



Hamilton

TRANSIT ORIENTED DEVELOPMENT GUIDELINES FOR **HAMILTON**

VOLUME 2

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Public Works Department
Planning and Economic Development Department

A joint project by the City of Hamilton's
Planning and Economic Development Department and
Public Works



Hamilton

All photos, sketches and graphic representations
of Transit Oriented Development areas are courtesy of
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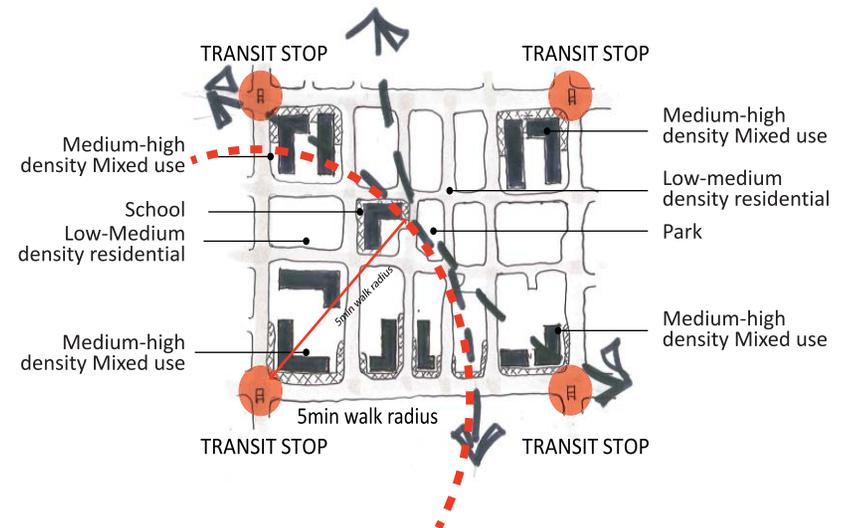
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1.1 What is Transit Oriented Development?

Transit Oriented Development (TOD) is generally defined as compact, mixed use development near transit facilities with high-quality walking environments. What sets transit oriented development apart from traditional/regular development is an increased emphasis on providing access to transit through mixed use areas with higher density, degree of activity and amenities. TOD encourages transit supportive land use with the intent to provide more balanced transportation choices so that travel by transit or active transportation (e.g. walking, cycling, etc.) can be as viable an option as driving.

TOD guidelines can be used as a tool to guide development that recognizes the important relationship between land use and transportation planning. Integrating land use and transportation, especially transit, is an important theme in both the City's Transportation Master Plan and the Urban Hamilton Official Plan. The overall goal of TOD is to encourage development with specific forms and features that facilitates easier access to transit and create attractive pedestrian-focused areas rich in amenities and providing a mixture of uses.

Sample of TOD elements



1.0 INTRODUCTION

1.2 How to use these Guidelines

The TOD Guideline Study consists of two parts. Volume 1 provides a background and context for TOD. Volume 2 (TOD Guidelines) identifies and illustrates the ten TOD principles and what TOD may look like in the City of Hamilton.

The purpose of the City of Hamilton's TOD Guidelines is to support and facilitate current and future transit use while further guiding the implementation of the City's Official Plan goals and policies and Zoning By-law provisions. Overall the Guidelines complement existing City land use policies and programs but also provide further guidance on implementing land use policies and zoning. The Guidelines may provide direction on where land use policy and zoning can be strengthened and what future planning and program initiatives should be developed. Future secondary planning, corridor studies and/or transit station planning in the City will be informed by these Guidelines with this document serving as a reference and guideline document to help inform future secondary plans, or the design of future transit station areas. For areas outside of new secondary plans, the TOD Guidelines can also aid in the review of development applications to ensure transit supportive land uses and site designs are applied consistently across the City. TOD Guidelines will also serve as an education tool to advance the City's goals of better integrating land use and transportation planning.

1.3 Structure of the TOD Guidelines (Volume 2)

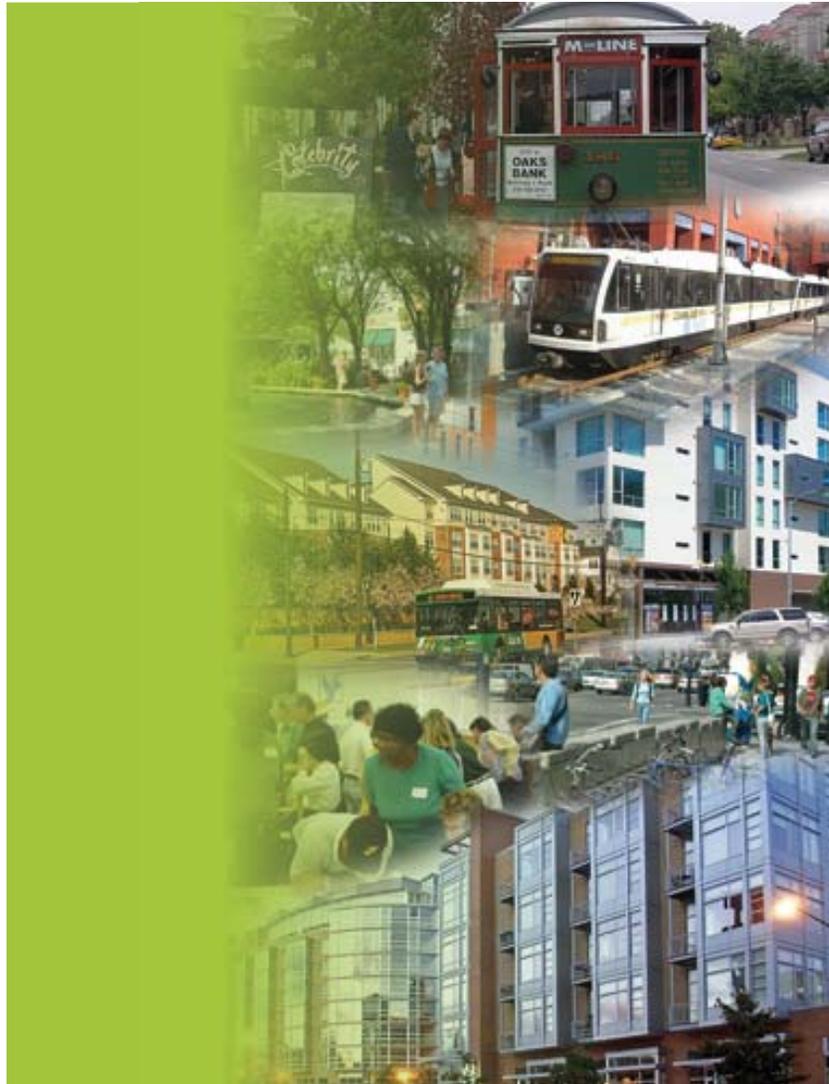
The TOD Guidelines are divided into three components. The first component presents ten key principles of TOD that are applicable to Hamilton. These principles provide the core Guidelines and key themes of TOD. Detailed guidelines are provided for each of the ten principles.

The second component of the Guidelines is a description of TOD typologies that are applicable in Hamilton. TOD can occur at varying scales: from large-scale downtown areas to smaller infill situations. The TOD typologies section describes each typology and where such typologies are applicable in Hamilton. Examples of where such typologies are found are presented in this section.

The third and final component of these Guidelines is a detailed discussion on the application of the TOD principles within the different typologies. Using sites within Hamilton as case studies, this section shows detailed application of TOD principles and Guidelines through a series of development scenarios. The representative sites shown are illustrative only and used to explore TOD forms at various scales and intensities in areas with varying function.

Following the TOD typology section, an implementation section provides further discussion on implementation mechanisms for TOD in Hamilton.

2.0 TOD PRINCIPLES/ELEMENTS



2.0 TOD PRINCIPLES/ELEMENTS

Transit Oriented Development (TOD) facilitates transit and improves walkability. In differing contexts and locations, the approach and implementation may differ. No two TOD areas are the same or have the exact same function. However, there is a standard set of principles that are common in all TOD areas regardless of the size, scale and function.

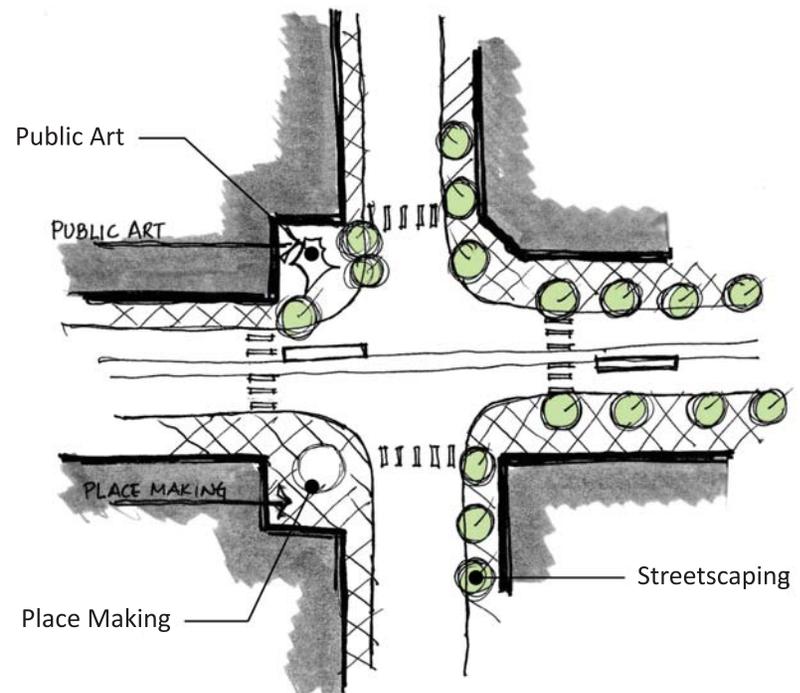
The following list presents ten TOD principles and associated Guidelines to be applied in Hamilton. These principles are based on best practices from around the world, including Canada. While the ten principles are listed individually, they are inherently interrelated. Successful TOD areas¹ blur the line of where one principle begins and the other ends. For example, TOD can start in an area with compact urban form which helps create a pedestrian-focused street by bringing density of activity to an area. Successful pedestrian-focused streets are created through good building and street design in conjunction with parking management. Street design supports existing transit and allow opportunities for transit connections to be realigned to serve the area. With all these elements in place, the area and its developments becomes truly transit oriented.

¹Note: TOD areas include locations where transit and land uses interact. TOD areas can include nodes and corridors as identified in the Urban Official Plan.

2.0 TOD PRINCIPLES/ELEMENTS

1. Promote Place Making - Creating a Sense of Place

- TOD areas should be memorable and of a human scale
- Focus on promoting liveability, quality and uniqueness of each space



Guidelines

1. Transit stations/stops should form part of a focal point within a neighbourhood

- a) Orient uses and activities towards the centre of the station/stop area

2. Utilize unique buildings or unique designs as focal points and a source of identity for TOD areas

- a) Use key features such as gateways, landmark buildings or design to make individual TOD areas stand out from each other and be attractive places for residents and pedestrians
- b) Allow flexibility in design to meet key parameters and regulations

3. Transit and TOD areas should encourage public spaces and public interaction

- a) Use public squares or incorporate open, useable space near the transit station
- b) Strike a balance between public and private spaces

4. Buildings and public spaces should be oriented to the street

- a) Buildings that front onto a street allow for better pedestrian environments and attractive street fronts



Photo Source: Ontario Growth Secretariat



Photo Source: Ontario Growth Secretariat

2. Ensure A Mix of Appropriate Land Uses

- An appropriate range of uses should be part of each particular station/transit stop area
- Get the “bones” right - plan for longer term land use transitions and multiple uses
- Mix of uses will promote 24 hour activity, pedestrian interest, convenience and safety



Guidelines

1. Ensure a mixture of land uses, but not necessarily all at the same location

- a) TOD areas will have either a vertical or a horizontal mix of uses
 - Uses can be mixed in one building or as several single purpose buildings clustered together to make mixed use areas
- b) Mixed use should apply to an entire corridor or node
 - A mixture of uses should be available across an entire corridor or within significant nodes
 - Station areas with one predominant land use are appropriate depending on function of the station area

2. Encourage travel in both directions at all times along a transit line

- a) Allow and promote uses that facilitate all day activity at all station/stop areas
- b) Specialized activities at different TOD areas/nodes may allow for more balanced travel patterns provided a good mixture of station areas is achieved along a corridor or transit route

3. Encourage a diversity in housing types/tenures around transit

- a) Access to transit should be available for a range of income levels
- b) TOD areas provide opportunities to offer choice in housing types/tenures to meet the need of new and changing demographic demands

4. Discourage auto-oriented uses on higher order transit corridors and at transit station areas.

- a) Uses such as carwashes, gas stations and drive-throughs should be discouraged within 400 m of rapid transit stations areas
- b) Where existing auto-oriented uses exist, plan for land use transitions over time to improve pedestrian environment
- c) Compensate for potential automobile-pedestrian conflicts where auto-oriented uses exist and are permitted through careful attention to building placement and site design

5. Encourage both daytime and night time activities near transit

- a) Ensure a mix of offices and retail/services (shops, restaurants, cafes, day care, dry cleaners, tailors, etc); retail activity can occur during the day and at night time
 - All-day activity helps facilitate a more balanced level of transit service

2.0 TOD PRINCIPLES/ELEMENTS

3. Require Density and Compact Urban Form

- Plan for and build sufficient density to make transit viable
- Compact form improves walkability
- Density and compact form improves efficiency (services, infrastructure, etc.)



