Transit-Oriented Development
Guidelines

Approved by City Council September 26, 2007

Transit-Oriented Development (TOD) is a mix of moderate to high-density transit-supportive land uses located within an easy walk of a rapid transit stop or station that is oriented and designed to facilitate transit use.

Purpose and Application

The purpose of these guidelines is to provide guidance to assess, promote and achieve appropriate Transit-Oriented Development within the City of Ottawa.

These guidelines are to be applied throughout the City for all development within a 600 metre walking distance of a rapid transit stop or station, in conjunction with the policies of the Official Plan and all other applicable regulations (i.e. Zoning By-law, Private Approach By-law, Signs By-Law). Enhanced cycling facilities and cycling infrastructure should be considered within a 1500 metre cycling distance. Areas served by high-quality transit (frequent service, numberous routes, extended hours of service) rather than rapid transit will also benefit from applying these guidelines.

These guidelines will be used:

1) To provide direction to the design and review processes for plans of subdivision, site plan control, rezoning and Official Plan Amendments;

2) To assist in the preparation of new community design plans or secondary plans for undeveloped or redeveloping communities;

3) To complement design considerations in approved community design plans or existing secondary plans.

This guidance is reflective of a more integrated approach that blends transit with urban planning and will be particularly important as the City expands its rapid transit network with a focus on increasing transit ridership when opportunities for Transit-Oriented Development are presented.

Official Plan Direction

The growth management strategies of the Official Plan direct most urban growth to the Central Area, Mixed-Use Centres, Town Centres and Mainstreets. All Mixed-Use Centres and Town Centres have, or are planned to have, rapid transit. Opportunities to create Transit-Oriented Development exist where these designated growth areas and rapid transit stations and stops coincide.

Schedules B and D of the Official Plan (and Annex 1 of this document) show the Urban Land Use Policy Plan and the Rapid Transit Network and provide direction regarding the location and policy framework for Transit-Oriented Development within the City of Ottawa.

Section 2.5.1 and Annex 3 of the Official Plan contain a number of design considerations for meeting design objectives and principles.

Context and Challenges

People are more likely to choose transit if they can easily walk between many destinations at the beginning and end of their trip. This can be achieved through providing increased densities, mixed-uses, and pedestrian-oriented design within easy walking distances of high-quality transit. Numerous benefits result, in terms of creating healthier and more livable communities where people can live, work and shop; improved affordability by reducing the need for private motor vehicles; more efficient public infrastructure, such as water, sewer, roads, recreation, fire and police services; and greater opportunities for economic vitality through an increase in the diversity and scale of development.

The main challenges associated with Transit-Oriented Development include: providing a mix of uses and densities that complement both transit users and the local community; ensuring built form is designed and orientated to facilitate and encourage transit use; managing the safe circulation of pedestrians, cyclists, vehicles and parking; and creating quality public spaces that provide direct, convenient, safe and attractive access to transit.

Transit-Oriented Development Guidelines

The Transit-Oriented Development Guidelines are organized into six general sections:

Land Use – The right kinds of land use, the combination of uses, and the intensity of activities have a direct relationship to the efficiency of transit. Locating uses close to transit that will either generate or attract a high percentage of riders, or combinations of uses that will do so throughout the day or night or that will enable people to perform multiple tasks at one location will enhance the level and frequency of service that can be provided and the efficiency of the transit system. Additional functional efficiencies can be obtained if these uses are built at medium to high densities as greater concentrations of people justify higher levels of transit service.

Layout – Land use patterns and the layout of site development that reduces the need to travel great distances or follow circuitous routes to transit stations or stops will encourage more people to utilize transit as an alternative to car travel. Locating the greater intensity uses (more people) closest to the stop or station enhances convenience for both the user and provider of transit.

Built Form – 'Place-making' is an important element in transit-oriented development. A transit station can be a destination in its own right. The purpose of this particular set of guidelines is to encourage the creation of environments surrounding transit stations or stops that will be considered to be 'good places' and 'good neighbours' within the community of which they are a part. Good urban design can make for a more interesting and attractive public realm.

Pedestrians & Cyclists – At some point in any given trip, everyone is a pedestrian. The intent of these guidelines is to make the experience of walking or cycling both convenient and positive in a way that will enhance the overall experience of getting to and from the transit stop or station.

Vehicles & Parking – Parking can occupy a significant proportion of a development's site area that could otherwise be devoted to building area or amenity space. Too much parking, particularly surface parking, can overwhelm people. A common area of conflict is where vehicular movement and parking competes in the same space with people on foot. This section provides guidance in the design of the street and parking environment to minimize these conflicts. It also recognizes that transit-oriented development offers an opportunity to reduce the amount of parking in the station area through increased transit riderships, reduced vehicle ownership, and shared parking arrangements.

Streetscape & Environment – The quality and design of the spaces along public sidewalks and internal pedestrian walkways, particularly those that lead to and from transit stops or stations, is an important element in the overall transit experience. Care taken with these environments can contribute to a positive experience for transit users and the achievement of Transit-Oriented Development.

Other Available City of Ottawa Guidelines

Several other City of Ottawa design and planning guidelines are available on the City's website:

http://ottawa.ca/city_services/planning/design_plan_guidelines

These guidelines play an integral role in achieving high quality design throughout the City by translating the vision of the Official Plan and its broad framework into detailed principles for development.

1 Land Use

Guideline 1:

Provide transit supportive land uses within a 600 metre walking distance of a rapid transit stop or station.

Transit-supportive land uses encourage transit use and transportation network efficiency as they:

- Establish high residential and/or employee densities
- Create travel outside of the am/pm peak periods
- Promote reverse-flow travel
- Attract and generate pedestrian and cycling traffic
- Provide extended hours of activity, throughout the day and week.

