tomorrow. The Guardian, 2015.

Vancouver, Canada - View Protection Guidelines

In order to protect Vancouver's spectacular ocean and mountain views, density is promoted in the downtown area. The backdrop of the mountains behind Vancouver's skyline signifies the city's connection to nature and aligns with its goals around sustainability.⁴⁴

The downtown peninsula has limited land available for development because of its geographic boundaries and in order to reduce urban sprawl, the City identifies areas for growth while ensuring that development does not impact the protected view corridors. Vancouver has 27 protected view corridors, established by the City to protect the view of the North Shore mountains, the Downtown skyline, and the surrounding water.

The location maps within the View Protection Guidelines⁴⁵ only show the location of the view cones and do not give the maximum building heights within them. Staff will calculate the maximum building height for each site falling within a view cone. Within the West End Community Plan⁴⁶, one of the seven built form guiding principles include: "Reinforce the Dome-Shaped Skyline: New development opportunity should reinforce the legibility of the downtown's recognized dome-shaped skyline when viewed from longer distances. Appropriate form and scale to "fill the gaps" can strengthen the image of the city."



Figure 125. View of Downtown Vancouver (image credit: City of Vancouver)

⁴⁴ Final Report: Implementation of "Vancouver Views" and Opportunities for Higher Buildings in the Downtown. January 20,2011

⁴⁵ City of Vancouver. *View Protection Guidelines*. Community Services, amended 2011.

⁴⁶ City of Vancouver. West End Community Plan. Planning and Development, 2013.

Montreal, Canada - Plan D'urbanisme de Montreal

Montreal is experiencing a condominium boom, which indicates a change of values for Montreal inhabitants, as the city has been known largely as a renters' city⁴⁷. As a city with strong heritage and history, churches together with Mount Royal dominated the traditional Montreal skyline; but due to growth downtown, the increase in tall buildings has transformed the skyline today. The borough of Ville-Marie requires all buildings to fit within the silhouette of the Downtown Area. "Even if they surpass the height of their neighbours...the goal is to maintain the importance of Mount Royal within the urban landscape"⁴⁸.

5.1.2 By-laws established by the Borough of Ville-Marie must ensure that a building that exceeds the street height in an area as specified on the attached Map entitled "Areas of Tall Buildings" is set with respect to the skyline.



Figure 126. Extract from Plan D'urbanisme de Montreal, November 2004, partie III -Document complementaire, that demonstrates two views of the skyline showing the image of growth

Doha, Qatar

As the capital city of Qatar, Doha been experiencing a rapid increase in corporate and commercial activity⁴⁹. However, each new tower is as tall, or even taller than the last, competing in profile, material, style, and roofline to stand out amongst the rest. In contrast to Toronto, which has a fairly legible shape despite the infill nature of recent developments, there is a lack of composition to the skyline.



Figure 127. Left and right: Views of Doha skyline in the day and night (image credit: Business Insider)

⁴⁷ Martin, Megan. Montreal's changing skyline. The Gazette, from the Ottawa Citizen, 2013.

⁴⁸ Heffez, Alanah. *Skyline Planning.* Spacing Montreal, 2008.

⁴⁹ Willet, Megan. (2014). Incredible photos show how Qatar has transformed over 40 years. Business Insider.

ANALYSIS

Viewing the skyline from the north shore of the Toronto Islands is arguably the most iconic view of Toronto. As part of this ensemble, the CN Tower and dome stadium (Rogers Centre) – although built only 40 years ago – is the signature of the skyline, recognized internationally as a symbol of Toronto. The skyline image of the CN tower along with the arc of the Dome Stadium (above its concrete base) should remain visible from the vantage point of the island when viewed due south of the stadium.



Visitors and residents alike identify the tower as a way-finding tool, tourist destination, and stands as a beacon of the city, both from within Downtown and outside of it. There is an identifiable shape and rhythm to the composition of Downtown skyline, with peaks and valleys that appear in both the east-west and north-south plane. Generally, tall buildings are clustered within the Financial District and gradually taper downwards to the east, west and north. As viewed from the east, along Broadview Avenue/Riverdale Park East, there is a swell in the north-south direction generally along the Yonge-University subway line, with some intersections marked by tall buildings. These tall buildings shape the skyline and reflect the urban structure of the Downtown, identifying the areas of growth.



The Downtown skyline is dynamic and with each new tall building the skyline is transformed. The skyline is also dynamic because there is no one point from which to view it. From the water, or the Islands, each point of view produces a different composition, as the skyline changes with every vantage point (Figure 129). The ensemble or composition of the skyline does not drive the location or form of growth, but rather, it will be an outcome of that growth Downtown, and evidence of how that growth has been directed. As the skyline continues to evolve with each new tall building, these new tall buildings should be evaluated with regards to their contribution to Downtown's dynamic skyline.



Figure 130. Recently approved buildings Downtown (purple) – as of February 2017 – have significant impact on the shape of Toronto's skyline (rendering by Perkins+Will)

FINDINGS

- The skyline is a symbolic representation and image of the city. Downtown's skyline has historically been defined by the clustering of tall buildings in the Financial District, and then later, by the addition of the CN Tower and dome.
- The Downtown skyline is dynamic and will continue to evolve.
- Although the skyline has generally retained a "curve" with the height peaks at CN Tower and in the Financial District, the planning framework for tall buildings has not adhered to a skyline concept but rather the Downtown skyline has been a result of policies used to direct growth along with other built form parameters.
- There are a variety of ways in which other precedent cities consider their evolving skylines. Some prioritize landscape elements where the skyline will typically follow the shape of its natural features.
- Other precedent cities recognize the need to differentiate between a skyline "concept" and skyline "control parameters":
 - Concepts: absolute height (Paris), view corridors and significant backdrop that prioritizes landscape elements (Vancouver), viewing cones (London); and
 - Control parameters: building as-of-right (New York), Tower Area Ratio (Lower Yonge Precinct), proximity to transit.

RECOMMENDATIONS

- 1. Consider the composition of the skyline as it pertains to identifying maximum building heights and their reflection of the urban structure and growth areas.
- 2. Develop evaluation criteria for reviewing tall buildings and their contribution to the ensemble of the skyline.
- 3. Continue to provide more specificity as to the characteristics, patterns and areas of protection for the skylines views identified on Official Plan Map 7A as perceived from their respective viewpoints.
- 4. Review tall building proposals with regard for their contribution to the overall skyline.



09. MIXED-USE AND FLEXIBLE BUILDING DESIGN

OBJECTIVE

New development should accommodate the wide range of services that foster a vibrant community, including schools, recreation, libraries, child care centres, human service organizations and other community service facilities.

RATIONALE

Walkable urbanism, which typically relates to pedestrian mobility, is also dependent on the number, or type of uses available within walking distance. This concept of walkable urban development includes high-densities, mix of uses and multiple transportation options⁵⁰. The relationship between people and places is strongly determined by the social and physical resources within residential environments⁵¹. Essentially, this means working, living, shopping and recreating all within a comfortable walking distance or within the same building. Vertical mixed-use is a strategic and intentional layering of uses, amenities and utilities in a compatible form of various scales and intensities, within a single building⁵². This tight-knit clustering of different programming fosters integration, pedestrian activity, and supports strategies of smart growth and complete communities.

Furthermore, a lower density of uses result in higher private and social costs because of the separation of uses, as proven by suburbanization and dependence on the car⁵³. Environments that foster complete communities embrace a wide range of uses that allow for healthy city function. The term "mixed-use" can be translated in different typologies, ranging from the site-scale to the block-scale.

In order to accommodate a wider range of services and facilities, there must be flexibility in the design of buildings to allow for a wide range of physical space requirements, particularly in the infill context of Downtown, and where community needs are constantly changing through generations and trends. A liveable and complete community is multi-faceted, largely driven by flexible buildings that can allow people of all ages, abilities and

interests to participate in urban life. This is more than just accommodating housing, retail and office – buildings must also be designed to offer adequate services and facilities, such as schools, healthcare, event spaces, recreation facilities and cultural uses. These community services and facilities should not be located in left over or less desirable spaces within a block or building, but should be the first trigger for defining how the rest of the uses and

⁵³ Angotti, Tom & Hanhardt, Eva. *Problems and Prospects for Healthy Mixed Use Communities in New York City*. Planning Practice and Research, 16(2), 2001.