Guidelines

- 1. Density ranges should be in conformity with the Official Plan and appropriate for the scale of each particular type of TOD area**
 - a) Highest densities will occur in the Downtown, in parts of primary and secondary corridors, and in node areas
 - b) Suburban and Greenfield areas may be lower scale overall, but the higher densities in these areas should be focused near transit areas
 - c) Maintain highest densities closest to station areas and corridors mean-while transitioning to lower densities in the internal areas of a neighbourhood
- 2. Densities required for TOD can be provided by a variety of building types**
 - a) Medium mid-rise buildings in particular are appropriate for TOD areas
 - b) Density and building height go together but TOD does not necessarily require very tall buildings
 - c) TOD appropriate densities can be achieved with good design and smaller scale buildings
 - d) Taller buildings may be appropriate in the Downtown, other node areas, and some station areas in urban corridors
- 3. Cluster mixed uses and densities within a 400m (five minute walk) of the transit station area**
 - a) Encourage a grid-like pattern of buildings and streets
 - Grid patterns promote walking and cycling as well as facilitating easy access to buildings
 - b) Provide connections between travel modes around station areas that are easily navigated by pedestrians to promote walkability
 - On larger sites, design for interconnectivity
 - Pedestrian walkways, bicycle paths, and clear directional and wayfinding signage will promote connectivity to transit

2.0 TOD PRINCIPLES/ELEMENTS

4. Focus on Urban Design

- Orientation of buildings
- Manage the look, feel and scale of an area
- Ensure high quality and attractive design



Guidelines

1. Design of TOD areas should be context-specific and respecting existing character and heritage

- a) New and retrofit buildings should complement, but not necessarily duplicate, existing built forms
- b) Design should integrate all components of a compact neighbourhood to create a unified environment

2. Employ a high degree of urban design and variety in architectural styles

- a) Design is key to creating a sense of place
- b) Design must address the arrangement of, and transition between, public and private spaces

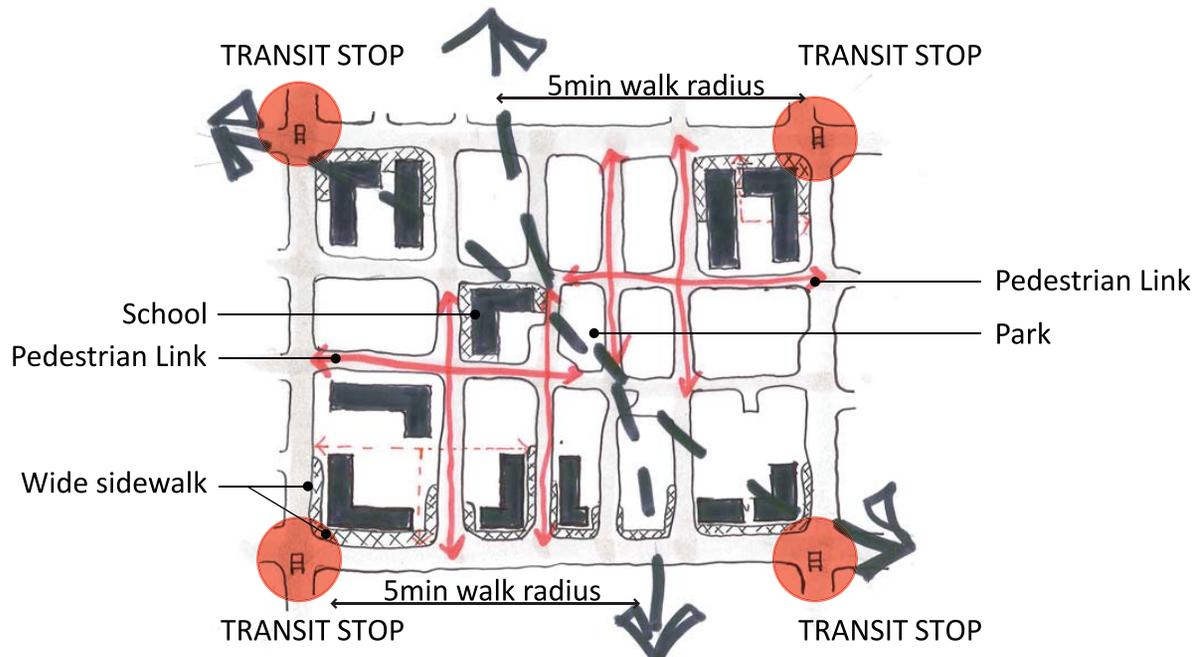
3. Create positive pedestrian environments and transit access through design

- a) Promote pleasant pedestrian environments through good urban design
 - Avoid buildings with blank walls along sidewalks and walkways
 - Buildings should be oriented to the public street
 - Arrange buildings to allow easy access and connections to transit
- b) Incorporate public art in developments whenever possible
 - Art should be provided in public spaces and private spaces that are publicly accessible to create interest and sense of place

2.0 TOD PRINCIPLES/ELEMENTS

5. Create Pedestrian Environments

- Closely related to urban design and improved connectivity
- Accessibility and mobility for all
- Easily walkable, safe, and attractive streets
- A pedestrian-oriented area is a transit oriented area



Guidelines

1. Ensure sidewalks are accessible to all and allow ease of movement

- a) Remove physical and perceived barriers to pedestrian movement and access
- b) Utilize urban braille, where appropriate

2. Create safe and inviting places for pedestrians

- a) Encourage safety and perception of safety with a high degree of pedestrian traffic, good use of lighting and signage, and encouraging movement through open public areas
- b) Use shelters in pedestrian and transit areas, where possible
 - Transit shelters should be used at transit stations and stops
 - Awnings, arcades, and other weather protection can be provided in pedestrian areas
- c) Provide attractive spaces to invite more pedestrians
 - Promote public spaces to encourage people to gather and linger
 - Busy, active spaces promote safety and security

3. Plan for pedestrians when planning transit stations and new developments

- a) Provide a high degree of pedestrian amenities and comfort, such as street furniture, wayfinding and directional signage, and wide sidewalks
 - Sidewalk width should be proportional to the scale of the TOD area and planned pedestrian level
- b) Building orientation should be to the public street with a high degree of visual interest, such as building articulation, windows, and landscaping along the streetfront and walkways
 - Loading areas, utilities and parking should be located away from the street front
- c) Streets and buildings should be in a grid pattern and clustered close to transit stations to encourage pedestrian movement and promote easier access to transit

6. Address Parking Management

- Control the amount and location of parking
- Ensure appropriate balance between automobiles and other modes of transportation



Photo Source: City of Hamilton



Photo Source: City of Hamilton

Guidelines

1. Encourage innovative parking management strategies

- a) Apply parking strategies to prevent an oversupply of parking in TOD areas
 - Opportunities include the use of shared parking area spaces, reduced parking requirements with TDM measures, offer transit passes, ensure appropriate parking rates, allow for carpool parking, promote car-sharing programs, and restricted parking hours
- b) Establish parking maximums or reduced parking requirements
 - Parking minimums should only be applied in low-scale TOD areas
 - Generally, the higher the level of transit service offered, the lower the amount of parking that should be provided

2. Promote an appropriate balance of parking

- a) Balancing automobile access with transit and active transportation should be the goal of parking management
- b) Allow on-street parking in appropriate TOD areas, such as greenfield areas, to buffer pedestrians from traffic
- c) Some parking may be appropriate if well designed and fitting to the scale of the TOD area
 - On street parking can buffer pedestrians along main street areas, in suburban and greenfield TOD areas, improving the pedestrian environment
 - Perimeter and interior landscaping of parking lots will help the pedestrian environment

3. Parking should not be the focus within TOD areas, even when available

- a) When parking is provided, it should not dominate or be overly prominent in TOD areas
- b) Parking should be moved away from the main station/stop areas and moved to the rear of buildings whenever possible
- c) Design of parking facilities should minimise/mitigate negative aspects associated with parking lots; Park-n-ride facilities also require careful attention to design
- d) Parking areas should have a high degree of landscaping and facilitate pedestrian movement from the parking areas to the sidewalks, storefronts, and transit stations and stops

7. Respect Market Considerations

- TOD areas should promote value recapture (utilize increased land value)
- Promote private sector “buy-in” and investment



Photo Source: Ontario Growth Secretariat



Photo Source: Ontario Growth Secretariat

Guidelines

1. Leverage increased land values

- a) As land prices increase, ability to obtain more value from land also increases. Community benefits such as affordable units and public art should accompany increased land values
- b) TOD should be implemented in areas with potential for greatest payoff

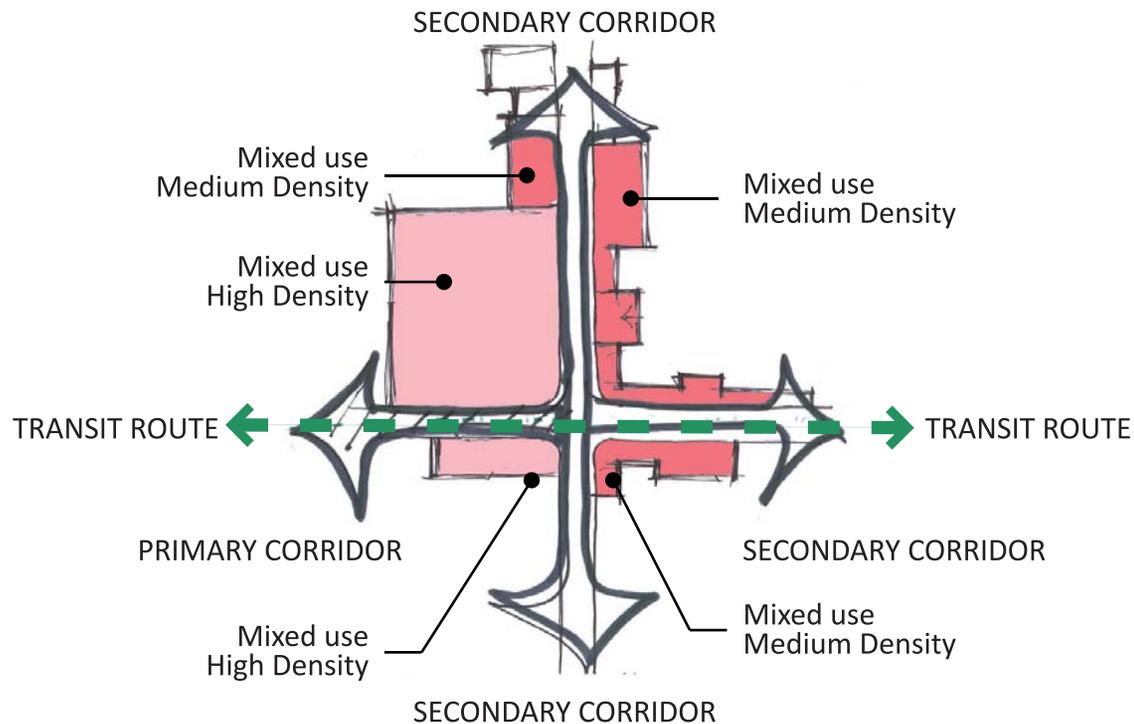
2. Transit alone will not drive market demand

- a) Transit alone is unlikely to create a market demand, but it can act as a catalyst and direct the demand. Transit is to be used as a City building tool to direct commercial, residential, and commercial demand to the appropriate areas
- b) Plans should be ambitious, but feasible. Plans can provide the opportunities, but uptake will ultimately be a market-based decision



8. Take a Comprehensive Approach to Planning

- Alignment of TOD plans and areas with greater community goals
- TOD's contribution to greater connectivity
- Local TOD areas should be layered to create a larger system linked to greater planning objectives and transportation plans



Guidelines

- 1. Transit and land use planning decisions should be made in conjunction with each other**
 - a) Transit should be a key goal and motivator when assessing land use planning decisions
 - b) Land uses should be transit supportive
- 2. Coordinate the development of individual station areas based on their role in the broader urban structure and City-wide initiatives**
 - a) Different rapid transit station areas have a role in the larger City structure; from the main mobility hub of the downtown to the smaller suburban TOD areas
 - b) Various levels of TOD all form part of the transit network which is connected to other transportation modes and land use goals and objectives

9. Plan for Transit and Promote Connections (for all modes)

- TOD principles should be applied in station area and corridor planning
- Transit is the key driver in TOD planning and should be addressed and accommodated in all aspects of TOD planning/design
- TOD areas should make connections to other modes, where appropriate, and improve connectivity to the larger City-region



Photo Source: City of Hamilton



Photo Source: Ontario Growth Secretariat

Guidelines

1. TOD areas should have a high degree of connectivity

- a) TOD areas should have opportunities for active transportation (walking and cycling), transit, and should allow for the movement of vehicles
- b) Transit routes should be well connected and viewed as a network. Conventional transit should service rapid transit by acting as a feeder system to the higher order system. TOD areas should serve as the transfer point where applicable

2. Higher order TOD areas provide for integration and transfer between modes

- a) Higher order TOD areas can provide specialized facilities such as Park-and-ride, drop-off areas, and bicycle parking areas