Examples of transit-supportive land uses include: townhouses; apartments; child care facilities; hotels; medical clinics; restaurants; affordable housing; libraries; recreational and cultural facilities; fitness clubs; movie theatres; call centres; offices; high schools and post secondary institutions. Refer to the text and maps of the Official Plan (Section 3 and Schedule B) and the City's Zoning By-Law for specific types of uses that are permitted within different areas.

Figure 1: Encourage transit supportive land uses within 600 metres of a rapid transit stop or station.

Guideline 2:

Discourage non transit-supportive land uses that are oriented primarily to the automobile and not the pedestrian, cyclist or transit user. Non transit-supportive land uses are those that:

- Generate exclusively high levels of vehicle activity
- Use large amounts of land with low-density form
- Require extensive surface parking areas and are oriented towards users arriving by automobile
- Create negative impacts for pedestrians, such as isolation, windswept walks, and numerous vehicle crossings on sidewalks
- Typically do not encourage extended hours of activity.

Examples of non transit-supportive land uses include: Automotive parts, repair and service; car dealerships; car washes; drive through facilities; gas/service stations; commercial surface parking; warehouse storage; animal boarding; commercial nurseries; and low-density residential developments on large lots (>12m).

Figure 2: Discourage non-transit supportive land uses within 600 metres of a rapid transit stop or station.

1

Land Use

Guideline 3:

Create a multi-purpose destination for both transit users and local residents through providing a mix of different land uses that support a vibrant area community and enable people to meet many of their daily needs locally, thereby reducing the need to travel. Elements include a variety of different housing types, employment, local services and amenities that are consistent with the policy framework of the Official Plan and the City's Zoning By-Law. The mix of different uses can all be within one building and/or within different buildings within close proximity of one another.

Figure 3a:
The Tunney's Pasture Transitway Station is a multi-purpose destination offering a diverse mix of transit-supportive uses that help enable people to meet many of their daily needs, thereby reducing their overall need to travel.

Figure 3b:
American Plaza in San Diego is an example of a mixed-use TOD building with uses geared towards both local and non-local residents alike, featuring office space (49 000 m^2), retail (2000 m^2) and a museum (1000 m^2).

Figure 3c:
The Byward Market is within 600 metres of rapid transit and offers a variety of different uses throughout the day and evening. It is a popular destination for many people across the City and is also a place where people can live, work and shop.

Figure 3d:
The Homme de Fer station area in Strasbourg, France is a hub of activity centered on many transit supportive uses that cater to local residents, transit users and tourist.

Figure 3e:
Sparks Street is a lively pedestrian mall located within 200 metres of Ottawa's Transitway that offers a mix of transit-supportive uses that cater to both transit and non-transit users alike.

2

Layout

Guideline 4:

Lay out new streets, laneways, pedestrian and cycling connections in a connected network of short block lengths that offer route choice.

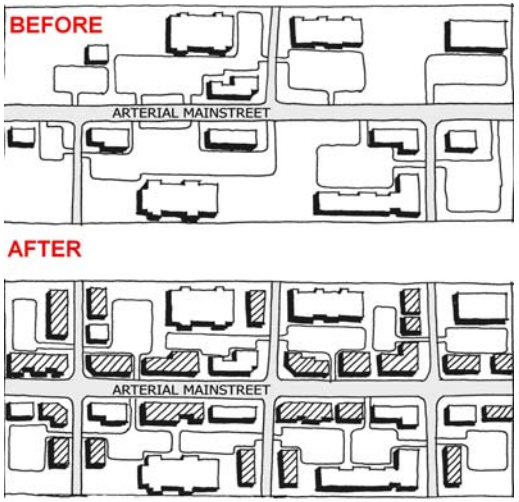


Figure 4: Incorporate new streets to create a grid pattern of short block connections of no more than 150 metres.

Guideline 5:

Design street blocks to be no more than 150 metres in length with pedestrian friendly intersections.

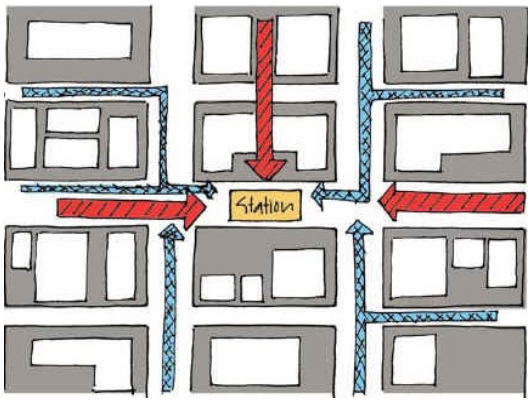


Figure 5: Shorter block lengths with pedestrian friendly intersections make transit more accessible.

Guideline 6:

Create pedestrian and cycling "short cuts" that lead directly to transit. Pathways require a minimum 6-metre right-of-way. Ensure these "short cuts" are maintained and free of ice and snow in winter. Look for opportunities to link "short cuts" to the larger greenspace, pedestrian and cycling networks. Note that carefully planned street networks should not require "short cuts".

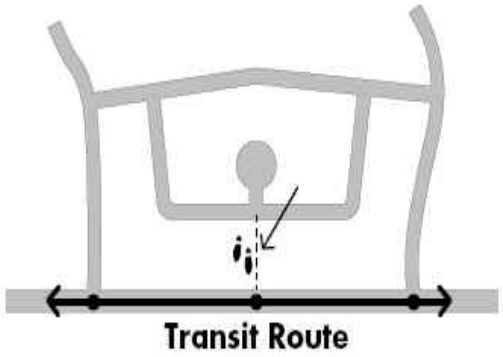


Figure 6a: The City of Ottawa Transit Service Policy aims to provide transit service within 400 metres of 95 per cent of Urban Transit Area residents.

Figure 6b: William Street is a pedestrian "short cut" that connects the Byward Market to the Rideau Street transit corridor.