Figure 131. Abstract demonstration of how multiple uses can fit within various typologies to create a complete community (illustration by Perkins+Will)

⁵⁰ Leinberger, Christopher B. & Rodriguez, Michael. *Foot Traffic Ahead: Ranking Walkable Urbanism in America's Largest Metros*, 2016.

⁵¹ Insch, Andrea & Florek, Magdalena. A great place to live, work and play: Conceptualising place satisfaction in the case of a city's residents. *Journal of Place Management and Development*. 2008.

⁵² Placemakers. Don't Get Mixed Up on Mixed-Use, 2013.

built form will be shaped around it. An example of this is the Leadership in Energy and Environmental Design (LEED) program which provides credits for encouraging residential uses to be located close to neighbourhood shops, services, and facilities⁵⁴. This reinforces the importance of locating people where existing resources can support them. It recognizes that where new facilities or buildings are not feasible, the expansion of existing facilities, or additional space for new community service facilities should also be considered.

A concurrent TOcore study, "Planning Downtown: The Outlook for Office and Institutional Employment to 2041", prepared by Hemson and SvN, takes a more comprehensive approach for understanding employment growth Downtown and the necessary space requirements for office and institutional uses. The forecasting, research and analysis from the study formed strategic policy recommendations that will lead to long-term employment prosperity Downtown, especially as residential development competes for prime sites. Refer to this study to understand the longterm prospects for employment growth Downtown.

TRENDS & TRAJECTORY OF CHANGE

Currently, Downtown is experiencing significant residential construction, with no signs of slowing down⁵⁵. Downtown is being transformed from a city of neighbourhoods to a city of vertical communities and it is important that amenities, services and facilities respond to these vertical patterns. A usable and high quality mix of uses integrated into a tall building context is important in addressing the well-being of residents and accommodating diverse lifestyle needs. To design for people on foot rather than the car, it is necessary to encourage a trend of complex mixed-use development to support live-work-play lifestyles.

Cities that go through exponential residential growth are at risk of developing "bedroom communities",



Figure 132. Images describing vertical mixed-use development and how the external envelope must be robust as the building internally can and does change (image credit: the Placemakers blog)

⁵⁴ US Green Building Council. LT3.2 Diverse Uses.

⁵⁵ Hunt, Shauna. What will it take for Toronto to continue to sustain the condo boom? CityNews, 2017.

where human activity is polarized around certain hours of the day – and in turn, left empty other times. One consequence of the current residential construction boom is the change that towers are becoming super slender, following a trend seen in New York, where the towers are between 50-90 storeys, with the most slender having a base to height ratio of 1:23⁵⁶. With such a small floor plate, it is not common practice to fit in typologies other than small residential or office units. The increase of infill development on these small or irregular sites will further challenge the provision of quality mixed-use within the building.

There is significant pressure on existing community infrastructure, including community centres, schools, and healthcare facilities. For example, Toronto hospitals have been under high pressure because of the high volume of new patients, with emergency visits to the eight acute-care hospitals in Toronto having increased 34% from 2007 to 2015⁵⁷. Ambulances are backed up waiting to unload patients, intensive-care patients are waiting for beds, and emergency rooms are overflowing. The increased density of Downtown today has been successful in welcoming increased populations into the core, but there remains a need for community facilities and vital services that support the daily and emergency functions of all of Downtown's populations.

Although it is still not widely adopted, a number of buildings have welcomed larger, non-residential uses, successfully implemented through integrated design (e.g. TIFF, One Yonge). In this time of rapid growth, where there are significant needs of the projected population growth, it is the City's responsibility to accommodate the necessary urban amenities that support and sustain a high quality of life.

TORONTO PLANNING & REGULATORY CONTEXT

The Mixed Use Areas designation in the City's Official Plan provides direction for includes "adequate and equitable access to community services and local institutions across the City" (3.2.2), but does not provide guidance for the appropriate mix of uses or the necessary balance between residential and non-residential uses. This language is applied to all of the Mixed Use Areas across the city, or even within Downtown.

Adopted in 2007, the Section 37 Implementation Guidelines note the required procedure for providing community services and facilities space as part of Section 37 agreements. It currently defines community services and facilities as "non-profit libraries, publicly funded schools, recreation facilities, community centres, community health centres, family resource centres, public meeting spaces and multi-use facilities, or any other facility operated or directly funded by a government agency or non-profit institution for the purpose of providing human services". These guidelines also outline the specific circumstances necessary to retain and maintain community services and facilities spaces. **Refer to Appendix S for full Toronto planning and regulatory context excerpts.**

The following pages include examples of successful integration of vertical mixed use development.

⁵⁶ Skyscraper.org

⁵⁷ Grant, Kelly. State of emergency. The Globe and Mail, 2016.

TIFF Lightbox, Festival Tower

The 42-storey Festival Tower sits on top of the 5-storey mixed-use podium, which contains the TIFF Lightbox (a non-profit organization) cinemas, gift shop, rooftop terrace, public atrium, galleries, studios, library, restaurants and associated patio space⁵⁸. Lightbox was a result of a partnership between the Toronto International Film Festival Group and the King and John Festival Corporation.

58 TIFF.net





Figure 134. Images from OpenBuildings, KPMB Architects, MeetingsCanada

Lower Yonge Precinct

This is a City-initiated Official Plan Amendment and Precinct Plan that include 13 new towers, to serve approximately 28,000 new residents and employees⁵⁹. These former industrial lands at the heart of the Central Waterfront area of the City, are an appropriate location for large-scale redevelopment and intensification.

It is anticipated that this new sustainable neighbourhood will require: modifications to the Gardiner Expressway; a tunnel connection under the rail corridor; two new streets; enhanced cycling infrastructure; and connections to the PATH network.

In collaboration with staff from Waterfront Toronto, Children's Services, Parks, Forestry and Recreation, the Toronto District School Board (TDSB), Toronto Catholic District School Board and Toronto Public Library, City Planning staff held several workshops and meetings to formulate a community services and facilities strategy for the Precinct. During Phase 2 of the process, community services and facilities are to be integrated into mixed-use, private developments: a community recreation centre, a public elementary school, and two non-profit child-care facilities. If community service facilities are not provided, densities will be re-evaluated, or, dependent on ongoing monitoring, additional facilities may be required. These facilities will be located within podiums of tall buildings, with large floor-to-ceiling heights and a public park to anchor the new developments.



59 City of Toronto Staff Report. Lower Yonge Precinct - City-initiated OPA and Precinct Plan - Final Report. 2016.



Figure 133. Images from Lower Yonge Precinct Plan and Urban Toronto

The new Health Sciences Complex by Perkins+Will is designed to not only house the Daphne Cockwell School of Nursing, the Midwifery Education Program, the School of Nutrition and the School of Occupational and Public Health, but also student housing. While an eight-story podium (16,145 m²) provides the cross-disciplinary academic, administrative and student study spaces, a tower provides 100 residential units for 332 students over 18 storeys, with a green roof terrace⁶⁰.

The dense mix of uses fosters the building's main goal of "holistic health and wellness" while providing the critical spaces for learning and inclusive student communities.



Figure 136. Ryerson University Daphne Cockwell Health Sciences Complex is an example of mixed-use fostering academic and student excellance (image credit: Perkins+Will)

Daniel's Spectrum

This 60,000 square foot community cultural hub in Regent Park is home to seven arts and social enterprise organizations. It is owned by the Regent Park Arts Non-Profit Development Corporation, a non-profit shared between subsidiary corporations of Toronto Community Housing, The Daniels Corporation, and Artscape⁶¹. This \$10 million capital campaign had the main goal to "engage with communities, encourage artistic creation, advance learning, inter-cultural experience".