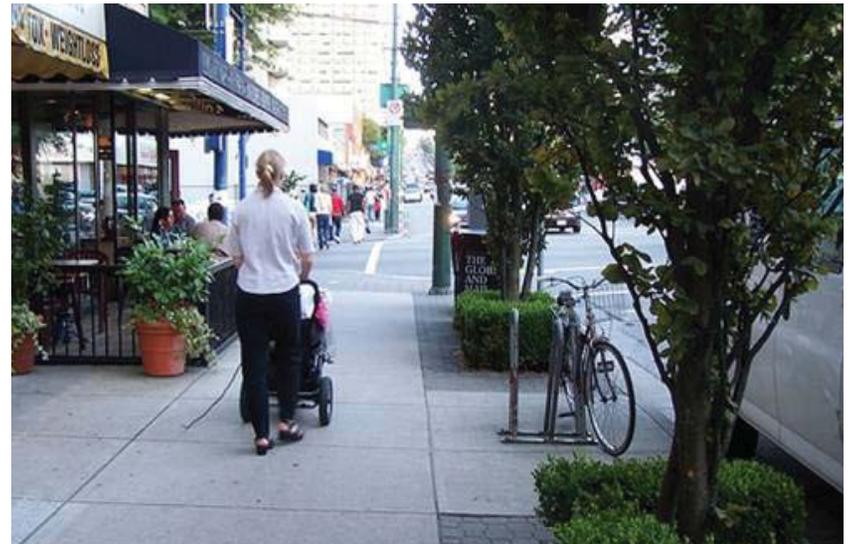


Photo Source: Ontario Growth Secretariat

10. Promote Partnerships and Innovative Implementation

- Promote community/investor “buy in”



Photo Source: City of Hamilton

Guidelines

1. **Establish partnerships when developing TOD areas to leverage the strengths of different groups (private, public, community)**
 - a) Involve stakeholders to make TOD areas successful including businesses, land owners, community groups, governmental organizations, and transit operators
 - b) Involve diverse groups in the decision making processes
 - c) Promote initiatives such as transportation demand management or other pilot programs in both the public and private sector
 - “Buy in” is required by all groups for widespread benefits to be realized



Photo Source: Ontario Growth Secretariat

3.0 TOD TYPOLOGIES - WHERE TO APPLY TOD

3.0 TOD TYPOLOGIES - WHERE TO APPLY TOD

The ten TOD principles should be applied to all types of TOD's from major transit areas to local neighbourhood transit areas. The difference in application will be a matter of scale, intensity, and approach and must be consistent with the function and objectives for different areas described in the urban structure. Higher level TOD areas include key nodes and corridors planned for rapid transit lines. These areas should receive the most intense application of the principles and Guidelines. However, the application of the principles and guidelines in smaller, more local scale areas, including greenfield areas is important in order to achieve compact urban form and create walkable and transit-supportive neighbourhoods.

The following section presents a descriptive system of classifying different scales and forms for TOD. The classification is based on the existing characteristics of various areas in the City and their planned function in the overall urban structure as set out in the Urban Hamilton Official Plan.

These typologies are not to be systematically applied to particular areas of the City. In some examples, the typologies describe existing areas with specific land use and built form characteristics. Other areas of the City are planned to transform over time into other types of TOD areas. For example, the Meadowlands area in Ancaster is currently a commercial area with residential uses along an arterial street. One could consider it close to a "suburban arterial" typology. However, over time, as described and planned

through the Urban Hamilton Official Plan, this area is intended to transform to a community node, providing a wider range of housing types and amenities and enhanced transit services to serve the surrounding community. Thus, the ultimate end state of this area is closer to the "Urban Node" typology. Therefore, the application of the Guidelines for future development should consider design elements from both suburban arterial and node typologies in this example.

Generally, TOD areas across the City of Hamilton can be classified into four main types of TOD areas: Urban Areas, Suburban Areas, Greenfield Areas, and Other. These four categories are further subdivided into more specific TOD areas with the differences between them primarily in scale and function. Table 1 (below), details the types of TOD areas and their general characteristics and function. Any transit area across the city may be applied to a typology which best suits existing characteristics and intended function. There can be flexibility in the application of which TOD typology gets applied on a given area. Overtime, an area may evolve from one typology to another.

3.0 TOD TYPOLOGIES - WHERE TO APPLY TOD

Table 1: TOD Types and Characteristics

TOD Typology		General Characteristics
Urban Areas	Urban Node Areas: Downtown, Sub-Regional Node, Community Nodes*	<ul style="list-style-type: none"> • Node areas around corridor • Employment and residential functions as well as civic uses varying by scale of a node • Different levels of services for different types of nodes
	Urban Corridor Area	<ul style="list-style-type: none"> • Area with development potential along RT corridor
Suburban Areas	Suburban Primary Corridor Area	<ul style="list-style-type: none"> • Mixed use area but may be constrained by poor pedestrian connections
	Suburban Arterial Road Area	<ul style="list-style-type: none"> • Good potential area for greyfield intensification • Potential to facilitate bus travel
Greenfield Areas	Greenfield Node	<ul style="list-style-type: none"> • Undeveloped area identified as a community node • New areas to be built around transit • Will evolve over time to have the same characteristics and similar functions as an urban node*
	Greenfield Neighbourhood	<ul style="list-style-type: none"> • A node in the neighbourhood context incorporating - residential and local scale commercial supported by local transit
Other	Major Activity Centre e.g. Universities, Colleges, Hospitals, etc.	<ul style="list-style-type: none"> • High level of institutional uses, with significant transit ridership

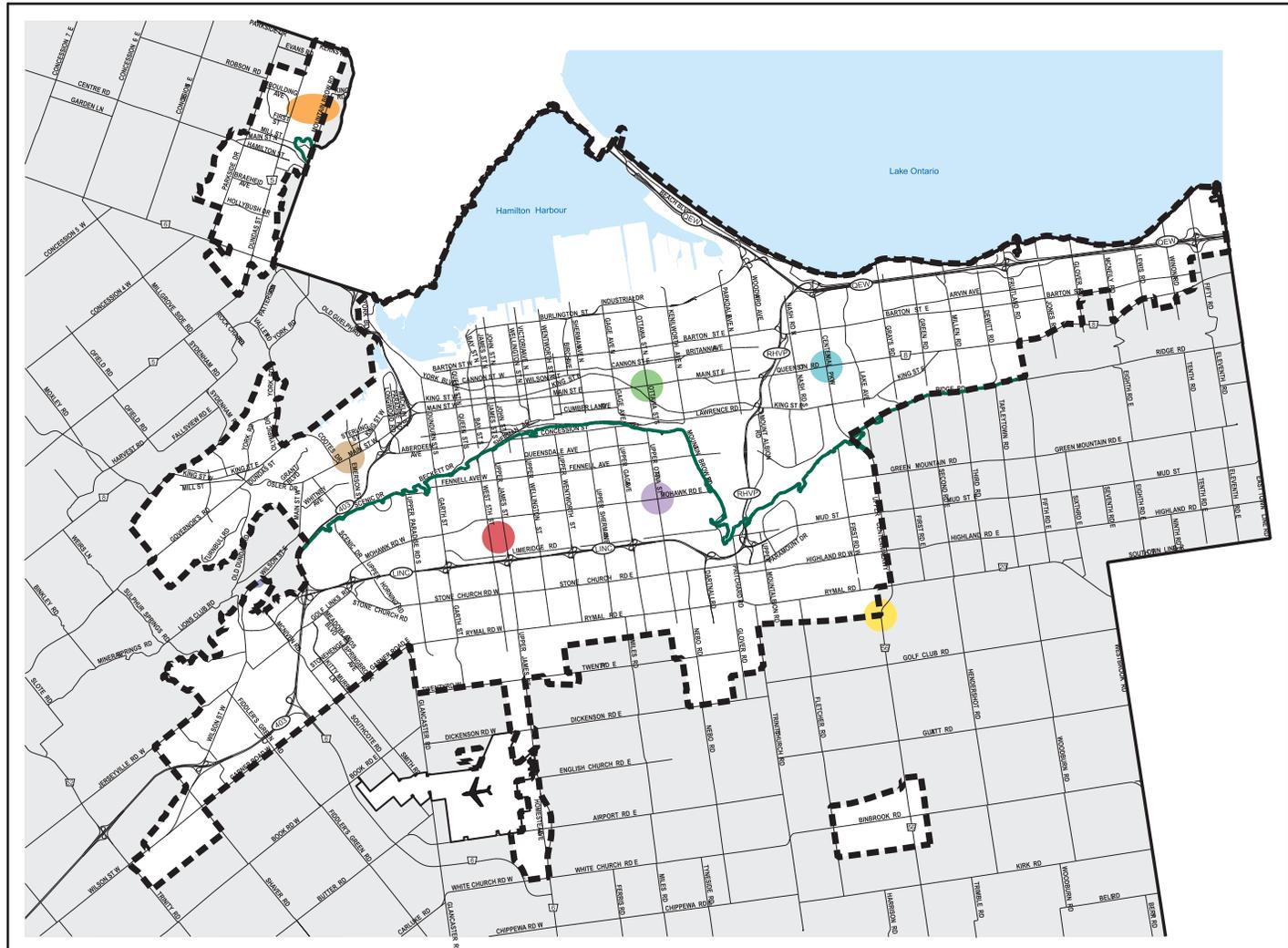
A note about Urban vs. Suburban in the context of the typologies...

Urban is generally used in the Guidelines to describe the older area of the City, primarily below the mountain (Dundas, Hamilton, Stoney Creek), but also in the community cores of Ancaster and Waterdown where historic community centres were developed. Urban areas are characterized by walkable, denser development, traditional street-scapes, and neighbourhoods. Suburban areas are generally those areas built in the post-war period and are characterized by larger lot patterns, lower densities, and automobile-oriented commercial and residential areas. Planning policy and land use regulation aims to transform some of these suburban areas into a more “urban” character to achieve compact, transit-supportive development patterns to support broader City goals of urban growth and sustainability.

3.0 TOD TYPOLOGIES - WHERE TO APPLY TOD

Figure 1: Location of Sample TOD Typology Areas in Hamilton

- Activity Centre
- Greenfield Node
- Greenfield Non-Node
- Suburban Corridor
- Suburban Arterial Road
- Urban Corridor
- Urban Node



3.0 TOD TYPOLOGIES - WHERE TO APPLY TOD

3.1 Urban Areas

The “Urban Areas” include some of the urban corridors and nodes identified in the Urban Official Plan as “Primary Corridors”, “Downtown”, “Sub-Regional Nodes”, and “Community Nodes”. These areas overlap in many cases with the proposed rapid transit route known as the B-line and part of the A-line. Some of the proposed rapid transit corridors included in this classification are King Street and Queenston Road along the B-Line and parts of James Street in the lower city along the A-Line. The B-line primary corridor will have the highest order transit in the City and should be the focus for the largest scale TOD. Nodes such as Eastgate will be among the highest order transit stations (as a multi-modal location) and will likely attract the most development outside the downtown. Along the corridor, various station areas may also be potential development/redevelopment sites, although it is unlikely that every station area will have a high demand for new development.

Community Nodes include traditional downtowns of former municipalities as well as areas that are currently made up of primarily community scale retail uses and a greenfield area, still to be planned. It is the intent that these non-traditional and future community nodes transform over time to contain a full range of services and functions found in the traditional community nodes. Thus the principles for urban nodes must be applied to these non-traditional and greenfield nodes. Although the Community Nodes may not be directly connect to higher order rapid transit, it is essential that TOD principles be applied at the appropriate

scale to ensure these nodes develop to support local transit and achieve their planned function in the urban structure.

TOD guidelines applied to urban areas will be of the highest scale. A description of how to apply TOD in the urban areas (Urban Corridors and Urban Nodes) is detailed in Section 4.0.

3.2 Suburban Areas

The “Suburban Areas” grouping includes areas along the proposed A-line rapid transit route along Upper James Street which are more suburban compared to the lower city. Non-rapid transit routes such as those along Upper Ottawa or parts of Mohawk Road are also grouped into this type of TOD area. The design of the suburban TOD will be similar to those of the urban TOD, but at a lesser scale. The long term goal is to use TOD principles to bring suburban rapid transit corridors up to a similar scale and level of transit use as presently exists in the lower city rapid transit corridor. Suburban area transit corridors can benefit from TOD at key locations such as where two transit routes intersect.

3.0 TOD TYPOLOGIES - WHERE TO APPLY TOD

3.3 Greenfield Areas

“Greenfield Areas” such as new nodes or new undeveloped areas have the opportunities of being planned, designed, and developed according to TOD principles from the start. Applying TOD principles early in the planning and development of greenfield areas may help transit service and use become established sooner. With TOD principles applied, new greenfield areas can develop around transit, thus transit service is more feasible as the population and density needed to support transit becomes established over time. Greenfield areas (as with all TOD areas) should have an overall mixture of densities which may include low density.

Greenfield areas include new neighbourhoods, including the planned greenfield Community Node. The greenfield Community Node will have the benefits of being planned according to TOD principles. Those principles will be applied to create a Node larger in scale than the greenfield neighbourhood areas.