2

Layout

Guideline 7:

Locate buildings close to each other and along the front of the street to encourage ease of walking between buildings and to public transit. Coordinate the location and integration of transit stops and shelters early in the design process to ensure sufficient space and adequate design.

Guideline 8:

Locate the highest density and mixed uses (apartments, offices, etc.) immediately adjacent and as close as possible to the transit station. This could be provided within one building or within several adjacent buildings. Consider the Official Plan's Implementation Mechanisms by Authority under the Planning Act (Section 5.2) and the City's Housing First policy.

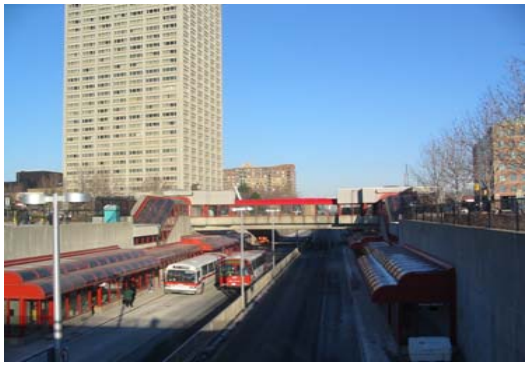


Figure 8:
Several large federal government office buildings are located immediately adjacent to the Tunney's Pasture Transitway Station.

Guideline 9:

Create transition in scale between higher intensity development around the transit station and adjacent lower intensity communities by stepping down building heights and densities from the transit station.

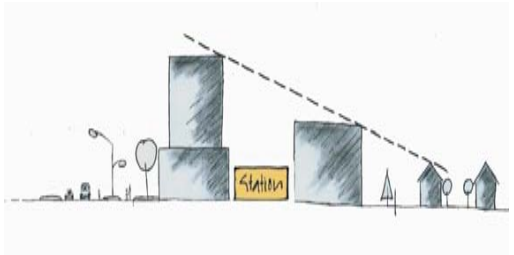


Figure 9:
A transition in building scale protects the adjacent residential neighbourhood and enhances the ability of the station to become part of the neighbourhood.

Guideline 10:

Orient buildings towards transit stations and provide direct pedestrian access that minimizes conflict with vehicles. Look for opportunities to face buildings to the station, integrate them with the station, and connect them to the station.

Figure 10:
Several University of Ottawa buildings are oriented towards the Campus Transitway Station with direct pathway connections to transit.

3

Built Form

Guideline 11:
Step back buildings higher than 4 to 5 storeys in order to maintain a more human scale along the sidewalk and to reduce shadow and wind impacts on the public street.

Figure 11a: Buildings set back above 4-5 storeys preserve a human scale and allow more light to reach the sidewalk.

Figure 11b: Buildings with angular set backs minimize massing and shadowing impacts.

Guideline 12:
Create highly visible landmarks through distinctive design features that can be easily identified and located. For example, taller buildings can create a landmark location because they stand out on the skyline.

Figure 12a: The Metropole serves as a landmark building adjacent to the Westboro Transitway Station.

Figure 12b: This piece of art is a landmark feature along the Transitway and a handy point of reference for Transitway users.

Guideline 13:

Set large buildings back between 3.0 and 6.0 metres from the front property line, and from the side property line for corner sites, in order to define the street edge and to provide space for pedestrian activities and landscaping.

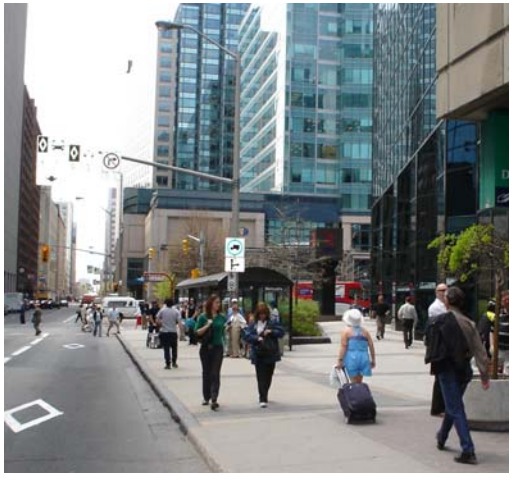


Figure 13a: The BDC building has an angled setback to provide space for pedestrian movements around the Metcalfe Transitway stop.

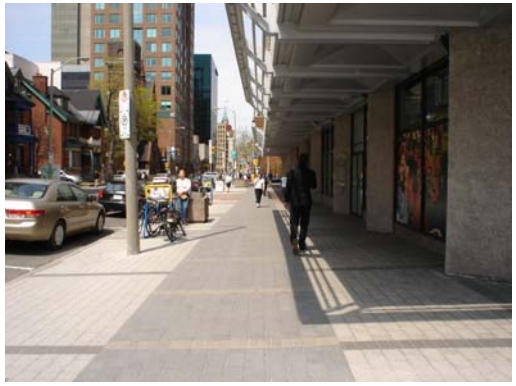


Figure 13b: The Place Bell building provides extra wide sidewalks and a building canopy that helps to define the street edge and shelter pedestrians.

Guideline 14:

Provide architectural variety (windows, variety of building materials, projections) on the lower storeys of buildings to provide visual interest to pedestrians.

Figure 14: Generous windows with changing displays can both animate the public realm, contributing to quality and interest at transit stops, and benefit the private realm by engaging the attention of transit users passing by or congregating opposite the building.

Guideline 15:

Use clear windows and doors to make the pedestrian level façade of walls facing the street highly transparent in order provide ease of entrance, visual interest and increased security through informal viewing.

Figure 15: Large clear street-level windows help animate the streetscape and provide a sense of security for pedestrians and cyclists.