A 26-storey condominium tower sits on top of this hub, providing 282 units to serve Regent Park. This amenity space is successful because of its adjacency to residential units, an urban mews, other community facilities, and a community park.

Experience Floor: 400 seat performance/event space, large outdoor performance court, two performance studios

Learning Floor: for music, visual arts and film, history, etc. Innovation Floor: 60 non-profit/social mission organizations

61 Toronto Artscape. Daniels Spectrum.



Figure 135. Images from Toronto Artscape and Diamond Schmitt Architects

Centres for Social Innovation

With three locations in Toronto and one in New York City, this social enterprise, the Centre for Social Innovation (CSI) incubates non-profits, entrepreneurs, artists and activists, with over 800 members today⁶². It rents private offices, private or shared desks, meeting or event spaces, and offers networking events (workshops, seminars, competitions, mentorships) to these local entrepreneurs or small businesses. These short term office spaces offer temporary commitment, in comparison to traditional leased spaces typically housed in high-rise office buildings in the Financial District. Targeted towards a social mission, the provision of these affordable, open concept spaces in an older building size, form, and style speak to the benefits of adaptive reuse, flexibility, and programming through a lense of not just residential, but also commercial/office affordability.

62 Centre for Social Innovation. socialinnovation.org, 2017



720



- CSI Spadina (215 Spadina Avenue) is the Centre's original location, in 25,000 square feet of a restored warehouse include open concept spaces with a community lounge and kitchen.
- CSI Annex (720 Bathurst Street) was acquired through the sale of Community Bonds, and is located in a renovated centuryold industrial building, totaling 36,000 square feet of space, with a mix of offices and themed incubator spaces.
- CSI Regent Park (585 Dundas Street East) operates in 10,000 square feet within the Daniels Spectrum community hub.



The Plant

The Toronto Star mentions its acknowledgement that for most condominiums, "the easiest - and cheapest - method is to fill the ground floor with load-bearing sheer walls that leave little room for flexibility. Because this isn't conducive to fine-grained retail, developers make spaces large to suit the needs of large global chains"⁶³.

This is what makes this 10-storey condo at Dovercourt Street and Sudbury Street, named "The Plant", stand out. The building is designed for small and neighbourhood retailers, with a large focus on sustainability, healthy living, and urban agriculture. This includes potential food market, flower shops, bicycle stores, cafe, gathering places, offices, and even health-related uses above the ground level. This retail mix, large units and balconies, urban gardens, greenhouse and kitchen that are all integrated in one building are pointing towards a more family-friendly, inviting, neighbourhood magnet building typology and attitude that is making a difference in its relationship to the community.

63 Hume, Christopher. A radical concept in Toronto - a condo designed for residents: Hume. The Toronto Star, 2017.



Figure 141. Proposed "The Plant" development at Dovercourt and Sudbury Streets demonstrates a more neighbourhoodcatered development, with smaller retail units at grade, and other community uses throughout

PRECEDENTS OF GUIDELINES & REGULATIONS IN OTHER CITIES

The research in this section includes a combination of policies and building precedents from different cities. While there may not be direct links between policy provision and built form decisions (e.g. each building may not show the policy described), the intent of policies represent the opportunities made possible for certain typologies. It is noted that many buildings in the case studies resulted from partnerships or incentives. **Refer to Appendix S for full excerpts and additional graphics from the precedent city research.**

Seattle, USA - Downtown Amenity Standards (2014)

Seattle permits increases in floor area "above the base Floor Area Ratio (FAR) limit or base height limit of the zone" in exchange for providing amenities in their Downtown.

London, UK - Official Plan

Mixed-use development in London is encouraged through renewal or modernisation, dependent on context. The Official Plan notes that "as a general principle, housing and other uses should be required on-site or nearby to create mixed use neighbourhoods" (7.23).

".15 The Mayor encourages mixed use development, with different approaches for places where high office values will generally support other uses, and those where values for other uses (such as residential) may be higher and support some office space renewal".

Vancouver - Downtown Official Development Plan By-laws

Vancouver may permit an increase in the as-of-right floor space ratio of density of a proposed building if a public, social, cultural or recreational facility has demonstrated to be satisfactory to their Development Permit Board.

Vancouver - Community Amenity Contributions - Through Rezonings

The use of Community Amenity Contributions in Vancouver are used in rezoning applications, and are in the form of cash contributions or an amenity.

"It is difficult to make a direct comparison between Vancouver and Toronto regarding the process of obtaining community benefits through rezonings and the value of the benefits secured...On the surface it appears that Vancouver is able to obtain more benefits for community amenities than Toronto through rezonings, but even for this calculation there are important nuances that make this observation inconclusive. One important difference is that Toronto, for the most part, has not included in-kind benefits in its summary of valuations..."⁶⁴

New York City - Incentive Zoning

The idea of incentive zoning was pioneered by New York City in its 1961 zoning, where additional floor area was applied to office buildings that also included public plazas around building bases. Although this approach is primarily used for creating privately-owned public spaces rather than public amenities, community facilities such as hospitals, universities, and churches can take advantage of it to bump up their site density.

"Incentive zoning provides inducements to developers for development projects that provide some type of a community benefit, such as a public square, streetscape, park, senior housing, or affordable housing. Often, the incentive will take the form of a density bonus". - Liveable New York Resource Manual

New York City - Inclusionary Housing

Since 1987, New York City's zoning has included an Inclusionary Housing program, which offers a floor area ratio bonus for developments that provide affordable housing. This housing may be offered on or off site, be a part of new construction, redevelopment, or preservation of existing affordable housing.

There are two types of Inclusionary Housing: "the R10 and the Designated Area programs offer an optional floor area bonus in exchange for creation or preservation of affordable housing. Mandatory Inclusionary Housing, or MIH, requires affordable housing as part of all residential development above a certain size in applicable areas."⁶⁵

"Voluntary Inclusionary Housing: enacted in 1987, enables a development to receive a density bonus in return for the new construction, substantial rehabilitation, or preservation of permanently affordable housing".

"Mandatory Inclusionary Housing: enacted in March 2016, requires a share of new housing in medium- and high-density areas that are rezoned to promote new housing production - whether rezoned as part of a city neighbourhood plan or a private rezoning application - to be permanently affordable".

⁶⁴ City of Toronto. (2013). Improvements to the Section 37 Implementation Process Interim Study Findings

⁶⁵ New York City Planning. Inclusionary Housing. Department of City Planning, 2017.

New York City, USA - Special Mixed Use (1997)

Within New York City's Zoning Regulation, there is a specific zone called the Special Mixed Use District that allows for non-residential and residential uses to be developed together as-of-right.

"The Special Mixed Use District (MX) was established in 1997 to encourage investment in, and enhance the vitality of, existing neighborhoods with mixed residential and industrial uses in close proximity and create expanded opportunities for new mixed use communities. New residential and non-residential uses (commercial, community facility and light industrial) can be developed as-of-right and be located side-byside or within the same building".

Hong Kong - Town Planning Ordinance, 2011

The Town Planning Board of Hong Kong recognizes that different types of compatible uses can create diversity in an area. This can be done through ensuring flexibility for development, redevelopment, or conversion of residential or other uses. For example, this is often done through Composite Buildings, which are buildings that are "constructed or intended for use partly for residential purposes and partly for non-residential purposes" (4.3).

"7.4 When designing a composite building, particular attention should be paid to fire safety requirements and building safety considerations and other special building requirements for the relevant uses as appropriate, e.g. social welfare facilities involving residential care. For instance:

- schools should not be located at a height exceeding 24 metres above ground;
- residential care homes for the elderly and child care centres (CCC) for children aged 2 to 3 years should not be located at a height more than 12 metres above ground;
- domestic accommodation should not be provided within or immediately adjoining a place of public entertainment;
- schools should not be located over shops".