3.4 Other Areas

The final category where TOD may be applied is in nodes that include “Major Activity Centres” in the Urban Hamilton Official Plan. Major activity centres have many potential transit riders due to the presence of health centres, colleges, and universities. Thus TOD principles should be applied in these areas at a scale similar to other urban or suburban nodes. Each activity area is unique and will need to apply TOD principles according to their specific function and needs. Other important areas in the City which can benefit from the application of TOD principles include the West Harbour and airport areas. These activity areas are very unique. Specific TOD principles can be applied as these areas evolve. Similarly, other areas of the city may become prominent activity areas where TOD will be desirable.

The following section (Section 4.0) illustrates the application of TOD principles and the Guidelines for each of the typologies in a hypothetical case study.

4.0 DETAILED GUIDELINES FOR TOD AREAS

4.0 DETAILED GUIDELINES FOR TOD AREAS

The Ten TOD principles will apply to all types of transit areas. However, the scale of development and the application of the principles will differ between TOD types. The following hypothetical development scenarios showcase design and function aspects for the different TOD typologies as described in Table 1.

An overview and description of the functions and objectives for each TOD area is provided, as well as more detailed guidelines on scale and design components specific to the particular TOD areas.

The densities and standards listed (heights, parking, etc.) in the following section are typical ranges and standards for TOD only and are not meant to replace zoning permissions. The following illustrative sites are meant to show examples and one of many potential development approaches to achieve TOD in these areas. Standards and sample sites shown are intended to be an example of how TOD principles can come together in overall development. Development approaches can be applied to similar TOD typology areas and are not specific to the example sites chosen. Actual densities and development standards may vary on a site by site basis and are directed by Official Plan policy and zoning.

The following images are illustrative only, showing one potential development scenario for these areas. These images do not imply that development will occur or can be approved exactly as shown in these examples. TOD areas will develop and evolve over time

and in phases. The sample TOD areas shown, detail a full build out of the sample sites. In practice, TOD areas will develop over time (one or a few sites at a time) in an incremental manner. In the long term, TOD occurs in phases, or incrementally, on a site by site basis. Ultimately, not all the changes shown in the examples may occur, but the illustrations show the potential. The samples shown do not preclude additional heights or uses as long as they conform to policy and zoning.

The figures below show an example of the gradual change of a street; moving from the current state, to a more transit supportive streetscape.



Photo Source: Sierra Club and Urban Advantage

4.0 DETAILED GUIDELINES FOR TOD AREAS

Urban Areas: Urban Nodes

Overview

This example shows the Eastgate Node area, a larger scale node, second only to the Downtown area. This Sub-Regional node area will ideally have rapid transit as well as conventional transit. The station area should be at the centre of the node as well as be part of the primary focal area. The TOD around the node will be applied to the highest degree, given the scale of development anticipated. The following concept may be applicable in an urban area such as other Sub-regional nodes, parts of the Downtown, or at a smaller scale in a Community Node. For the purposes of this section, only a Sub Regional Node example is shown.

4.0 DETAILED GUIDELINES FOR TOD AREAS

Sub Regional Node-Eastgate Village

Queenston Rd. and Centennial Pkwy. N.

2 4 5 New medium density residential neighbourhood with walkable blocks and lower scale buildings compatible with adjacent neighbourhoods

1 4 5 Green space is the focus of mixed use redevelopment. Links to retail promenade and transit station plaza

5 Walkways link parking to street frontage

1 5 New plaza/open space at intersection links to pedestrian walkways to draw pedestrians into the retail promenade

2 8 Redevelop large arterial commercial sites with internal streets/lanes to create opportunity for different building forms and uses

3 Higher densities at corridor transition to lower scale

3 4 Highest densities and heights reinforce corner locations

2 7 Mix of large format retail and shops to replace retail mix of existing mall

5 Introduce major pedestrian boulevard as new retail promenade. Permit limited on street parking to support retail

9 Transit station as focus of re-development

6 Internal surface parking to serve retail and park/ride; potential for structured parking

7 Provide a balance of lower and higher densities and housing forms

8 Re-development of Eastgate Mall site should provide for a full range of land uses and densities. Create distinct precincts of diverse land uses and smaller blocks. Encourage mixed uses at major street edges.

6 7 Provide shared parking for retail office and transit with potential for structured parking and rear service access for retail

The illustration shown details one potential development scenario of a Sub-Regional Node. The sample typology shows how several TOD principles can be implemented throughout the TOD area.

- TOD PRINCIPLES**
- 1 PROMOTE PLACE MAKING-CREATING A SENSE OF PLACE
 - 2 ENSURE A MIX OF USES/APPROPRIATE LAND USES
 - 3 REQUIRE DENSITY AND COMPACT URBAN FORM
 - 4 FOCUS ON URBAN DESIGN
 - 5 CREATE PEDESTRIAN ENVIRONMENTS
 - 6 ADDRESS PARKING MANAGEMENT
 - 7 RESPECT MARKET CONDITIONS
 - 8 TAKE A COMPREHENSIVE APPROACH TO PLANNING
 - 9 PLAN FOR TRANSIT AND PROMOTE CONNECTIONS (FOR ALL MODES)
 - 10 PROMOTE PARTNERSHIP AND INNOVATIVE IMPLEMENTATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Urban Areas: Urban Nodes

Function

A Sub-Regional Node serves as a retail, office, service, and institutional centre for the area with a variety of housing forms. These TODs are the main transit transfer point, while containing the greatest variety of uses. These TOD areas have the greatest scale and intensity outside of the Downtown.

Goals

The goals for this type of TOD area is to increase densities, maximize the level of access to transit, and to make the area as pedestrian and cycling friendly as possible. This TOD type aims to have a good level of street activity and good integration with transit.

Application

Urban Sub-Regional Nodes will have the highest density areas outside of the downtown. The density for these Sub-Regional Nodes will be directed by the Urban Hamilton Official Plan and implemented by zoning. Typical density will range between 120-150 people and jobs per hectare. This density will be applied over the entire area, not necessarily to any one given site. Residential density may include high to low density uses. Typical TOD developments will have several housing densities from 60-120 units/hectare or more.

TOD in Urban Sub-Regional Nodes offer opportunities for public/private partnerships and the most connectivity between modes of transportation. Parking should be controlled in these TOD areas and accompanied by higher investment in pedestrian and cycling amenities. The planned land uses should be diverse in these TOD areas and uses should be clustered near the transit stations.

4.0 DETAILED GUIDELINES FOR TOD AREAS



Typical Residential Density Range:
Min 60-120+ units/hectare

Typical Commercial Density Range:
Min 1-1.5 Floor Area Ratio

Typical Land Use:
Mixed Use (vertically or horizontally), Residential

Scale of Development:
6-12 storeys
Min 3 storeys
Min 12 m building height



Typical Parking Standards:
Low to no parking minimum
Discourage surface lots

- Res: 0.75-1.2 max
- 1-2/300m² (commercial)

4.0 DETAILED GUIDELINES FOR TOD AREAS

Typical Design Elements

- A high degree of focus on creating a sense of place, by locating unique and visually appealing buildings, public art, etc. within the TOD area
- Commercial uses to be located at grade with doors and windows oriented towards the street. Blank walls are to be avoided
- Lot coverage of 50-70%
- Sidewalks should be wide - 1.8m -2.5m min to 4.5m in high traffic areas (3.5m or larger is ideal)
- The ideal height to width ratio of the buildings to the street 1:1 (may be appropriate to go higher in some areas)
- The transit station should be the prominent feature easily accessible from all part of the node
- Utilize small blocks where possible
- Create a “transit village” - develop entire node as a village focused around transit

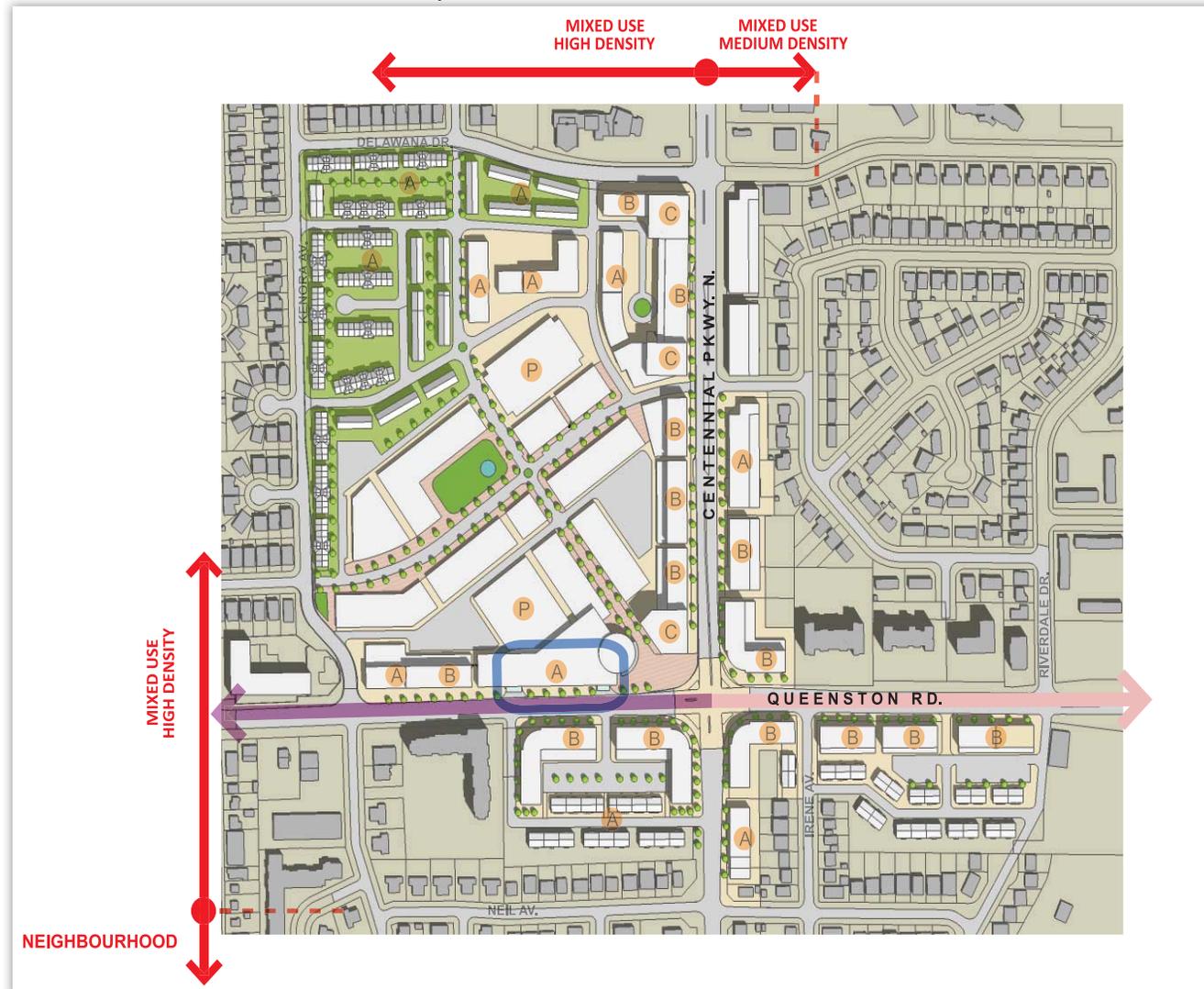
Other Considerations

- Given location as a transit hub, this may be an appropriate area to enter a partnership for park-n-ride facilities etc.
- Many other transit lines and modes of transportation intersect and connect to this type of area
- Good location for public spaces as amenity for residential population
- Higher order cycling facilities (secured bike storage, etc.) are appropriate
- Cluster highest density uses within 400m of the transit station
- Retail uses should not be mandatory, but permitted (although retail is mandatory on the 1st floor of pedestrian predominant streets)
- Encourage daytime and evening uses

4.0 DETAILED GUIDELINES FOR TOD AREAS

Sub Regional Node-Eastgate Village

Queenston Rd. and Centennial Pkwy. N.



The image below shows one possible development scenario. In this TOD area example, a large lot commercial area has been redeveloped to include a clustering of buildings around a transit station area. There are a mixture of building heights and uses. The highest densities and buildings are located toward the corridor and transit hub. Lower scale buildings are situated toward the existing residential areas.