4

Pedestrians & Cyclists

Guideline 16:
Design pedestrian connections that are convenient, comfortable, safe, easily navigable, continuous and barrier-free and that lead directly to transit.

Figure 16: Pedestrian connections should be convenient, safe, comfortable, barrier-free and directly lead to transit.

Guideline 17:
Use different materials such as concrete for crosswalks or treatments such as painted patterns to provide visual identification of pedestrian routes for motorists.

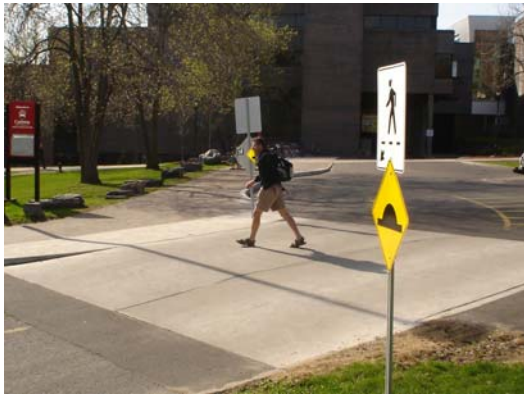


Figure 17: This pedestrian crosswalk at Carleton University is made from concrete, which makes it stand out from the roadway asphalt.

Guideline 18:
Reduce or limit grade separated pedestrian connections. Where pedestrian grade separation is required, the connection should be continuous and integrated. Elevated connections are preferred over below grade connections for reasons of cost, reduced interruption of below grade services, safety and provision of views into the public realm.

Figure 18: Billings Bridge Plaza is connected to the Transitway by a grade separated pedestrian bridge.

Guideline 19:
Incorporate glazing and natural lighting into the design of below grade linkages.

Figure 19: This below grade pedestrian connection that links the Rideau Centre to the Transitway and National Defence Headquarters is well illuminated.

Guideline 20:

Provide amenities and services within grade-separated linkages to generate activities and enhance security. Public telephones, benches, automated banking machines, news stands, retail kiosks, promotional marking activities and public art programs should be considered, in conjunction with Crime Prevention Through Environmental Design (CPTED) principles.

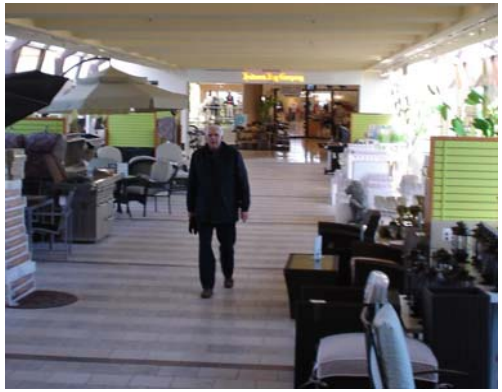


Figure 20: This grade separated pedestrian connection in the Rideau Centre includes retail services that help to generate pedestrian activity and avoids a "tunnel" feeling.

Guideline 21:

Provide indoor and outdoor signage and way finding elements to help direct transit users towards the transit station.

Figure 21: This Transitway sign directs transit users to the Campus Transitway station at the University of Ottawa.

Guideline 22:

Ensure pedestrian connections are maintained and operational at all times when transit services are functioning, even after building business hours.

Figure 22: Development agreements can ensure public access when transit services are available. This connection between the Rideau Center and the Transitway is accessible after store hours when transit services are still operating.

Guideline 23:

Design connections for continuous visibility of any area 20 metres ahead. Eliminate hidden areas or recessed areas that could be used for hiding. These include hidden areas above or below grade, alleys, walls, dense planting, and storage and service areas. Consider Crime Prevention Through Environmental Design (CPTED) principles.

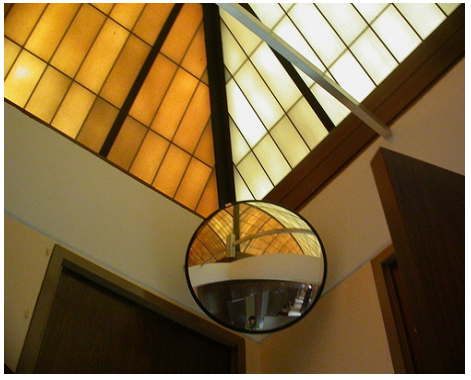


Figure 23: Corner mirrors allow pedestrians to see around tight corners for continuous visibility, which helps to build a sense of security.

Guideline 24:
Minimize changes in floor levels. Pedestrians should not have to walk more than 100 metres to escalators, ramps or elevators to change floor levels in order to access transit. Vertical connections should also be within the building interior rather than as freestanding structures added to the building's exterior.

Figure 24: The Rideau Centre provides several escalators, ramps, stairs and elevators within 200 metres of walking distance on each floor.

Guideline 25:
Ensure pedestrian walkways are an adequate width to accommodate anticipated pedestrian volumes, with a minimum width of 2.0 metres with accessible grade changes.

Figure 25: A ramped floor with gradual level changes that meet accessibility requirements is preferred over stairs.

Guideline 26:
Ramps must have a maximum slope of 1:20. A level walking space should be provided at the top of the ramp.

Figure 26: This ramp at the Museum of Civilization is artistically integrated with stairs and provides a levelled area at the top.

Guideline 27:
Provide weather protection to make waiting for and getting to and from transit stops more comfortable. This can include covered waiting areas, building projections, colonnades, awnings and use of landscaping.