Seattle - Municipal Code

Seattle's Municipal Code outlines the specifics of the uses permitted within the Seattle Mixed designation. It also includes the required street level uses that have to be incorporated into the building.

"D. Required Street-level Uses: One or more of the following uses listed in this subsection 23.48.005.D.1 are required at street level along the street-facing façade abutting streets designated as Class 1 Pedestrian Streets...".

- a. General sales and service uses
- b. Eating and drinking establishments
- c. Entertainment uses
- d. Public libraries
- e. Public parks
- f. Arts facilities
- g. Religious facilities
- h. Light rail transit stations

Adelaide, South Australia - Guide to Mixed-Use Development

The Guide to Mixed-Use Development defines mixed-use as two or more land uses horizontally or vertically in a single building or multiple buildings within a distinct site. Mixed-use is encouraged for they create economic and amenity synergies, promoting successful development. Mixed-use should be especially important as a part of redevelopment strategies.

"Within the Central Business Area, as further premium office space is developed, there are opportunities to convert under-utilised lower grade office buildings to different uses. These buildings are often centrally located in relation to retail, education, entertainment and other facilities and highly accessible to public transport".

Hong Kong - Metro Plan

There are three Residential Density Zones within the Metro Area, which also permit non-residential uses.

"6.2.4. Residential Density Zone 1 covers the highest density of residential development and applies to districts well served by high capacity public transport systems such as rail station or other major transport interchange. The buildings often incorporate a significant component of commercial floorspace on the lower one to three floors."

Rotterdam, Netherlands

Timmerhuis

The stacked cuboidal modular form of this mixed-use building allows it to be flexible, especially with the integration of two large atriums that function as the "lungs" for all the uses within the building³².

Merged with an existing municipal office block, this public-private partnership is dedicated to office space (for the municipal departments), sandwiched between cafes, retail space, restaurants, museums, underground car parking, and 84 luxury apartments - each with their own rooftop patio!

32 Frearson, Amy. *OMA completes pixellated Timmerhuis complex in Rotterdam*. Dezeen, 2015.



Figure 143. Examples from Rotterdam, where architects explored innovative and different typologies of mixed-use development (image credit: OMA, Dezeen, and Inhabitat)

Chicago - Neighborhood Opportunity Bonus (updated 2017)

In Chicago, in order to obtain a Floor Area Ratio bonus, the applicant has to make a voluntary payment into a Neighbourhood Opportunity Bonus system, which is calculated by: "Cost of 1 square foot of floor area = 80% x median cost of land per buildable square foot". The Neighbourhood Opportunity Fund will support development within under-served commercial corridors, including grocery stores, restaurants and cultural facilities.

Chicago, USA

River North Fire Station

This unique civic and private partnership proposal led by Friedman Properties proposes to build a new fire station at the base of an office and mixed use tower, replacing the existing Engine Co. 42 station. The new, integrated firehouse in the podium will also include a community room for resident engagement and a training room for the Fire Prevention Bureau.

Friedman properties will pay the \$20.2 million cost for the firehouse and as much as \$10 million to Chicago's Neighborhood Opportunity Bonus system⁶⁶.

66 Gallun, Alby. *Developer plans big office tower atop River North firehouse*. Crain's, 2017.



Chicago Public Library

The City of Chicago announced a 'co-locate' plan in 2016, where three Chicago Public Library branches will be integrated with affordable public housing. Not only does this lower construction costs, but increase patronage⁶⁸. A large public atrium makes the building prominent, visible, and contributes to intuitive wayfinding.

68 Kamin, Blair. *Mayor unveils combined public housing, library designs*. Chicago Tribune, 2017.

150 North Riverside

Named as NAOIP's Office Development of the year in 2016, this 54 storey building provides 1.25 million square feet of rentable space⁶⁷ with a 260-seat junior ballroom and multiple boardrooms. This building serves both tenants and the public through a prominent atrium with high ceilings and large windows.



67 Chicago Architecture. *150 North Riverside Opens for Business*. 2017.



Figure 144. Chicago examples of public-private partnerships and how to design private office buildings to be inviting to the public (image credit: Crain's, 150northriverside.com, and Chicago Tribune)

FINDINGS

- The City of Toronto Official Plan includes a "Mixed Use Areas" land use designation but does not provide further direction on the breakdown or percentages of the uses (i.e. does not provide formulas to define balance between non-residential and residential uses).
- Mixed use buildings are a common building typology Downtown.
- It is generally accepted that the location of non-residential uses at the base and lower levels of mixeduse buildings positively contribute to the liveliness and activity on the street, while benefitting from high exposure and visibility to the public.
- Current market trends indicate that the location of residential uses in podiums of taller buildings is not desirable as the required depth of the footprint is not conducive to residential layouts.
- The location of residential uses in the lower levels of buildings can be affected by noise and lack of privacy from both the uses at-grade or on the street; particularly true for developments within dense areas.
- In some zones in Hong Kong, non-residential uses are permitted in the lower three floors of residential buildings.
- Given the rising cost of urban land across cities in North America, the global trend is moving away from stand-alone facilities for public facilities and services (e.g. schools, hospitals, community centres), and including them in the base of private buildings.
- In Toronto, the current regulations do not specify conditions and guidelines related to the provision, location and configuration of community uses within new developments. The provision of amenities is typically secured, designed and approved through consultation with City staff on a case-by-case basis.
- As community uses are usually purpose-built with specific program and design requirements, design guidelines for these types of facilities typically do not exist.
- The precedent case studies indicated that the most successful incorporation of public urban amenities into private development occurred when:
 - proposed on generous sites; and/or
 - municipalities and/or institutions participated; and/or
 - partnerships with NGOs for operation were negotiated; and/or
 - building design allocated sufficient room to be made available at-grade; and/or
 - building design incorporated multi-programming spaces at-grade.
- While the balance of uses both within areas and buildings has significantly contributed to the success of Downtown as a place to work, live and play, the proliferation of single use residential buildings has challenged the ability of the office sector and landmark institutions to expand, due to the limited supply of development sites.
- Buildings designed with generous ceiling heights, large spans and centralized services (e.g. elevator cores, garbage, servicing, loading) are flexible enough to be used for both residential and commercial uses, or even for some less-restrictive types of public facilities, and do not need to be tied to a specific land use over time. While this is particularly true at ground level, it is still relevant for the full structure of the building, as seen in the extremely successful adaptive reuse of several buildings in the Downtown in recent years.

RECOMMENDATIONS

- 1. Limit residential uses in the base or lower floors of mixed use buildings, to provide opportunities for a variety of non-residential uses in the podium of mixed use buildings.
- 2. Require taller floor-to-ceiling heights in the base or lower floors of buildings to provide opportunities for a variety of non-residential uses and flexibility/adaptability over time.
- **3.** Consideration should be given to the prioritization of replacement, expansion and enhancement of office space Downtown, particularly within mixed use development.
- 4. Provide further design direction for a variety of grade-related retail typologies.
- 5. Provide further design direction for grade-related non-residential or community uses that are appropriate for streets other than Priority Retail Streets.
- 6. Consider tools to provide incentives for the provision of public community uses in the base and lower floors of buildings.
- 7. Identify opportunities for the provision of community uses as part of development applications, with regard for minimum site sizes and encourage lot consolidation where there are opportunities within a block to accommodate these community uses.



10. HERITAGE

OBJECTIVE

Buildings and landscapes with historic significance should be conserved and sensitively incorporated into new developments to enhance the character and liveability of the urban fabric.

RATIONALE

Heritage conservation interprets the history of the city, identifies characteristics for protection and is a response to the tangible and the intangible history of our culture. In Toronto, it begins with the collective past of Indigenous Peoples, and the imprint of successive waves of newcomers through the centuries. The cultural heritage of Toronto is inseparable from its identity. Through the City's policies and plans, significant buildings, properties, districts, landscapes and archaeological sites, are being conserved and adapted through wise use and protection, in accordance with accepted conservation principles.