LEGEND

- PRIMARY CORRIDOR
- SECONDARY CORRIDOR
- A THREE-FOUR STOREYS
- B SIX-EIGHT STOREYS
- C TEN STOREYS +
- P PARKING
- RAPID TRANSIT STATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Urban Areas: Urban Corridor

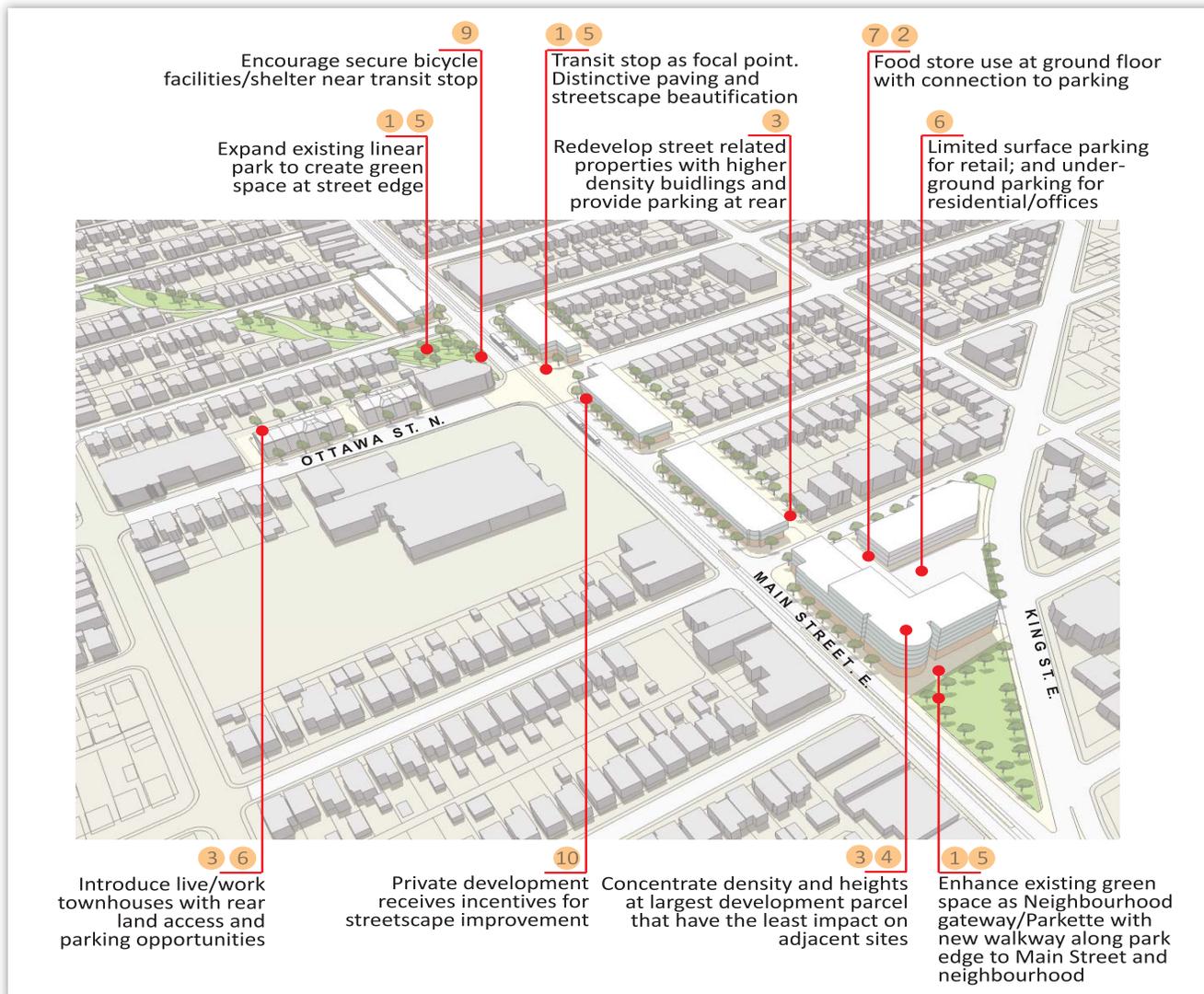
Overview

Urban Corridor areas such as parts of King Street, Queenston Road, and James Street North are higher scale TOD areas. However, rather than being concentrated in one station area (as in a larger node), various TOD station areas will be located along the corridor. While some individual TOD/station areas will be more developed than others, overall, the entire corridor will be representative of a highly urban corridor that supports higher order transit such as LRT.

4.0 DETAILED GUIDELINES FOR TOD AREAS

Urban Corridor

Main St. E. and Ottawa St. N.



The illustration shows how an urban corridor can develop according to the principles of TOD. The TOD area is smaller and more linear than a node, but the patterns can generally be repeated at other transit stops along the corridor.

- TOD PRINCIPLES**
- 1 PROMOTE PLACE MAKING-CREATING A SENSE OF PLACE
 - 2 ENSURE A MIX OF USES/APPROPRIATE LAND USES
 - 3 REQUIRE DENSITY AND COMPACT URBAN FORM
 - 4 FOCUS ON URBAN DESIGN
 - 5 CREATE PEDESTRIAN ENVIRONMENTS
 - 6 ADDRESS PARKING MANAGEMENT
 - 7 RESPECT MARKET CONDITIONS
 - 8 TAKE A COMPREHENSIVE APPROACH TO PLANNING
 - 9 PLAN FOR TRANSIT AND PROMOTE CONNECTIONS (FOR ALL MODES)
 - 10 PROMOTE PARTNERSHIP AND INNOVATIVE IMPLEMENTATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Urban Areas: Urban Corridor

Function

Urban Corridors are a focus for neighbourhoods and joins together other nodes and activity centres. Some station areas will have moderate to high densities. Station areas and TOD uses that surround them are to be access points to higher order transit for the neighbourhood.

Goals

The goal for this type of TOD area is to provide access to higher levels of transit from the surrounding neighbourhoods. TOD along corridors can develop into pockets of higher density with neighbourhood amenities.

Application

Urban Corridor TOD's will have higher density uses compared to the surrounding neighbourhoods. Residential densities will be directed by the Urban Hamilton Official Plan and implemented by zoning, though generally the highest density uses should be located nearest to the transit stations. Medium and low density uses will be applied gradually moving away from the transit stations.

TOD along urban corridors offers opportunities for public/private partnerships and a high degree of connection between nodes. Limited to no on-street parking will be provided along corridor areas and parking requirements will be reduced in areas adjacent to the corridor. TOD in corridor areas should have a high degree of pedestrian and cycling amenities clustered near the transit stations.

4.0 DETAILED GUIDELINES FOR TOD AREAS



Typical Residential Density Range:
Min 60-120 units/hectare

Typical Commercial Density Range:
Min 1-1.5 Floor Area Ratio

Typical Land Use:
Mixed Use, Local Commercial, Neighbourhood

Scale of Development:
Up to 8 storeys
Min 3 storeys

Typical Parking Standards:
Low to no parking minimum
Discourage surface lots

- Res: 0.75-1.2 (max)
- Retail: 1-2/300m²



4.0 DETAILED GUIDELINES FOR TOD AREAS

Typical Design Elements

- Achieve higher density with medium rise buildings (up to 8 storeys). An increase in lot coverage permitted to achieve this density
- Limit parking in front of buildings directly fronting onto the rapid transit corridor
- Require main entrance to front on the street
- Building Setback: encourage a continuous streetwall of built form
- Ensure connectivity of sidewalks
- Encourage loosely spaced shade trees, where feasible, to improve walking environment

Other Considerations

- TOD related uses (mixed use, retail, residential, institutional) to be clustered within 400m of the rapid transit station
- Some specialized TOD areas are acceptable (e.g. some station areas mainly residential, some station areas mainly commercial, etc.)
 - Individual station area work together to make a viable TOD corridor
- Transit stop located to create optimal walking distance of 150-300m to access work and 400-800m for residential areas, where feasible
- Incorporate connections to other transit routes into design of station areas (sidewalks, bus layover, fully accessible transfers, etc.)

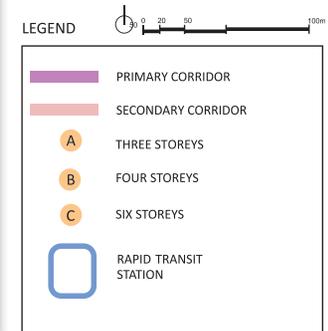
4.0 DETAILED GUIDELINES FOR TOD AREAS

Urban Corridor

Main St. E. and Ottawa St. N.



Three and four storey buildings, shown below, are located in close proximity to a transit stop area at the intersection of two arterials. The east-west corridor, in this example, is a primary corridor and a rapid transit corridor. Higher density buildings are located along the street front within walking distance of the transit stop. The Official Plan and zoning permit mixed use-medium density uses in this sample location.



4.0 DETAILED GUIDELINES FOR TOD AREAS



Suburban Areas: Suburban Corridor Area

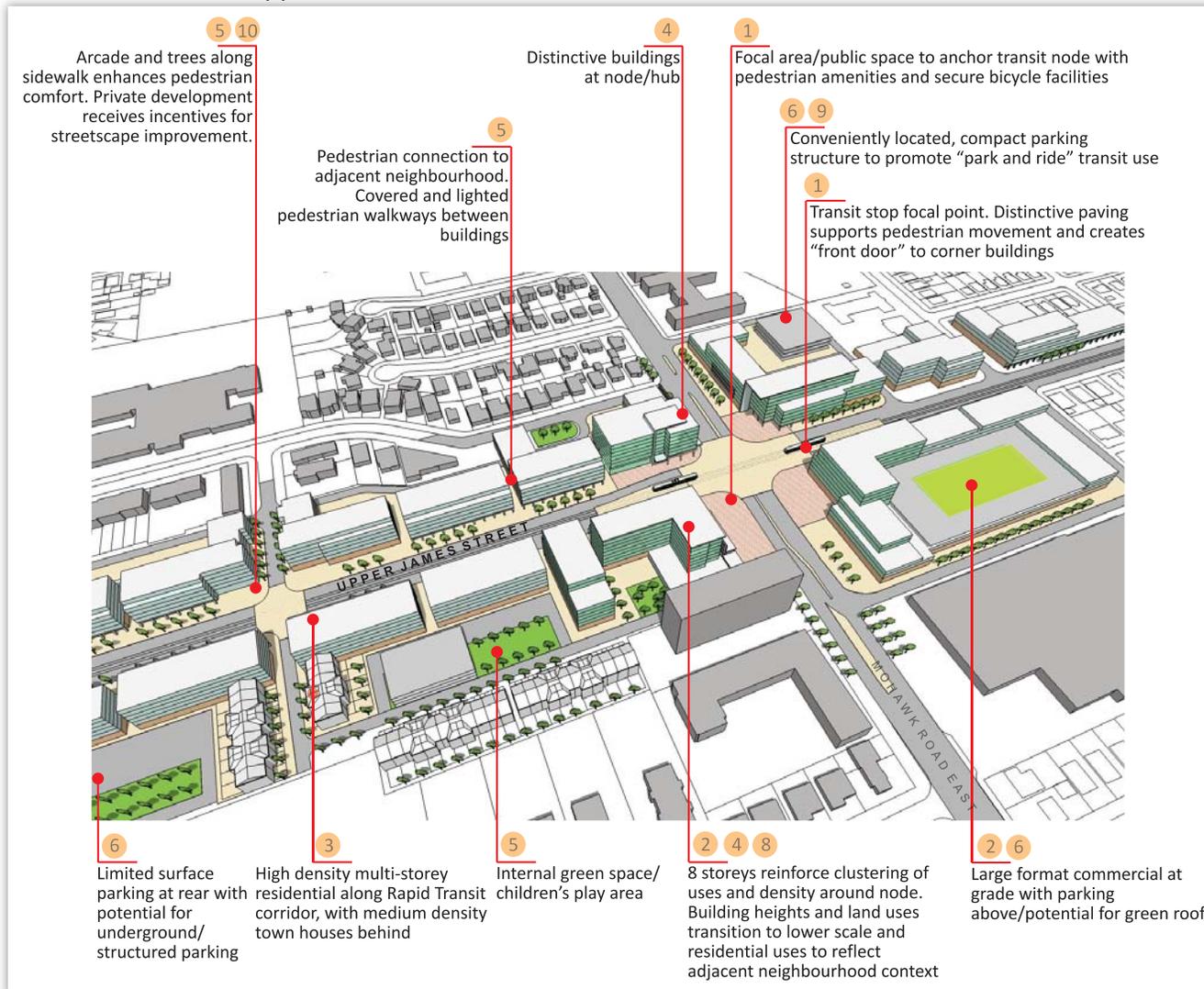
Overview

TOD in Suburban Corridor areas such as parts of Upper James Street are corridors which can have higher order transit, but are not as urban and developed as the Urban Corridor areas yet. These areas have potential for more intensification owing to direct access to higher order transit.

4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Corridor

Mohawk Rd. E. and Upper James St.



The Suburban Corridor TOD area balances several TOD principles. Several principles overlap such as managing parking, ensuring a mixture of uses, and promoting partnerships to develop streetscaping elements.

- TOD PRINCIPLES**
- 1 PROMOTE PLACE MAKING-CREATING A SENSE OF PLACE
 - 2 ENSURE A MIX OF USES/APPROPRIATE LAND USES
 - 3 REQUIRE DENSITY AND COMPACT URBAN FORM
 - 4 FOCUS ON URBAN DESIGN
 - 5 CREATE PEDESTRIAN ENVIRONMENTS
 - 6 ADDRESS PARKING MANAGEMENT
 - 7 RESPECT MARKET CONDITIONS
 - 8 TAKE A COMPREHENSIVE APPROACH TO PLANNING
 - 9 PLAN FOR TRANSIT AND PROMOTE CONNECTIONS (FOR ALL MODES)
 - 10 PROMOTE PARTNERSHIP AND INNOVATIVE IMPLEMENTATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Areas: Suburban Corridor Area

Function

TOD's along Suburban Corridors will be the primary access point for transit for the surrounding neighbourhoods. Various TOD's may become specialized in the services offered. As a primary corridor, higher scales of development and intensification are appropriate.

Goals

To allow for land use that is compatible with higher order transit. The goal is to increase the density in suburban corridors to function closer to those of urban corridors thereby maximizing transit use on a rapid transit system.