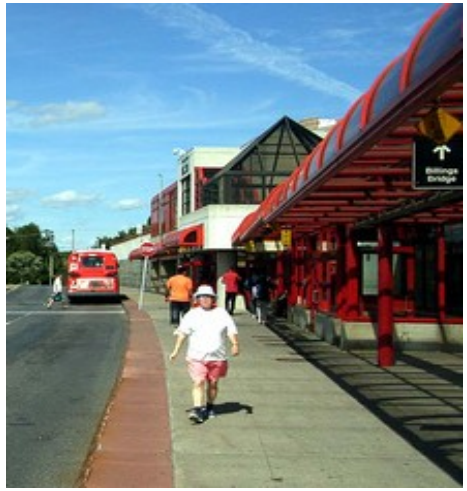


Figure 27: The Billings Bridge Plaza is connected to the Transitway via several covered pedestrian walkways.

Guideline 28:
Design ground floors to be appealing to pedestrians, with such uses as retail, personal service, restaurants, outdoor cafes, and residences

Figure 28: This outdoor patio in the Glebe helps to animate the streetscape for pedestrians.

Guideline 29:
Provide convenient and attractive bicycle parking that is close to building entrances, protected from the weather, visible from the interior of the building and that does not impede the movement of pedestrians.

Figure 29: This bicycle parking area at City Hall is protected from the weather by a colonnade and is visible from inside the building.

Guideline 30:
Provide cycling amenities such as change rooms, lockers and shower facilities for employees to help encourage cycling and the integration of cycling and transit use. The new City of Ottawa Draft Zoning By-law allows for the reduction of one motor vehicle parking space for every 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other similar facilities intended for the use of the bicyclists (Part 4, Section 111 [13].

Figure 30: Transport Canada recommends one shower per 100 employees as a good ratio for providing showers and change room facilities in the workplace.

Guideline 31:
Design infrastructure to enhance the cycling environment and to help increase access to transit for cyclists.

Figure 31: Bicycle ramps on staircases help to facilitate enhanced mobility for cyclists.

Guideline 32:

Provide no more than the required number of vehicle parking spaces, as per the Zoning By-law. Consider cash-in-lieu and on-street parking. Reductions in Development Charge fees may also be available for developments that provide reduced parking. The new draft Zoning By-law allows for reduced motor vehicle parking requirements in lieu of cycling infrastructure (Part 4, Section 111 [13]) and also waives parking requirements on Traditional Mainstreets for lots that are 20 metres or less in width (Part 10, Section 197 [10b]).

Figure 32:
On-street parking may be a viable alternative to accommodating all parking on-site. Rows of parked cars along sidewalks also provide a buffer between pedestrians and vehicle traffic.

Guideline 33:

Develop a Transportation Demand Management (TDM) plan that is integrated with the City's TDM initiatives and mechanisms. The City's TDM Section, within the Public Works and Services Department, is available to assist in developing a TDM plan.

Guideline 34:

Encourage the sharing of parking spaces for uses that have peak parking demands at different times of the day, such as offices, restaurants and cinemas. The City's Zoning By-law includes reduced parking requirements for shared parking provisions, which helps to make more efficient use of parking areas.

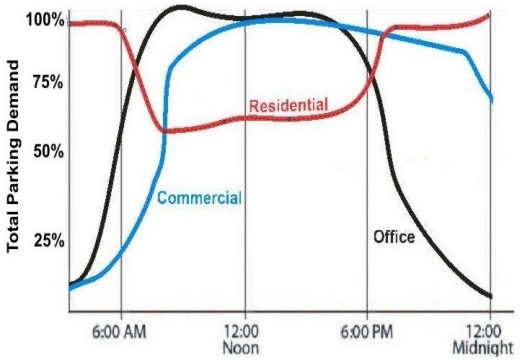


Figure 34a:
This graph illustrates different peak parking times between commercial, residential and office facilities.

Figure 34b:
The Canal Ritz restaurant shares parking spaces with a community daycare facility, as their peak parking demands occur at different times of the day.

Guideline 35:

Locate parking lots to the rear of buildings and not between the public right-of-way and the functional front of the building. For buildings on corner sites, avoid locating parking lots on an exterior side.

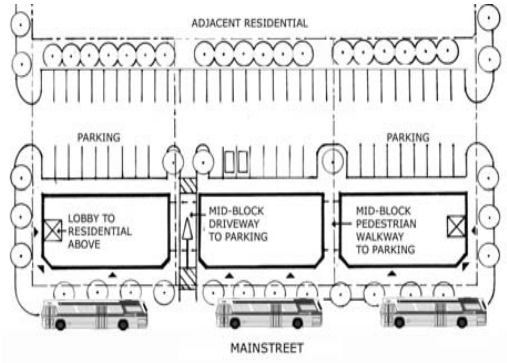


Figure 35: Transit users should not have to navigate through parking lots to access transit.

Guideline 36:

Design access driveways to be shared between facilities. This helps to improve the pedestrian environment by limiting the number of depressed curbs across public sidewalks and reduces potential points of conflict between pedestrians and vehicles.

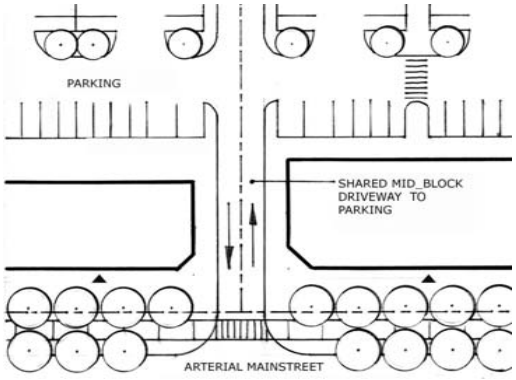
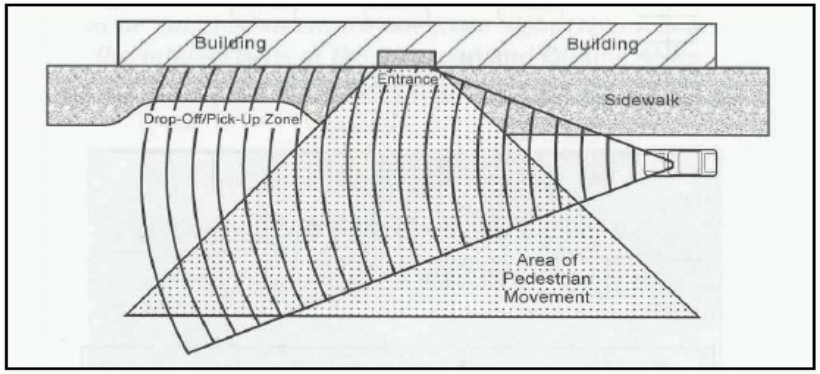


Figure 36: Fewer curb cuts results in less interruption of the public sidewalk and contributes to a better pedestrian environment.