Existing spaces, buildings and streetscapes, regardless of whether they are on a heritage register, create the diverse fabric of the city and tell its stories, contribute to liveability, provide a human scale and provide places to live, work and grow. Toronto's everyday places and neighbourhoods are lessons in resilience, for they have adapted and will continue to adapt through reuse. When sense of place is conserved, new developments can contribute to a sustainable and economically rich future that reinforces communities, is full of character and culture, and enhances placemaking. Heritage also ensures that the city will retain a distinct identity that is visually rich in character and cultural experiences.



Figure 145. Kensington Avenue, looking north towards Baldwin Street, 1922 to 2016



Figure 146. Augusta Avenue, looking east towards Baldwin Street, 1932 and 2016

Each district and neighbourhood has a history, where old and new come together. The benefit of preserving heritage places has been acknowledged in Toronto for decades but conservation of the City's heritage is key to achieving a range of public goals, including:

- Commemoration of our collective past;
- Preservation of community and public history;
- Protection of the significant built environment that provides the sense of place for which the City is known;
- Protection of our heritage of parks and open spaces, that foster healthy and active communities;
- Celebration of our role as a provincial capital, and a City of natural and human-made beauty;
- Protection of the places that are acknowledged as being landmarks, as well as the everyday places that contribute to district and neighbourhood character for which Toronto is famous world-wide;
- Creation of a City with vibrant and engaging, human scale streets and laneways, through preservation of heritage places where variable lot size, setbacks, mid-rise to low scale buildings that provide variety as well as access to daylight and open space are located;
- Provision of adaptable and diverse mixed use districts where both large and small businesses can locate and flourish;
- Provision of engaging places that support the practice and enjoyment of arts and culture;
- In reuse, or in their existing state, supporting of variety and affordability in housing;
- Through reuse, contribution to sustainable development;
- Through reinvestment, contribution to City centre revitalization;
- Through conservation and reuse, creation of skilled jobs in the professions and crafts and trades;
- For Heritage tourism; and
- For Economic development⁶⁹.



Figure 147. Excerpts from Kensington Market Heritage Conservation District study shows the urban fabric of historical Kensington Market has been retained, and remains feasible today (image credit: Taylor Hazell Architects Ltd.)

69 PlaceEconomics, Measuring Economic Impacts of Historic Preservation, A report to the Advisory Council on Historic Preservation, 2nd edition, 2013, p. vi

TRENDS & TRAJECTORY OF CHANGE

The presence of a rich mix of buildings, lot sizes and open spaces from all periods of development elevates Downtown's character. From this stock of heritage buildings emerges an active and engaging streetscape, patterns and texture, all which are inherent in the evolution of Downtown's fabric. These characteristics provided by heritage buildings are successful in engaging with the public realm through their contribution to a vibrant, animated and legible Downtown, filled with rewards and surprises. In a time of large scale development over whole blocks, and intensification through tall buildings, the retention of historic buildings, parks and heritage places reinforces community identification with place, as well as a more human scale.

Overtime, there has been a trend of marginalization of heritage resources in favour of new development that has resulted in an unacceptably high degree of loss of important buildings, parts of buildings and open spaces. As Downtown intensifies, it becomes increasingly important to reconcile high quality new buildings with high quality heritage properties in order to define streets, districts and unique areas with special heritage character.

Through the revision of the Official Plan Heritage policies (Official Plan Amendment 199) in 2015, the increasing number of heritage resource listings on the City's Register of Historic Buildings under Part IV of the Ontario Heritage Act, increasing the number of Downtown mixed use and residential Heritage Conservation District Studies and Plans (Part V of the Ontario Heritage Act), and its Archaeological Management Plan, the City has embarked upon a new trajectory for encouraging development that is context driven and sensitive to the City's heritage.

Massey Tower Condos

This 20,000 square foot site, which includes the historic Canadian Bank of Commerce Building, will restore and adaptively reuse the building and construct a new 60 storey mixed use development behind⁷⁰. The development aims to rejuvenate the vibrancy, arts, and retail character of Yonge Street, including contributing to the renovation and revitalization of concert venue, Massey Hall.

In order to restore the heritage nature of the intricate site, the podium will be built out to the lot lines, the back lanes will be transformed, and parking will be hidden to the rear with a proposed vehicle elevator.

70 Landau, Jack. *MOD's Massey Tower set to Rejuvenate Yonge Street Theatre Block*. Urban Toronto, 2013.





TORONTO PLANNING & REGULATORY CONTEXT

Toronto's regulatory context is framed by the direction set out by Provincial Policies. The revision to the Provincial Policy Statement in 2014 enhanced many requirements that support the retention and adaptation of heritage places including policies on adaptation to climate change, health, sustainability, liveability and resilience in communities. In particular, Section 2.0 Wise Use and Management of Resources: "Ontario's long-term prosperity, environmental health, and social well-being depend on conserving biodiversity, protecting the health of the Great Lakes, and protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits."

The Ontario Heritage Act, last amended in 2009, sets out mechanisms for the conservation of heritage resources by enabling municipalities to:

- Establish municipal heritage committees (OHA, Part IV, section 28 (1))
- Designate individual properties as having cultural heritage value or interest (OHA, Part IV, section 29 (1))
- Include potential heritage properties on a register (OHA, Part IV, section 27 (1.2))
- Enter into heritage conservation easements (OHA, Part IV, section 37 (1))
- Establish heritage conservation districts (OHA, Part V)
- Conservation of archaeological resources (OHA, Part VI)

Heritage conservation policy is integrated in many Chapters of the Official Plan but Section 3.1.5: Heritage Conservation was rewritten in its entirety. The Policy preamble describes the objectives and rationale for conservation. Key policies governing built form include policies on identification, protection, protection from neglect, demolition, the requirement for Heritage Impact Assessments (HIAs), relocation and the definition of adjacency, integrity and alteration. Other policies relate to commemoration and recognition of First Nations and Metis resources, archaeology, heritage awareness, incentives, the preservation by the City of its owned resources, protection of cultural landscapes and views and vistas. The listing of heritage properties is encouraged, as is the designation of individual properties under the Ontario Heritage Act Part IV and Heritage Conservation Districts with Plans under the Ontario Heritage Act Part V.

"2. Properties and Heritage Conservation Districts of potential cultural heritage value or interest will be identified and evaluated...".

"5. Proposed alterations, development, and/or public works on or adjacent to, a property on the Heritage Register will ensure that the integrity of the heritage property's cultural heritage value and attributes will be retained, prior to work commencing on the property and to the satisfaction of the City".

"6. The adaptive reuse of properties on the Heritage Register is encouraged...".

"21. Additional gross floor area may be permitted in excess of what is permitted in the Zoning By-law ..." describes the conditions that apply to development in combination with heritage buildings, including design values, conservation and easements".

Refer to Appendix T for full provincial and Toronto planning and regulatory context excerpts.

Listing on the Heritage Register

There are currently approximately 14,000 properties on the Heritage Register, with hundreds within Downtown (Figure 149). This includes properties that are listed but not designated, and properties that are designated under Part IV and V of the Ontario Heritage Act.



Figure 149. Properties on the heritage register within Downtown, dated July 2017 from City of Toronto Open Data Webmap

Heritage Conservation Districts (HCDs)

A Heritage Conservation District (HCD) is a distinct area that is distinguished by specific cultural heritage values; they may be residential or mixed use, including downtown commercial, institutional or industrial uses. They may be blocks or streetscapes with significant structure, open space, landscape, or intangible value. In the Plan Stage, the unique character of the HCD is described and special policies and guidelines provided that affect the management, conservation and change within the area. Policies concerned with the physical alteration of contributing and non-contributing properties within the area relates to alteration of resource attributes, and additions of height or width, to step backs, setbacks, physical compatibility and preservation of open space within the development framework.