Application

Suburban Corridor areas will direct higher density uses to locate nearest to the transit stations. Actual density amounts are directed by the Urban Hamilton Official Plan and implemented by zoning. Medium and low density uses will be applied gradually moving away from the transit stations. The density and intensity of uses near TOD areas in Suburban Corridor areas should increase over time.

There is currently limited pedestrian and cycling connection in Suburban Corridor areas; connections and amenities will increase over time. Application of the TOD principles should increase the overall land use mix and create enhancements to the public realm. Increased transit connections to higher order transit along the corridor will further enhance TOD development. Parking may be oversupplied early on, but will be reduced as intensity increases along the corridor and at TOD transit areas. An example may include developing surface parking sites into new developments.

4.0 DETAILED GUIDELINES FOR TOD AREAS



Typical Residential Density Range:

Min 60-120 units/hectare

Typical Commercial Density Range:

Min 0.5-1.5 Floor Area Ratio

Typical Land Use:

Mixed Use, either vertically or horizontally, Neighbourhood, stand alone commercial

Scale of Development:

Up to 8 storeys

Min 3 storeys



Typical Parking Standards:

Lower standard at station area

- Res: 1-2/unit
- Office: 1/100m²
- Retail: 2/300m²

Photo Source: City of Hamilton

4.0 DETAILED GUIDELINES FOR TOD AREAS

Typical Design Elements

- Medium level scale and intensity of buildings
- Larger lots allow for more opportunities for redevelopment - new development should be street orientated
- Wider sidewalks should be placed within 400 m of the station area. Create new connections with adjacent neighbourhoods if not currently present
- Cycling facilities required at transit stations - secured facilities preferable
- Create a positive pedestrian environment, utilize wider ROW to expand sidewalks, plant shade trees, and encourage a large proportion of on-street windows
- Create smaller blocks during redevelopment where possible (90m are best, 120m -150m may also be appropriate)
- Parking areas for new development should be located to the rear of the building, limit the building setback, and limit parking in front of the building to one or two rows

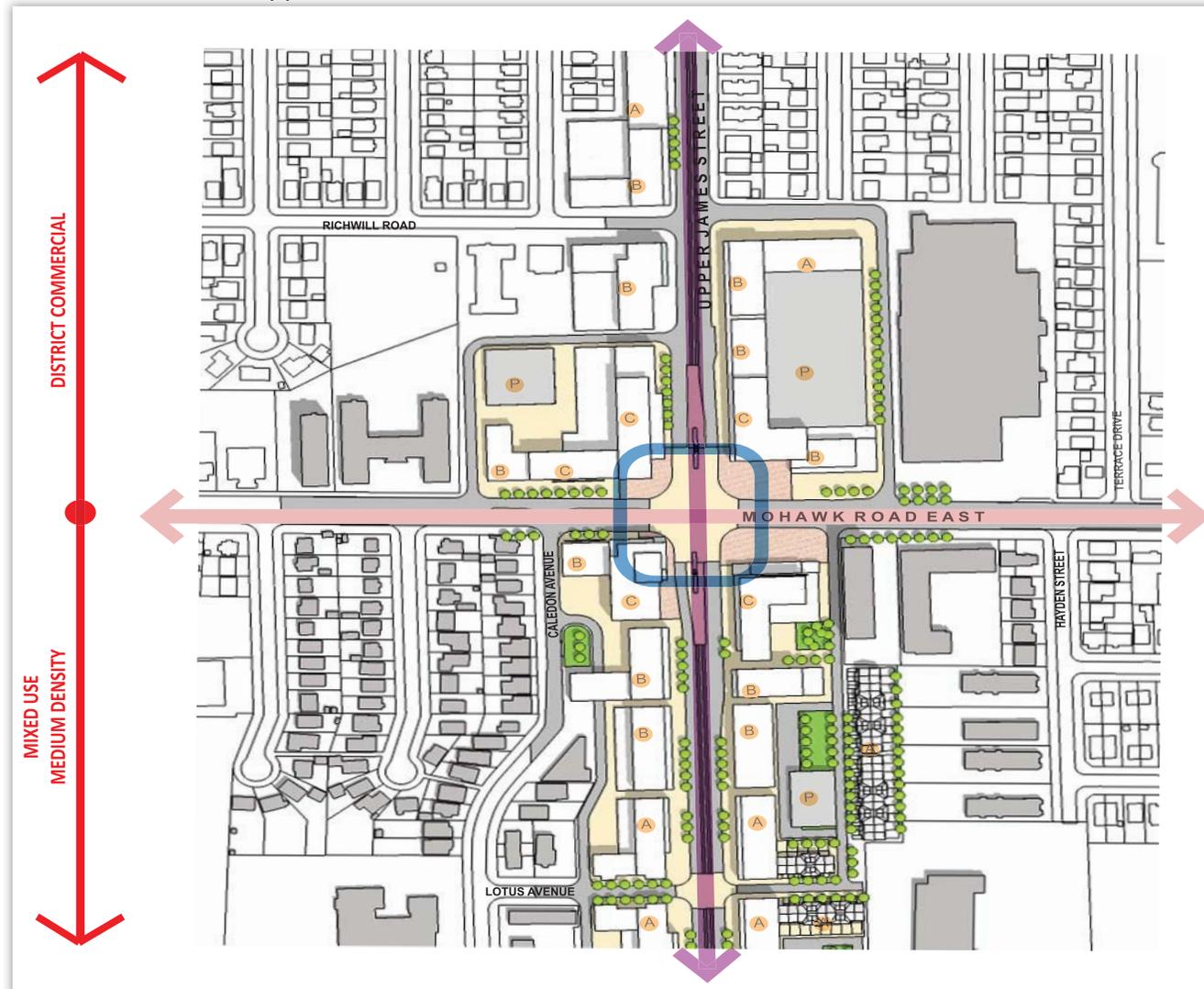
Other Considerations

- Design and land use should be realistic to the existing uses, but also plan for more intensity in the future given access to higher order transit on the corridor
- Should have lower parking requirements than other arterial road areas
- Discourage new auto related uses within 400 m of a RT station area
- There may be provisions for secured bike storage, but regular cycle storage may also be appropriate
- Connections to other modes of transit should be clearly marked and have easy to read/understand signs

4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Corridor

Mohawk Rd. E. and Upper James St.



The TOD example below shows residential and commercial uses of varying scales integrated with parking and transit facilities. Streetscaping enhancements are shown throughout this example. Clustering occurs at the intersection of two arterial roads. Parking is provided, but is not the dominate feature.

LEGEND

- PRIMARY CORRIDOR
- SECONDARY CORRIDOR
- A THREE STOREYS
- B SIX STOREYS
- C EIGHT STOREYS
- P PARKING STRUCTURE
- RAPID TRANSIT STATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Areas: Suburban Arterial Road

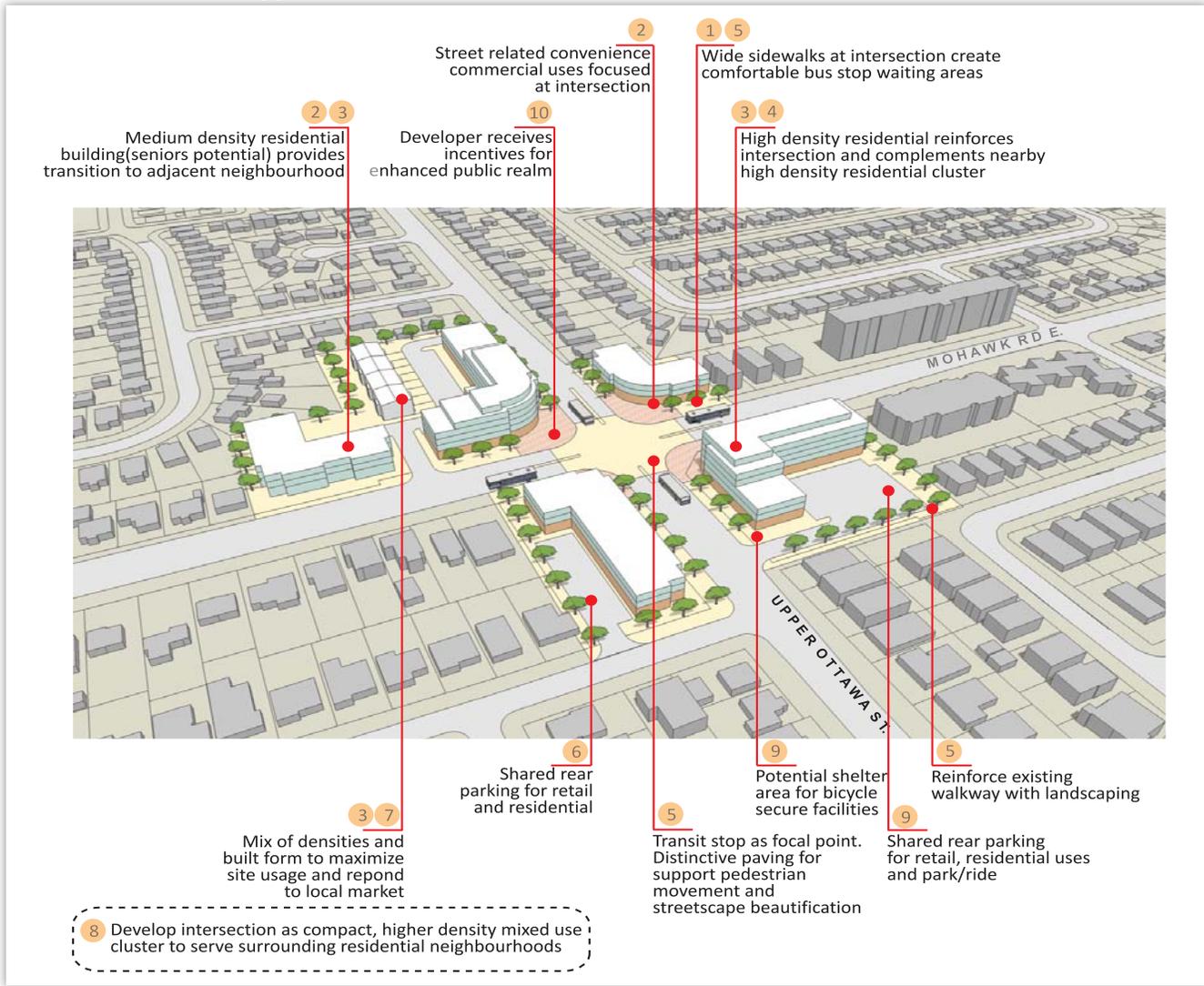
Overview

Suburban Arterial Roads have access to conventional transit but not rapid transit. TOD can be applied to areas without rapid transit with the recognition that TOD in these areas will be at a lower scale and intensity. Suburban areas with bus service can act as a feeder system to the higher order system. At the appropriate scale, TOD along these arterial intersections can further facilitate increased transit ridership in the areas not serviced by rapid transit directly. Official Plan policy already directs higher density uses toward arterial streets. TOD related uses would be appropriate at key intersections; where two or more bus routes intersect or at key suburban transit hubs.

4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Arterial

Mohawk Rd. E. and Upper Ottawa St.



TOD at the intersection of two arterial roads are at a lower scale than other areas, but TOD principles still apply.

- TOD PRINCIPLES**
- 1 PROMOTE PLACE MAKING-CREATING A SENSE OF PLACE
 - 2 ENSURE A MIX OF USES/APPROPRIATE LAND USES
 - 3 REQUIRE DENSITY AND COMPACT URBAN FORM
 - 4 FOCUS ON URBAN DESIGN
 - 5 CREATE PEDESTRIAN ENVIRONMENTS
 - 6 ADDRESS PARKING MANAGEMENT
 - 7 RESPECT MARKET CONDITIONS
 - 8 TAKE A COMPREHENSIVE APPROACH TO PLANNING
 - 9 PLAN FOR TRANSIT AND PROMOTE CONNECTIONS (FOR ALL MODES)
 - 10 PROMOTE PARTNERSHIP AND INNOVATIVE IMPLEMENTATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Areas: Suburban Arterial Road

Function

TOD along suburban arterial roads are primarily where two bus routes intersect or meet. TOD in these areas are to enhance bus service by promoting greater density and transit friendly uses near the transit stops. Given the scale, bus stops will have limited amenities though basic elements such as a bus shelter and seating are preferable.

Goals

To increase the ridership of non-rapid transit and make conventional transit easy to access and more attractive to nearby neighbourhoods and business.

Application

Suburban arterial roads will not have higher order transit but do offer conventional transit. The Urban Hamilton Official Plan directs higher density uses toward arterial roads. TOD areas such as those at the intersection of two arterial transit routes should have higher densities than that of the surrounding neighbourhood areas. Upper end, low-density and medium-density residential densities detailed in the Official Plan are transit supportive.

Pedestrian and cycling connections and amenities should be provided at lower scales than in urban areas. Application of the TOD principles should increase the overall land use mix and create enhancements to the public realm. Conventional transit serving neighbourhood areas should provide connections to higher order rapid transit. Parking may be provided in suburban areas though it should not be the dominant land use feature.