Guideline 37:

Provide areas where motorists, including taxis, can drop off or wait for transit passengers. Passengers require a direct connection to the transit station.



Guideline 38:

Design and locate parking lots and internal roads to minimize the number of vehicle crossings over primary pedestrian routes.

Figure 38: Separate vehicle and pedestrian functions within parking lots for safety and aesthetic reasons.

Guideline 39:
Encourage underground parking or parking structures over surface parking lots. Locate parking structures so that they do not impede pedestrian flows and design them with active street-level facades, including commercial uses and/or building articulation, non-transparent windows or soft and hard landscaping.

Figure 39: This parking structure in the Byward Market includes an active street façade that animates the pedestrian realm.

Guideline 40:
Provide preferential parking spaces for carpools, car sharing, and ridesharing to help reduce vehicle parking demands.

Figure 40: Providing priority parking spaces for car pools, car sharing and ridesharing helps to encourage more efficient use of vehicle infrastructure and reduces the need for parking spaces.

Guideline 41:
Design parking lots to include direct and safe pedestrian linkages while maintaining pedestrian comfort and access. This includes dividing large surface parking lots into smaller areas through landscaping and walkways. Reference the City's Hard Surface Tree Planting Guidelines for more information.

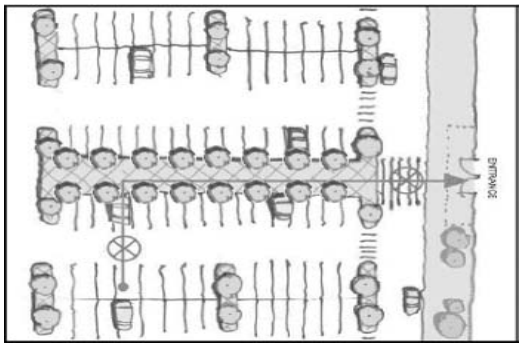


Figure 41: Several small parking areas help to reduce vehicle speeds and minimize the number of pedestrian conflict points.

Guideline 42:
Include a boulevard or planting strip along internal roadways and parking areas to buffer pedestrians from vehicles and road spray. Landscaping planning should consider Crime Prevention Through Environmental Design (CPTED) principles and sight triangle requirements.

Figure 42: Landscaping along pedestrian walkways buffers pedestrians from vehicles and road spray.

Guideline 43:

Locate loading areas off the street, behind or underneath buildings. Avoid routing deliveries through parking areas and across primary pedestrian, transit and cyclist routes.

Figure 43:
This loading area is located off the street and within the building, which helps to minimize disruptions to pedestrians, cyclists, and other vehicles.

Guideline 44:

Design loading areas to avoid the need for back-in or back-out movements. Screen loading areas from public view through building design, location, landscaping and fencing while maintaining appropriate sightlines. Minimize the infiltration of exhaust fumes and noise into pedestrian areas or pathways.

Figure 44:
On large sites, loading zones can be located underground to minimize impacts on pedestrians and cyclists. Pedestrians and cyclists should be clearly visible from the loading ramp exit.

Guideline 45:

Look for opportunities to develop Park & Ride lots into mixed-use transit villages through providing underground parking or locating surface parking short distances away from the station to allow for development opportunities immediately adjacent to the station.

Figure 45a:
Transit-oriented development opportunities increase at park & ride stations when vehicle parking is located in close proximity, but not immediately adjacent to the station.

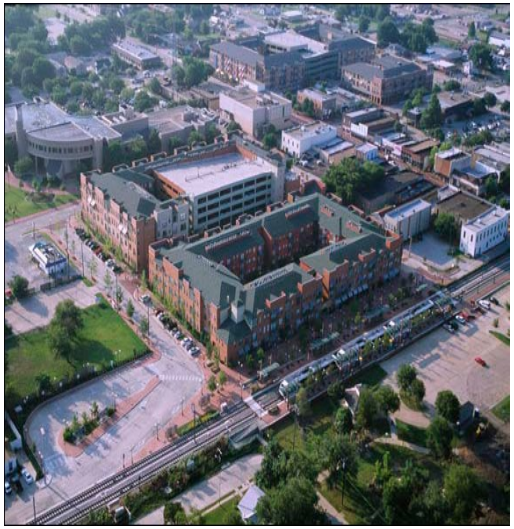


Figure 45b:
The Plano transit station in Dallas, Texas includes a mixed-use complex between the station and the parking garage to provide passengers who utilize this Park & Ride with a short, attractive walk featuring amenities such as street-level retail. The project's upper-story dwellings also create potential ridership, particularly during non-peak hours.

Guideline 46:

Locate residential garages at the rear of buildings. If residential garages are accessed from the front façade, they should not project beyond the front wall of the dwelling and should not be wider than 50% of the front building façade so that they do not dominate the streetscape.

Figure 46:
These residential garages are located at the back of the dwellings and are accessible via a private rear lane.

Guideline 47:

Design ground oriented multiple unit dwellings with shared driveways to maximize on-street parking and to limit the physical disruption of sidewalks.