Figure 150. The retention of historical architecture, alongside the alignment of podium to heritage structures or façades is a demonstration of integration of old and new (image credit: Hariri Pontarini Architects)

PRECEDENTS OF GUIDELINES & REGULATIONS IN OTHER CITIES

Research that consisted of other multi-city heritage studies revealed a number of consistent historical built form characteristics and development principles that support economic, social, and cultural activity. **Refer to Appendix T for full excerpts and additional graphics from the precedent city/study research findings.**

Older, Smaller, Better – by the Preservation Green Lab, National Trust for Historic Preservation (2014)

The Older, Smaller, Better study looked at 50 cities across the United States to understand the role that historic buildings (those built prior to 1945) play in promoting positive economic, social and cultural activities. Using spatial analytics, the study overlaid a 200 x 200 metre grid over mixed use areas of each city centre. The grid served two purposes: 1) it generally replicated the size of a city block and 2) it allowed an 'apples-to-apples' comparison of statistical information. Across the 50 cities, the findings were consistent; notably that blocks containing a mix of older, small buildings of diverse age support greater levels of positive economic and social activity than areas dominated by larger, newer buildings.

The study suggests general planning and development principles:

- Focus on streets and blocks rather than individual buildings.
- Realize the efficiencies of older buildings and blocks. Older buildings tend to have mixed daytime and nighttime uses, common entrances and shared services. Codes and regulations that limit these uses should be reviewed and revised to encourage the efficient use of older, smaller buildings.
- New and older buildings should be fit together on a human scale. Variety of building age, including new construction, should be encouraged because it promotes blocks that thrive. The scale of the new construction is important and new infill should be of a compatible size and scale to the older buildings.
- Average of dates of construction from 50 buildings: 16% built pre-1920; 22% built 1920-1945; 28% built 1945-1967; and 34% built 1967-2017.
- Neighbourhoods should be encouraged to evolve. Successful areas tend to be those than have evolved over time, adding and subtracting buildings incrementally rather than comprehensively and all at once.
- Vacant and underused buildings contain density that should be unlocked. Outdated zoning, parking requirements should be reviewed and revised. Permitting and approvals processes should be streamlined. Incentives and financing programs should be created to assist small-scale projects.

Building on Chicago's Strengths: The Partnership for Building Reuse – Preservation Green Lab and Urban Land Institute (May 2016)

The Partnership for Building Reuse addresses vacancy and reuse issues related to all existing structures, not just those designated at the local or federal levels. In Chicago, fewer than three percent of the city's existing buildings are protected through local designation. This research highlighted the ways that older, smaller buildings contribute to the vitality of the city, including its support for new and small businesses, energy efficiency and the success of local cultural uses (e.g. bars and restaurants). Conversely, the paper acknowledges as obstacles that make building reuse challenging, such as financial restraints, weak market conditions, zoning restrictions, and the lack of coordinated neighbourhood planning.

"The Partnership recommends five key strategies to strengthen building reuse in Chicago in the coming years:

- 1. Adopt adaptive reuse policies within the Chicago Zoning Code.
- 2. Reduce parking requirements for building reuse projects.
- 3. Apply Chicago Building Code in a more flexible manner for older buildings.
- 4. Support community development organizations, non-profit developers, and small-scale developers.
- 5. Strengthen the use of financial incentives that support building reuse and explore the implementation of new financial tools."

Chicago, USA

A range of programs and plans are in place in Chicago which support the reuse of existing buildings. The city's zoning code's downtown floor area bonus system

NEIGHBOURHOOD OPPORTUNITY BONUS provides funding sources to "encourage commercial development in neighborhoods lacking private investment". The funds are allocated to:

- "Neighborhood Opportunity Fund: Receives and allocates 80 percent of all bonus contributions to support development projects within under-served West, Southwest and South side commercial corridors, including grocery stores, restaurants, and cultural facilities."
- "Citywide Adopt-A-Landmark Fund: Receives and allocates 10 percent of all bonus contributions to support the restoration of structures designated as official landmarks by City Council."
- "Local Impact Fund: Receives and allocates 10 percent of all bonus contributions to support improvements within one mile of the development site generating the development funds, including public transit facilities, streetscapes, open spaces, river walks, and other sites, including landmarks."

RETAIL THRIVE ZONES

"Within those corridors, the City will offer an evolving package of financial assistance to entrepreneurs and business. By focusing on targeted areas, the City is able to roll out programs more quickly, experiment with new ideas, and expand those that are successful to other parts of the city."

TROUBLED BUILDING INITIATIVE

"TBI works with existing owners and lien holders, primarily through the housing court process with the use of receivers and by the acquisition of distressed notes and liens, to prevent these buildings from deteriorating into a state of disrepair which may lead to displacement, the loss of affordable housing, and unnecessary demolition."



Figure 151. Example of adaptive reuse in Chicago, transforming a storage warehouse into an office building (image credit: Inhabitat)

CHICAGO SUSTAINABLE DEVELOPMENT POLICY (updated 2016): The new policy allows development teams to choose from a menu of strategies that can be tailored to fit the project's characteristics. Each strategy is assigned a point value. New construction projects are required to achieve 100 points and renovations of existing buildings are required to reach 25 or 50 points depending on the scale of the renovation:

ANALYSIS

Recently completed Heritage Conservation District studies within the Downtown (King Spadina, St. Lawrence Neighbourhood, Queen Street West and Historic Yonge Street) focus on built form adaptation relating to conservation of structures, design of compatible additions to heritage structures and infill on non-contributing properties; streetwall design, preservation of sunlight, and public realm.

Common threads in the design of compatible alteration and infill development concludes that new design must:

- be compatible with the heritage attributes of the subject and adjacent buildings and its streetscape through scale, massing, form, horizontal and vertical alignments, solid and void ratios, design and proportion of windows and doors;
- avoid a false historic appearance;
- use compatible or similar materials in the streetwall, with use of contemporary compatible materials above the streetwall;
- use horizontal composition and alignments, cornices, overhang and roof forms for additions and infill that are complementary to the dominant streetscape patterns; with mechanical and other penthouses screened from view;
- establish streetscape continuity by reflecting the pre-existing lot division in the design of new façades (bays, storefronts, narrow width and variety to engage pedestrians, floor-to-floor heights);
- provide front setbacks of infill similar to the setbacks of buildings on either side of the development; side yard setbacks should be maintained;
- step back from the dominant streetwall height, where appropriate;
- not cast shadows on sensitive features within the district, including on public spaces;
- not have blank walls facing the public realm;
- not have vehicular access through streetwalls;
- for commercial or multi-family residential, establish guidelines for signage, lighting, streetscape features and interpretation that are consistent district wide; and
- for the Public Realm, and for networks of pedestrian and vehicular circulation retain, enhance networks of laneways and access routes, preserve daylight between buildings and to the street and encourage mid-block pedestrian connections where appropriate; it must protect pre-existing public spaces including sidewalks for the use of vendors, artists, street furniture and interpretive displays to reinforce a vibrant street life.

FINDINGS

- The Ontario Heritage Act is the primary legislation for heritage protection in the Province.
- The Provincial Policy Statement supports the preservation and appropriate adaptation of heritage resources and recognizes that Ontario's prosperity, environmental health and social well-being is linked to the protection of cultural heritage and archaeology.
- Heritage conservation crosses boundaries of sustainable development, livable cities, cultural and economic well-being, and accord with First Nations and Métis heritage.
- The City of Toronto has updated its Official Plan and theoretically harmonized its heritage and downtown development objectives to include heritage conservation objectives and the preservation of context for the community.
- Conservation is not just about buildings, it also relates to commemoration and interpretation, to preservation of communal memory, to streetscapes, public realm, open spaces and views and vistas.
- Demolition and alteration of heritage resources that occurs as part of infill development do not always fully respond to the historical context of the urban fabric.
- There is an increase in the use of listing, designation and HCD Plans to regulate the protection of heritage resources, but many of the City resources have not been included on the inventory of heritage properties, resulting in collaboration with developers, to ensure buildings are not lost.
- HCD Plans provide common threads for conservation of districts, character areas and streetscapes.
- Findings in the United States show that across 50 similar sized urban centres the conservation of older buildings in combination with new development has had a positive effect on economic, social and cultural activities in those cities, and that these areas are more successful than areas dominated by larger, newer buildings.
- Older areas of Mixed Use designations contain hidden density that are already as high as some new development. Density should be achieved through changes in zoning and regulation of use. There is a higher concentration of small and new businesses in older buildings, and more concentration of affordable housing.
- The emphasis should be on context-driven conservation oriented solutions entailing streets or blocks rather than on individual buildings.