4.0 DETAILED GUIDELINES FOR TOD AREAS



Photo Source: City of Hamilton

Typical Residential Density Range:

Min 60 - 100 units/hectare

Typical Commercial Density Range:

Min 0.5-1 Floor Area Ratio

Typical Land Use:

Neighbourhood
Local Commercial

Scale of Development:

3-6 storeys

Typical Parking Standards:

Lower than interior of neighbourhoods

- Res: 1-2/unit
- Retail: 1-4/100m²

4.0 DETAILED GUIDELINES FOR TOD AREAS

Typical Design Elements

- Maintain and/or enhance sidewalks from neighbourhood areas to the transit stops
- Promote sidewalks on either side of a bus stop with a minimum of 1.5m width
- Careful attention to pedestrian realm to mitigate presence of automobile related uses
- Amenities such as bus shelters, seating areas, and good lighting should be part of the immediate bus stop area
- Where feasible, on-street parking can be used to buffer pedestrians from on street traffic
- Bus shelters near larger commercial areas should promote good pedestrian environments and safe connections between the building and the bus stop
 - Pedestrians should not have to cross an open parking lot to access between the bus stop and building (e.g. create pedestrian connections through parking lot areas)

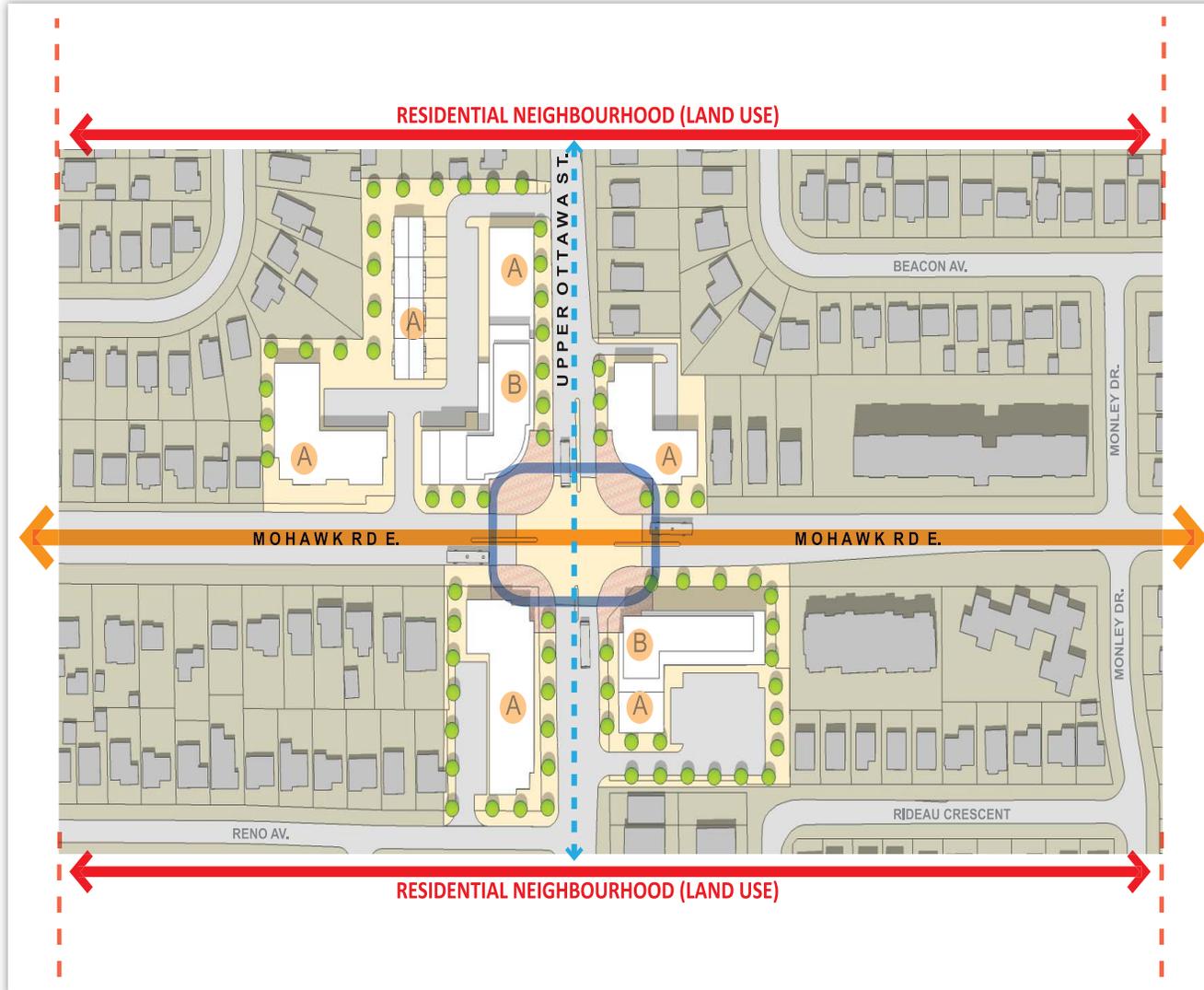
Other Considerations

- Connections to other modes, such as cycling, can be promoted with bicycle locking areas or other cycling facilities such as bike ramps at stairs, etc. where appropriate
- Bus signs and stops should be clearly marked and highly visible
- Locate bus stops to provide maximum access to as many residents/business as possible
- Encourage convenience uses such as service shops and retail to locate near bus stops to promote local market activities
- Information on connections to other bus routes should be clearly marked and made easy to understand

4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Corridor

Mohawk Rd. E. and Upper James St.



The Suburban Arterial road example is a smaller scale TOD area compared to the Sub-Regional nodes and Urban and Suburban corridor's. Therefore, fewer buildings are shown in the example. The intent is to cluster higher densities than the surrounding neighbourhood areas near the intersection of two conventional transit lines. Shown below is the ultimate build-out of the four corners. This and other similar TOD type areas will develop incrementally one building and one corner at a time.

LEGEND

- RAPID TRANSIT CORRIDOR
- LOCAL BUS ROUTE
- THREE STOREYS
- SIX STOREYS
- RAPID TRANSIT STOP ZONE

Scale: 0 20 50 100 150m

4.0 DETAILED GUIDELINES FOR TOD AREAS

Greenfield Area: Neighbourhood Centres

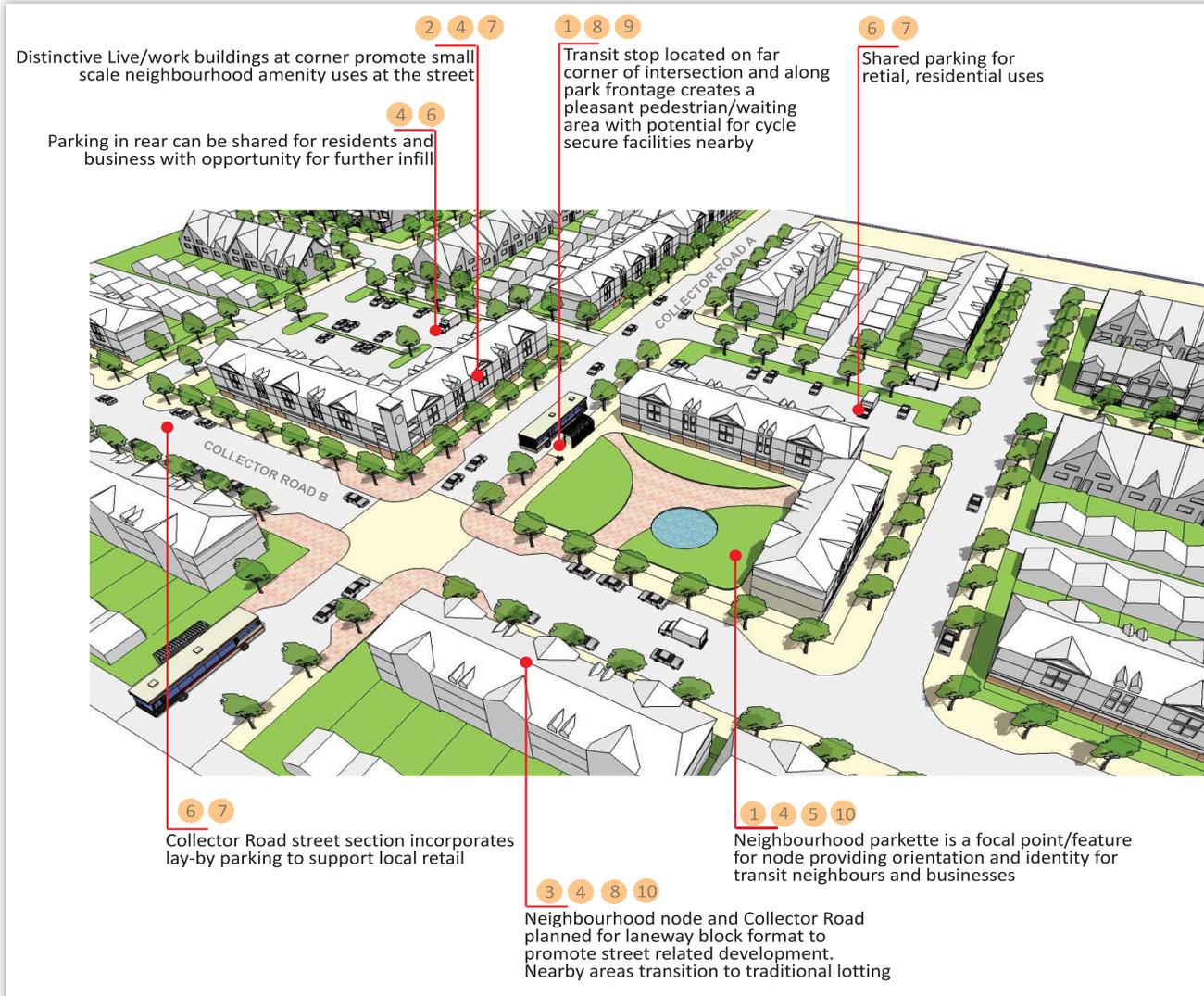
Overview

Planning for TOD is important in areas where transit (or development) may not yet be in place. Further greenfield developments, such as Elfrida, are identified to be a future node area of the City. TOD principles can be applied early in the planning process for this node in recognition that, in the future, transit should be at the centre of the node and a key component to all future developments. Planning for TOD early allows new residents of the future community to be accustomed to transit from the beginning. TOD principles can be implemented ahead of transit so that transit can be incorporated easily and successfully.

4.0 DETAILED GUIDELINES FOR TOD AREAS

Neighbourhood Centre

Waterdown South area



The illustration shows the TOD principles applied at a new Greenfield Centre. The principles are lower scale than other types of TOD but the elements that make this area transit supportive are all present.

- TOD PRINCIPLES**
- 1 PROMOTE PLACE MAKING-CREATING A SENSE OF PLACE
 - 2 ENSURE A MIX OF USES/APPROPRIATE LAND USES
 - 3 REQUIRE DENSITY AND COMPACT URBAN FORM
 - 4 FOCUS ON URBAN DESIGN
 - 5 CREATE PEDESTRIAN ENVIRONMENTS
 - 6 ADDRESS PARKING MANAGEMENT
 - 7 RESPECT MARKET CONDITIONS
 - 8 TAKE A COMPREHENSIVE APPROACH TO PLANNING
 - 9 PLAN FOR TRANSIT AND PROMOTE CONNECTIONS (FOR ALL MODES)
 - 10 PROMOTE PARTNERSHIP AND INNOVATIVE IMPLEMENTATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Greenfield Area: Neighbourhood Centres

Function

TOD principles in greenfield areas, such as nodes and other areas, mainly serve as a guide to promote transit supportive uses and behaviours from the beginning. Transit TODs in greenfield areas can be the focal point for new developments, growing around the transit centre.

Goals

To increase the ridership of local/conventional transit and make conventional transit easy to access and more attractive to nearby neighbourhoods and business. Transit should be well integrated from the beginning in new communities.

Application

Greenfield densities are detailed in the Urban Hamilton Official Plan and will be refined by secondary planning. Greenfield TOD areas may have a mixture of low to high density uses ranging from a min 60 units per hectare and upwards. Sufficient transit supportive densities may take time to develop, but greenfields should be designed to accommodate transit from the beginning. Example areas may include greenfield areas in Waterdown or potential new greenfields in the Elfrida area.

Greenfield TOD offers an opportunity to establish pedestrian and cycling connections early on. Pedestrian and cycling amenities may only consist of a bus shelter and a bike rack, but these amenities should still be provided. A mixture of land uses and clustering around transit stops will evolve over time. On street parking can serve as a buffer between the sidewalks and the roadway.

4.0 DETAILED GUIDELINES FOR TOD AREAS



Photo Source: City of Hamilton



Photo Source: City of Hamilton

Typical Residential Density Range:

Min. 60 - 100 units/hectare

Typical Commercial Density Range:

Min 0.5-1 Floor Area Ratio

Typical Land Use:

Neighbourhood

Mixed Use (either in commercial greenfield area or industrial greenfield area)

Scale of Development:

2-6 storeys

Typical Parking Standards:

Lower than interior of neighbourhoods

- Res: 1-2/unit
- Retail: 1-4/100m²

4.0 DETAILED GUIDELINES FOR TOD AREAS

Typical Design Elements

- Plan for clustering of uses and buildings from the beginning
- Create a focal point for new communities near the centre, with good transit access
 - Greenfield and Suburban areas can benefit from public art just like urban areas - the transit or bus stop could incorporate public art
- Plan for walkways and pedestrian paths early in the process to improve long-term connections
- Where parking lots are required; promote smaller lots or shared lots in the rear or side of buildings or structures
- On-street parking is appropriate
- Ensure good pedestrian connections between buildings and bus stops (avoid crossing large parking lot areas)

Other Considerations

- Plan future transit and location of higher density areas concurrently
- When planning for and assigning new land use designations and zoning, think transit from the beginning
- Plan for buildings and uses which may change over time. Allow buildings which can be converted at a later date if necessary (e.g. first: surface parking, second: structure parking, third: Mixed Use buildings, etc.)