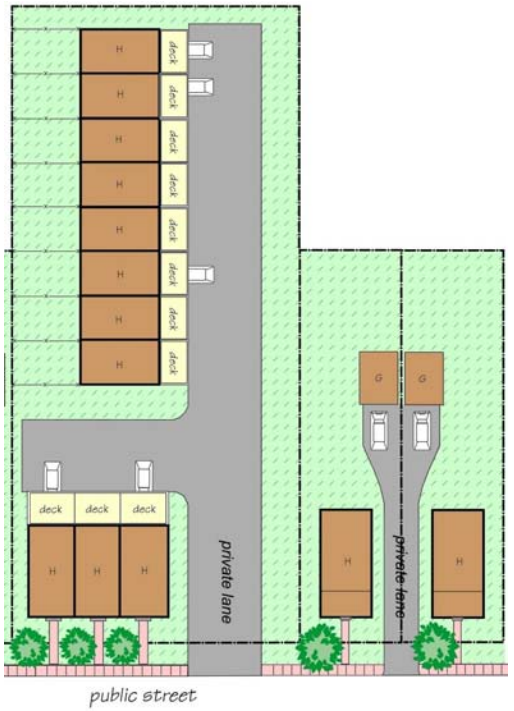


Figure 47:
Sharing driveways reduces paved areas within front yards and limits the number of disruptions to pedestrians along the front sidewalk. Where grades permit, multiple unit dwellings may have underground garages with rear grassed yards situated over the garages.

Guideline 48:
Provide quality benches, tree guards, street lighting, bicycle racks, and garbage receptacles. A Maintenance and Liability Agreement may be required for the installation of non-standard streetscape material in the public right-of-way.

Figure 48:
This consistent use of wrought iron design helps tie together the streetscape environment.

Guideline 49:
Provide seating along walkways and sidewalks greater than 50 metres in length and at key scenic viewing locations. Ensure benches and other amenities are located as to provide at least two metres of unencumbered sidewalk.

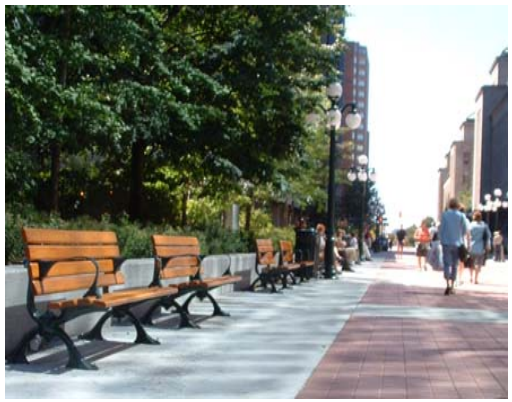


Figure 49:
These benches on Sparks Street do not impede pedestrian circulation. At least two metres of unencumbered sidewalk is required.

Guideline 50:
Incorporate special street lighting in significant areas to help define a pedestrian realm and to promote walking to and from transit.

Figure 50:
Special streetlights along Murray Street help to define its rich historical character and complement the pedestrian realm.

Guideline 51:
Design lighting so that there is no glare or light spilling onto surrounding uses. Reference should be made to the City's Right-of-Way Lighting Policy.

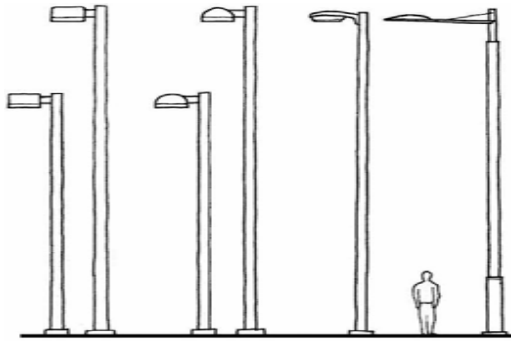


Figure 51:
These streetlight designs can illuminate the street without negatively affecting adjacent uses with glare or light spill.

Guideline 52:
Plant shade trees and shrubs and use permeable surfaces and light coloured hard surfaces where possible to help reduce urban heat and to create a more comfortable microclimate. When using special pavers, be mindful of maintenance issues such as frost heaves and plowing issues with paving stones. Reference the City's Hard Surface Tree Planting Guidelines for more information.

Figure 52:
These trees are planted in a permeable surface and are well spaced. Trees should be planted 6.0 to 8.0 metres apart with approximately 10.0 square metres of soil per tree.

Guideline 53:
Concentrate amenities at transit stops for convenience and to reduce visual clutter along the streetscape.

Figure 53:
A transit stop is an excellent location for locating amenitie such as newspaper boxes, public telephones and garbage containers.

Guideline 54:
Enclose air conditioner compressors, garbage and recycling containers and other similar equipment within buildings or screen them from public view.

Figure 54:
This fenced in area conceals unsightly garbage from the public realm and helps to provide a more appealing pedestrian environment.

Guideline 55:
Consider opportunities to cluster and screen utilities together to minimize visual impact on the streetscape.

Guideline 56:
Incorporate signage that respects building scale, architectural features and the established design objectives of the streetscape.

Figure 56:
These signs are oriented towards a pedestrian environment rather than for occupants of private motor vehicles.

Glossary

Amenity: something that contributes to an area's needs, whether social, environmental, or cultural.

Articulation: architectural detail that gives a building interest and added richness.

Built form: buildings and structures.

Compatible/Compatibility: when the density, form, bulk, height, setbacks and/or materials of buildings are able to co-exist with their surroundings.

Curb cut: a break in the curb for vehicular access from the street onto a property.

Façade: the principal face(s) of a building (also referred to as the front wall(s)). May address more than one side when buildings open on to multiple public spaces.

Frontage: the front of the property facing the street.

Front yard: the space between the property line and the front wall of a building facing the public street.

Glazing: clear or lightly tinted glass windows.

Hard landscape: landscape features other than plant materials, such as decorative pavers, planter boxes, fences, or retaining walls.