RECOMMENDATIONS

- 1. Link conservation and adaptation of the City's heritage to its liveability and to a resilient, economic, social and cultural development, to a sustainable future and city building objectives.
- 2. Develop a Downtown-wide heritage character analysis, to understand how protection outside of HCD Plan areas could be established.
- 3. Align streetscape and public realm design with the goals of conservation of historic context.
- 4. Recognize and celebrate good examples of heritage preservation and conservation, including residential, commercial, institutional and industrial additions and infill.
- 5. Promote education of existing heritage policy framework to help unlock roadblocks between the City's Heritage Preservation Services Staff and development interests.



- are built in close proximity to one another, the shadows cast from these buildings become more pervasive. The shadows from tall buildings, depending on the time of day and year, can extend several blocks from its footprint.
- There are opportunities to expand the areas of within Downtown beyond the Signature Parks, identified for the 6-hour shadow protection window found in the City's Downtown Tall Buildings: Vision & Supplementary Guidelines.
- Given Downtown's limited number of existing parks and open spaces, limited opportunities to create new parks and open spaces, and an increasing intensity of people using these parks and open spaces, it is important to protect spaces in the • As the overall height of tall buildings increases, the public realm that have sunlight, and create spaces that will have access to sunlight.
- In addition to general shadow guidance, other cities continue to evaluate shadow analysis on a case-by-case basis.

- As buildings get taller, and as more tall buildings From the analysis of existing sunlight access As buildings get taller, and as tall buildings are The Ontario Building Code (OBC) contains The need for privacy exists at two scales: conditions, there are many streets which have high sunlight access, and others, mainly in the Financial District, that have low sunlight access. Many of the areas outside of the core have good access to sunlight, with 4 or more hours of sunlight onto the street
- shadow protection for parks and open spaces Most of the precedent cities studied use transition policies and angular planes to control sunlight on streets, as the prevailing built form is mid and low-rise
 - Some precedent cities with tall building areas use indirect policies, such as separation distances and or protect sunlight on streets through a case-bycase evaluation
 - span of their shadows lengthen, and the shadow cast from a tall building several blocks away may start to impact low and mid-rise areas that would otherwise have good sunlight access based on their adjacent built form. These far-reaching impacts make it difficult to regulate sunlight on streets by simply regulating the built form fronting onto adjacent streets.
 - Shadows from groupings of tall buildings, when close to each other, may amalgamate and cover streets as one larger shadow for a longer period
 - The modelling exercise demonstrated that sunlight protection onto a street may hinder the potential for taller buildings located generally south of low and mid-rise areas.
 - To-date, the City-Wide Tall Building Design Guidelines' direction has generally informed the height and shape of base buildings only to provide for sunlight onto streets, and indirectly reinforced by tall building separation distances.

- clustered in close proximity to one another, the built environment will continually impact and change how winds are experienced at the pedestrian level. The dynamic nature of wind speaks to the need to understand the cumulative impact from multiple developments in a given area.
- The Terms of Reference for Pedestrian Level Wind Studies in the City's Development Guide does not provide sufficient detail to ensure consistent nformation is provided through all application submissions, and does not include targets for evaluation
- floorplate sizes, to control the density of shadows, The submission of the detailed Wind Impact Assessment at the Site Plan Application stage does not allow for more substantial changes to be made to the building orientation and massing.
- provisions that require every room used for sleeping in any building be provided with windows. but makes no reference to hours of sun or shadows received on windows.
- Most regulations reviewed focus on daylighting of private spaces (units) rather than shared spaces (amenity spaces)
- daylighting for new spaces (units), rather than preventing interruption of daylighting for existing
- Most regulations studied were designed to best control the provision of daylight on low to mid-rise neighbourhoods.
- For areas of high density, sophisticated computational tools have been designed to predict the daylight availability of building interiors. However, to date, simpler design and regulatory tools that can be applied have not been developed. • Limiting the height at which residential uses can
- Testing indicates that the higher a window is located in a wall, the deeper the sunlight penetration is into the interior space.
- Implementation of alternative metrics is difficult to achieve comprehensively Downtown, particularly given the limitations of City Planning to regulate interior layouts for units and buildings.

- design) Most regulations reviewed focus on providing • The City-initiated Official Plan Amendment and Zoning By-law for Updating Tall Building Setbacks Downtown (2016) in part helps to improve privacy for inhabitants of tall buildings by providing minimum separation distances between tall buildings.
 - Façade design and buffering can also assist in providing privacy. Options such as inset balconies and use of more solid materials help achieve this. Other measures such as fencing, plantings, and screening may also be helpful at the lower levels.
 - face onto a major street or active uses can help protect for privacy.

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- Overlook between tall or mid-rise buildings and the areas around them (e.g. respond through building orientation, separation and design);
- Between the public and private realm at grade (e.g. respond through at-grade setbacks and
- in the Downtown context, given the finite space in the rights-of-ways, and the increased demand for walking, cycling and surface transit. Given the increased number of pedestrians, there is a need to enhance and expand the sidewalk network.
- Downtown's small blocks and narrow rights of enhanced through mid-block connections and breaking up of blocks by the introduction of open spaces
- Connectivity can be enhanced by the number by the design and programming of the buildings that frame the experience (e.g. the design of the
- The PATH and other climate-controlled pedestrian networks provide a strong network of connections Downtown sidewalks, particularly during business hours and in inclement weather.
- Decreasing personal car ownership, increasing use of ride-sharing programs and the potential use of autonomous vehicles will increase the need for drop-off locations for both people and goods. This could challenge the continuity of the pedestrian realm and bicycle infrastructure.
- In most cities, 'connectivity' is rarely thought of as a complete multi-modal system, but rather as separate networks of cycling, walking, transit, and vehicular traffic. This can result in gaps for transfers between modes.
- When Toronto's planning framework is compared to those of other cities, the current requirements for the provision of pedestrian circulation spaces associated with new developments requires a higher and more detailed level of classification space, as seen in New York City's Zoning Regulation (e.g. arcade, plaza, entrance area,
- Laneways serve an important transportation capacity function. The increased use of laneways for pedestrians and cyclists can contribute to connectivity, provided it does not negatively impact the utility, safety, and function of the space.

- Pedestrian connectivity is increasingly important The pedestrian experience is significantly Downtown's built form is not homogeneous in Sky-view is an important consideration for the The skyline is a symbolic representation and image The City of Toronto Official Plan includes a "Mixed Use The Ontario Heritage Act is the primary legislation influenced by the design of the public realm and the lower floors of buildings that directly interface with the public realm. The quality of the public realm can be shaped through the use of high quality and durable materials and by promoting design excellence.
- ways enhance connectivity. Connectivity is further Current policy and practice has been successful at implementing standardized improvements to the public realm as part of on-going redevelopment. However, the design of active ground floors that support the public realm has been a challenge.
- of connections, but is also greatly influenced In other precedent cities, most planning documents provide broad guidance on the design of the pedestrian realm in an attempt to not be site • The City's Official Plan provides general direction specific. Many guidelines underestimate the value of beauty and design excellence as important contributors to the public realm experience.
- and reduce the intensity of pedestrians on The New York City Retail Guidelines are an example of how to highlight the importance of the design of the horizontal plane, which is shaped by the human experience. City of Toronto policies do not include a definition of what areas require further visual interest for pedestrians.