4.0 DETAILED GUIDELINES FOR TOD AREAS

Neighbourhood Centre

Waterdown South Area



TOD in a new greenfield community will generally be the lowest scale of all TOD areas. By clustering development, conventional transit may be supported for the neighbourhood. As the area evolves, additional uses and density will increase transit viability. Parking is part of the area but is managed by locating it behind buildings or limiting it to a couple of rows.

LEGEND

- THREE-FOUR STOREYS
- PARKING
- RAPID TRANSIT STOP ZONE

4.0 DETAILED GUIDELINES FOR TOD AREAS

Major Activity Centre

Overview

TOD for Major Activity Centres will have a special role. TOD in Major Activity Centres will be specialized for the surrounding areas. TOD at locations near McMaster University and Mohawk College will be geared towards students and the hospitals located adjacent to the schools. In addition to the draw of students and staff as transit riders, these facilities also receive many visitors which should also be accommodated by transit and create a demand for services near the TOD area.



Photo Source: City of Hamilton

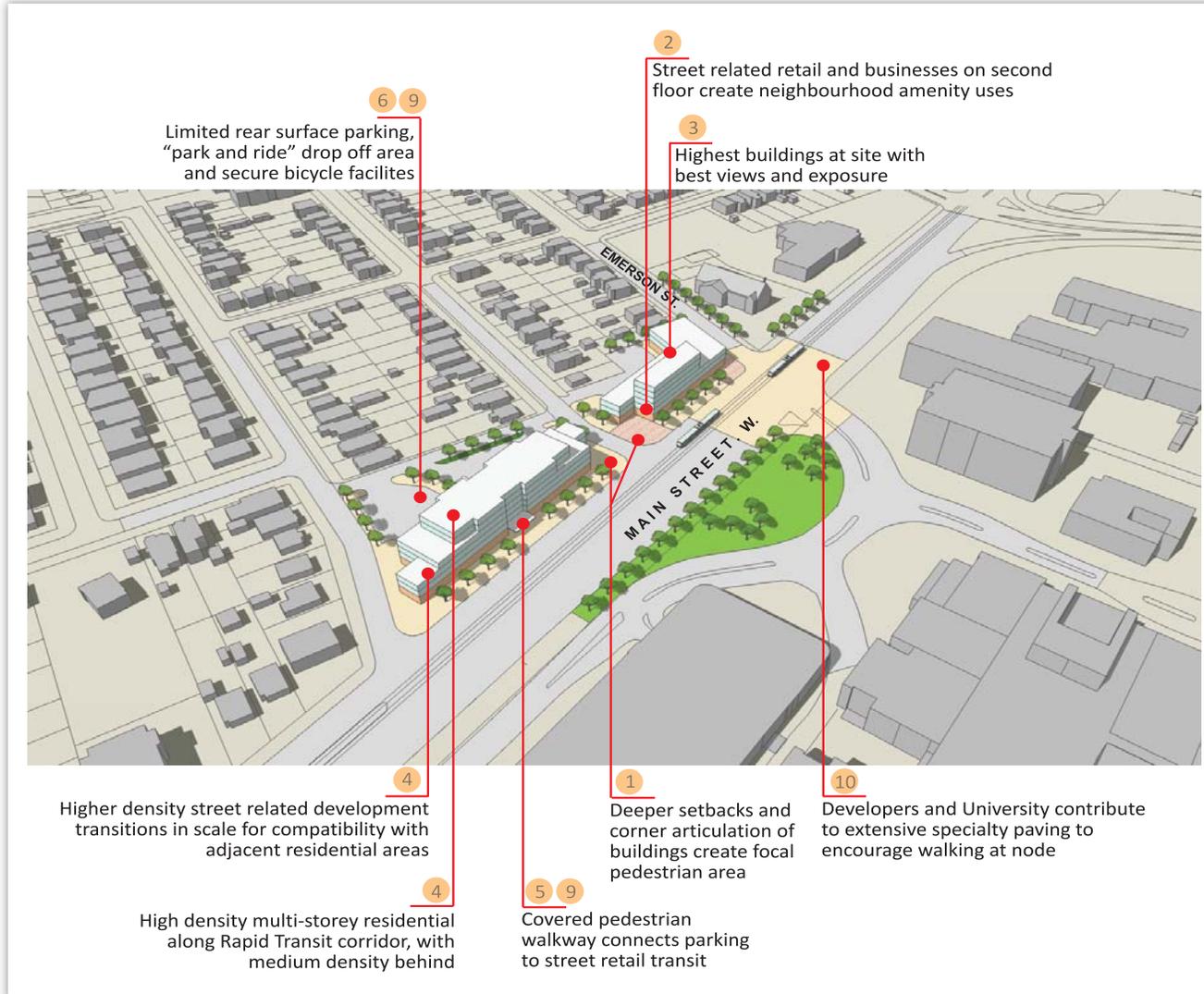


Photo Source: City of Hamilton

4.0 DETAILED GUIDELINES FOR TOD AREAS

Major Activity Centre

Main St. W. and Emerson St. (McMaster University)



6 9
Limited rear surface parking, "park and ride" drop off area and secure bicycle facilities

2
Street related retail and businesses on second floor create neighbourhood amenity uses

3
Highest buildings at site with best views and exposure

4
Higher density street related development transitions in scale for compatibility with adjacent residential areas

1
Deeper setbacks and corner articulation of buildings create focal pedestrian area

10
Developers and University contribute to extensive specialty paving to encourage walking at node

4
High density multi-storey residential along Rapid Transit corridor, with medium density behind

5 9
Covered pedestrian walkway connects parking to street retail transit

The illustration shows TOD principles can be applied to a unique area such as a Activity Centre with a University, College or hospital.

- TOD PRINCIPLES**
- 1 PROMOTE PLACE MAKING-CREATING A SENSE OF PLACE
 - 2 ENSURE A MIX OF USES/APPROPRIATE LAND USES
 - 3 REQUIRE DENSITY AND COMPACT URBAN FORM
 - 4 FOCUS ON URBAN DESIGN
 - 5 CREATE PEDESTRIAN ENVIRONMENTS
 - 6 ADDRESS PARKING MANAGEMENT
 - 7 RESPECT MARKET CONDITIONS
 - 8 TAKE A COMPREHENSIVE APPROACH TO PLANNING
 - 9 PLAN FOR TRANSIT AND PROMOTE CONNECTIONS (FOR ALL MODES)
 - 10 PROMOTE PARTNERSHIP AND INNOVATIVE IMPLEMENTATION

4.0 DETAILED GUIDELINES FOR TOD AREAS

Major Activity Centre

Function

The TOD of Major Activity Centres will primarily serve the needs of the students and staff of the adjacent education and health centres. Major Activity Centres are located on urban corridors, thus are on the same scale as urban corridors.

Goals

To maximize the level of access for these large transit ridership generators. Major Activity Centres can be a key designation for visitors to the City's universities, colleges, and health centres.

Application

Major Activity Centres will have higher densities as directed by the Urban Hamilton Official Plan. This density will be applied over the entire area, not necessary to any one given site. Residential density may include high to low density uses as per the Official Plan. The highest density areas should be applied to areas closest to the transit stations.

TOD in Major Activity Centres offer opportunities for public/private partnerships (ie. between the City and major institutions). Parking should be controlled in these TOD areas accompanied by higher degrees of investment in pedestrian and cycling amenities. The planned land uses should be diverse in these TOD areas.

4.0 DETAILED GUIDELINES FOR TOD AREAS



Photo Source: City of Hamilton



Photo Source: City of Hamilton

Typical Residential Density Range:

Min 60-120 units/hectare

Typical Commercial Density Range:

Min 1-1.5 Floor Area Ratio

Typical Land Use:

Mixed Use, Educational and Health related services, Neighbourhood

Scale of Development:

6-10 storeys

Typical Parking Standards:

Discourage surface lots, preference for underground or structure parking, where feasible

- Res: 0.75-1.2 (max)
- Retail: 1-2/300m²

4.0 DETAILED GUIDELINES FOR TOD AREAS

Typical Design Elements

- Medium to high level scale and intensity of buildings
- Wider sidewalks should be placed within 400m of the station area. Create new connections within adjacent neighbourhoods and buildings if not currently present
 - A high degree of pedestrian amenities should be available
- Cycling facilities required at transit stations, secured facilities preferable
- Create a positive pedestrian environment, utilize the ROW to expand sidewalks, plant shade trees, and encourage a large proportion of street façade windows
- Create smaller blocks during redevelopment where possible (90m are best, 120m -150m may also be appropriate)
- The preferred location for parking in new developments is at the rear of the building with a limited setback. If there are no alternatives and a small setback is required, parking in front of the building should be limited to one or two rows

Other Considerations

- Design and land use should be realistic to the existing uses but also plan for more intensity in the future given access to higher order transit on the corridor
- Should have lower parking requirements than other arterial road areas
- Discourage new auto related uses within 400m of a RT station area
- Connections to other modes of transit should be clearly marked and have easy to read/understand signs
- Opportunities to partner with institutions for better transit integration - promote direct access
- Integration with inter-regional transit should be factored into decisions

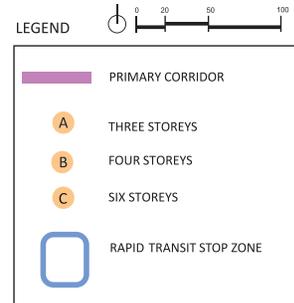
4.0 DETAILED GUIDELINES FOR TOD AREAS

Suburban Corridor

Mohawk Rd. E. and Upper James St.



The example shows a hypothetical station area across from a university. Buildings heights across from the transit station allow transit supportive density, but are consistent with existing Official policy.



5.0 IMPLEMENTATION

5.1 How To Use These Guidelines

These TOD guidelines describe ten key principles to developing TOD and provide example sites and scenarios where they may be implemented. The various TOD typologies illustrate the physical elements that make up an ideal TOD area based on site context. Between Volume 1 and 2 of these guidelines, strategies for TOD are outlined, TOD built form standards are provided, and implementation issues such as parking are addressed.

The TOD guidelines are meant to complement the existing Official Plan policy, zoning restrictions, and to serve as a tool to help translate policy into action. While the TOD guidelines are targeted to transit areas, the principles can be used as a tool to implement the existing policy. The TOD guidelines can be used by planners to articulate existing policies and design standards within a transit specific context. The guidelines are intended to be used by the City, developers, and the broader community.

City Staff can use these guidelines to:

- Provide direction in the development of future secondary plans and updates;
- Provide direction on planning around transit stations;
- Serve as a tool to review development applications located near key transit areas to ensure some principles of TOD are addressed;
- Incorporate TOD principles when updating policy and zoning;
- Guide implementation of new transit infrastructure, including rapid transit;
- Provide direction to local area transportation master plans, cycling projects, and other municipal initiatives;
- Guide the design or retrofit of streets and other public spaces to be more pedestrian, bicycle, and transit friendly; and,
- Serve as an education tool to educate the public and industry about the benefits of TOD.

Developers can use this guidebook to:

- Design projects that take advantage of a transit presence;
- Meet policy objectives of the Official Plan and other planning requirements;
- Work with the City on potential public/private projects;
- Be used as a marketing tool for transit-oriented projects.

Community groups can use these guidelines to:

- Learn more about the benefits and principles of TOD; and
- Advocate for walkable, transit-oriented neighbourhoods.

5.2 Additional Policy (if necessary)

Currently, the Urban Hamilton Official Plan and new Zoning By-law are consistent with TOD. Thus, the broader policy planning framework already exists to enable transit supportive development including the design guidelines already detailed in the Official Plan. The TOD guidelines provides further direction and guidance to help implement the direction already detailed in the Official Plan and through Zoning. As plans for rapid transit become more refined, slight modifications to the Official Plan and/or Zoning may be appropriate. The TOD guidelines will assist in providing direction to any future modifications.

5.3 Implementation Tools/Frameworks

The TOD guidelines will most likely be used during the site plan stage of development review as an additional resource to determine if developments are transit supportive. The intent is to help guide the development to meet the existing policy framework. Ideally, these guidelines will be consulted before the site plan review process is underway. These TOD guidelines could potentially become part of the site plan guidelines and part of the site plan review process.

One of the most influential places to implement TOD will be in the development of new Secondary Plans. New Secondary Plans should follow principles of the TOD guidelines and implement many of the design elements during the development of Secondary Plans for existing and planned transit expansion areas.

Finally, many of the most successful TOD projects involve partnership between different groups within community organizations, and private and public sectors. TOD guidelines and principles should be followed when such groups collaborate to implement TOD.



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