Landscaped buffer: a landscaped area located along the perimeter of a lot intended to screen or separate land uses.

Non transit-supportive land uses:

- Generate high levels of vehicle activity
- Use large amounts of land with low-density form Require extensive surface parking areas and are oriented towards automobile use
- Create negative impacts for pedestrians, such as isolation, windswept walks, and numerous vehicle crossings on sidewalks
- Typically do not attract extended hours of activity.
- Examples of non transit-supportive land uses include: Automotive parts, repair and service; car dealerships; car washes; drive through facilities; gas/service stations; commercial surface parking; warehouse storage; animal boarding; commercial nurseries; and low-density residential developments on large lots (>12m).

Property line: the legal boundary of a property.

Public realm: the streets, lanes, parks and open spaces that are available for anyone to use.

Rapid transit: a convenient, fast, and frequent public transportation service that features a high carrying capacity and that operates on its own right-of-way, as a separate system or in shared corridors, and is not delayed in general traffic. The Ottawa rapid-transit network consists of an interconnecting system of existing and planned rights-of-way and corridors in which a rapid-transit facility, such as a Transitway, O-Train, or streetcar, may be located.

Glossary

Scale: the size of a building or an architectural feature in relation to its surroundings and to the size of a person.

Setback: the required distance from a road, property line, or another structure, within which no building can be located.

Sidewalk: unobstructed concrete pedestrian travel route in the public right-of-way.

Sight triangle: a triangular-shaped portion of land, typically three to five metres in length and 3 to 5 metres in width, established at street intersections in which there are restrictions on things erected, placed or planted which would limit or obstruct the sight distance of motorists entering or leaving the intersection.

Soft landscape: landscape features of plantings, such as trees, shrubs, vines, perennials and annuals.

Streetscape: the overall character and appearance of a street formed by elements and features that frame the public street, such as building façades, street trees and plants, lighting, furniture, or paving.

Transit-supportive land uses: land uses that encourage transit use and transportation network efficiency as they:

- Establish high residential and/or employee densities
- Create travel outside of the am/pm peak periods
- Promote reverse-flow travel
- Attract and generate pedestrian traffic
- Provide extended hours of activity
- Examples of transit-supportive land uses include: Townhouses; Apartments; Child care facilities; Hotels; Recreational and Cultural facilities; Medical clinics; Restaurants; Libraries; Fitness clubs; Movie Theatres; Call centres; Offices; High schools and post secondary institutions.

Urban design: the analysis and design of a city's physical design.

Walkway block: a pedestrian travel route on public or private property outside of the public street right-of-way.

Figure Locations & References

Figure 1: City of Minneapolis, Minnesota
Figure 2: www.transitorienteddevelopment.org
Figure 3a: Tunney's Pasture Transitway Station, Ottawa
Figure 3b: San Diego, California
Figure 3c: Clarence Street, Ottawa
Figure 3d: Strasbourg, France
Figure 3e: Sparks Street, Ottawa
Figure 4: City of Ottawa
Figure 5: City of Calgary, TOD Policy Guidelines
Figure 6a: City of Calgary, Transit Friendly Design
Figure 6b: William Street, Ottawa
Figure 7: City of Calgary, TOD Policy Guidelines
Figure 8: Tunney's Pasture Transitway Station, Ottawa
Figure 9 City of Ottawa
Figure 10: Campus Transitway Station, Ottawa
Figure 11a: Toronto, Ontario
Figure 11b: Lakeshore Boulevard, Toronto
Figure 12a: Westboro Transitway Station, Ottawa
Figure 12b: City of Ottawa
Figure 13a: Albert Street, Ottawa
Figure 13b: Metcalfe Street, Ottawa
Figure 14: Young Street, Toronto
Figure 15: Montreal, Quebec
Figure 16: Brentwood Skytrain Station, Burnaby
Figure 17: Carleton University, Ottawa
Figure 18: Billings Bridge Transitway Station, Ottawa
Figure 19: Rideau Centre, Ottawa
Figure 20: Rideau Centre, Ottawa
Figure 21: University of Ottawa, Ottawa
Figure 22: Rideau Centre, Ottawa
Figure 23: Rideau Centre, Ottawa
Figure 24: Rideau Centre, Ottawa
Figure 25: Rideau Centre, Ottawa
Figure 26: Museum of Civilization, Gatineau
Figure 27: Billings Bridge Transitway Station, Ottawa
Figure 28: Bank Street, Ottawa
Figure 29: City Hall, Ottawa
Figure 30: Transport Canada
Figure 31: Assoc. of Peds and Bicycle Professionals
Figure 32: Bank Street, Ottawa
Figure 34a: City of Ottawa
Figure 34b: Fifth Avenue, Ottawa
Figure 35: City of Ottawa
Figure 36: City of Ottawa
Figure 37: Institute of Transportation Engineers
Figure 38: Terry Fox, Ottawa
Figure 39: York Street, Ottawa
Figure 40: City of Ottawa, Ridesharing Strategies
Figure 41: Institute of Transportation Engineers
Figure 42: West Market Square, Calgary
Figure 43: City of Ottawa
Figure 44: City of Ottawa
Figure 45a: GB Arrington, Parson Brinckerhoff
Figure 45b: Dallas, Texas
Figure 46: City of Ottawa
Figure 47: City of Ottawa
Figure 48: Halifax, Nova Scotia
Figure 49: Sparks Street, Ottawa
Figure 50: George Street, Ottawa
Figure 51: City of Ottawa ROW Lighting Policy
Figure 52: San Sebastian, Spain
Figure 53: Billings Bridge Transitway Station, Ottawa
Figure 54: City of Ottawa
Figure 56: Cambie Street, Vancouver

Annex 1

Rapid Transit Network and Urban Land Uses