- age, scale or typology. In some areas there is a consistent pattern and scale, while in other areas, there is a mix of building types and scale, even within a single block. Each of these areas has its own distinct character, which can be respected and reinforced through a transition in built form.
- In "as-of-right" cities, transitions are mostly controlled with maximum heights and regulatory setbacks; other precedent cities regulate transitions by using more qualitative policies, using concepts of scale and fit. When not explicitly described using metrics or standards, the application of transition can be misinterpreted.
- only on how new development should 'fit' into its existing and planned context. Typological design guidelines for mid-rise and tall buildings provide further detail on what transition means for each building type, and how to achieve such transition to various scales of development as well as to parks, open spaces and streets. Secondary Plans and SASPs may provide additional site specific details for certain locations and conditions.
- In Downtown, most conflicts around transition occur either between different land uses (e.g. Mixed Use Areas adjacent to Neighbourhoods), or within a Mixed Use Area (e.g. tall buildings adjacent to main street typologies), as defined by the Land Use Map in the Official Plan.
- The City of Mississauga provides more general language, and defines and ensures 'transition' through the proposed development's composition or attributes (e.g. size of area, street width, adjacent open space, etc.) rather than by building typology

- evaluation of tall and mid-rise buildings
- The setbacks and stepbacks required by Updating Tall Building Setback in Downtown provide a minimum best practice, but do not embody an absolute standard that will suffice in all contexts. • The Downtown skyline is dynamic and will continue As well, the street wall and step-back proportions are defining features of the character of a street • Although the skyline has generally retained a or area, and the sky-view contributes to that character. There are examples in other local studies that have expanded on the separation to increase openness and sky-views, including:
- The North Downtown Yonge SASP: included a 10-20 metre step-back to maintain the consistent low-rise quality of Yonge Street; and • There are a variety of ways in which other
- The Lower Yonge Precinct Plan: identified Tower Area Ratios as a method of prescribing a fixed amount of openness while maintaining for a collection of towers as part of a larger master plan. Tower Area Ratio is a useful tool • Other precedent cities recognize the need to for analyzing or quantifying openness as an indicator of sky view, independently from other factors such as tower separation or setbacks.
- In other precedent cities, view regulations generally focus on the protection of views and view corridors to a particular monument, building or geographical

to evolve.

- Concepts: absolute height (Paris), view corridors and significant backdrop that prioritizes landscape elements (Vancouver), viewing cones (London) and

skyline "control parameters":

built form parameters.

Control parameters: building as-of-right (New York), Tower Area Ratio (Lower Yonge Precinct), proximity to transit.

of the city. Downtown's skyline has historically

been defined by the clustering of tall buildings

in the Financial District, and then later, by the

'curve" with the height peaks at CN Tower and in

the Financial District, the planning framework for

tall buildings has not adhered to a skyline concept

but rather the Downtown skyline has been a result

of policies used to direct growth along with other

precedent cities consider their evolving skylines.

Some prioritize landscape elements where the

skyline will typically follow the shape of its natural

differentiate between a skyline "concept" and

addition of the CN Tower and dome.

- Areas" land use designation but does not provide further direction on the breakdown or percentages of the uses (i.e. does not provide formulas to define balance between non-residential and residential uses).
- Mixed use buildings are a common building typology Downtown
- It is generally accepted that the location of non-residential uses at the base and lower levels of mixed-use buildings positively contribute to the liveliness and activity on the street, while benefitting from high exposure and visibility to the public
- Current market trends indicate that the location of residential uses in podiums of taller buildings is not desirable as the required depth of the footprint is not conducive to residential lavouts.
- The location of residential uses in the lower levels of buildings can be affected by noise and lack of privacy from both the uses at-grade or on the street; particularly true for developments within dense areas.
- In some zones in Hong Kong, non-residential uses are permitted in the lower three floors of residential buildings.
- Given the rising cost of urban land across cities in North America, the global trend is moving away from stand-alone facilities for public facilities and services (e.g. schools, hospitals, community centres), and including them in the base of private buildings.
- In Toronto, the current regulations do not specify conditions and guidelines related to the provision location and configuration of community uses within new developments. The provision of amenities is typically secured, designed and approved through consultation with City staff on a case-by-case basis.
- As community uses are usually purpose-built with specific program and design requirements, design guidelines for these types of facilities typically do not exist.
- The precedent case studies indicated that the most successful incorporation of public urban amenities into private development occurred when:
- proposed on generous sites: and/or
- municipalities and/or institutions participated; and/or - partnerships with NGOs for operation were negotiated;
- and/or - building design allocated sufficient room to be made available at-grade; and/or
- building design incorporated multi-programming spaces at-grade
- While the balance of uses both within areas and buildings has significantly contributed to the success of Downtown as a place to work, live and play, the proliferation of single use residential buildings has challenged the ability of the office sector and landmark institutions to expand, due to the limited supply of development sites.
- Buildings designed with generous ceiling heights, large spans and centralized services (e.g. elevator core garbage, servicing, loading) are flexible enough to be used for both residential and commercial uses, or even for some less-restrictive types of public facilities, and do not need to be tied to a specific land use over time. While this is particularly true at ground level, it is still relevant for the full structure of the building, as seen in the extremely successful adaptive reuse of several buildings in the Downtown in recent years.

- for heritage protection in the Province
- The Provincial Policy Statement supports the preservation and appropriate adaptation of heritage resources and recognizes that Ontario's prosperity, environmental health and social wellbeing is linked to the protection of cultural heritage and archaeology.
- Heritage conservation crosses boundaries of sustainable development, livable cities, cultural and economic well-being, and accord with First Nations and Métis heritage.
- The City of Toronto has updated its Official Plan and theoretically harmonized its heritage and downtown development objectives to include heritage conservation objectives and the preservation of context for the community.
- Conservation is not just about buildings, it also relates to commemoration and interpretation, to preservation of communal memory, to streetscapes, public realm, open spaces and views and vistas.
- Demolition and inappropriate alteration of significant heritage resources continues to occur, and infill development is often inappropriately related to historic contexts.
- There is an increase in the use of listing. designation and HCD Plans to regulate the protection of heritage resources, but many of the City resources have not been included on the inventory of heritage properties, resulting in unanticipated confrontations with developers and building loss.
- HCD Plans provide common threads for conservation of districts, character areas and streetscapes.
- Findings in the United States show that across 50 similar sized urban centres the conservation of older buildings in combination with new development has had a positive effect on economic, social and cultural activities in those cities, and that these areas are more successful than areas dominated by larger, newer buildings.
- Older areas of Mixed Use designations contain hidden density that are already as high as some new development. Density should be achieved through changes in zoning and regulation of use. There is a higher concentration of small and new businesses in older buildings, and more concentration of affordable housing.
- The emphasis should be on streets or blocks rather than on individual buildings.



- S. Coordinate with the Pocore rarks and Public Realm Plan to identify other criteria for inclusion in the areas for no net-new shadow. Location within a "Park District" as identified in the Parks and Public Realm Plan should also be considered as part of the criteria as these parks and open spaces are important public realm amenities within their respective neighbourhoods.
 Kise Buildings Study, through the application of the angular planes and step-backs.
 Ensure that development applications provide sufficient detail and geographic context to enable City Planning to review the impacts of sunlight on streets beyond the immediate site for all areas within Downtown, given the complexity of understanding, prodicting and regulation curling on the application of the angular planes and step-backs.

- were to be reconfigured.

- 5. Enhance privacy for at-grade conditions (e.g. where residential units front onto a main street) through increased setbacks, changes in grade, and other buffering methods, such as landscaping.
 6. Increase privacy for residential units that face onto main streets by providing vertical separation from the

- Framing of important public spaces and connections through the use of building massing or design elements (e.g. canopies, arcades, entrances or recesses);
 Use of materials, proportions and design that reflects the human scale to create comfort and interest, and strengthen the identity and character of an area; and
 Mixed Use Areas through site-specific studies.
 Mixed Use Areas through site-specific studies.
 Mixed Use Areas through site-specific studies.
 Demonstrate different built form adjacencies or typologies and identify tools (e.g. angular planes or setbacks) for creating transitions.
 Translate existing typological transitions from guidelines into policy where appropriate.
 3

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