

TRANSIT ORIENTED DEVELOPMENT POLICY GUIDELINES

PUBLISHING INFORMATION

TITLE: Transit Oriented Development Policy Guidelines

AUTHOR: Land Use Planning & Policy

STATUS: Adopted by City Council 2004 December 6

PRINTING DATE:

ADDITIONAL COPIES: The City of Calgary
Planning Document Sales Centre #8115
P.O. Box 2100, Station 'M' Calgary, AB T2P 2M5
Phone: (403) 268-3450
Fax: (403) 268-4615
Email: plngbldg@calgary.ca
Web: www.calgary.ca/planning/landuse go to: Publications

TABLE OF CONTENTS

Executive Summary.....	v
1.0 Introduction	1
1.1 Transit Oriented Development Definition.....	1
1.2 Benefits of TOD	1
1.3 Policy Background.....	3
1.4 TOD: Context.....	4
1.5 Purpose.....	5
1.6 Application of TOD Policy Guidelines.....	5
2.0 Transit Station planning areas.....	7
2.1 Station Planning Area	7
2.2 Defining Station Planning Areas.....	7
3.0 Transit Oriented Development Policies.....	9
4.0 Policy Objective – Ensure transit-supportive land uses	10
4.1 TOD Guideline – Transit-supportive land uses.....	10
4.2 TOD Guideline – Mix land uses	13
4.3 TOD Guideline – Limit non transit-supportive land uses.....	14
5.0 Policy Objective – Increase density	16
5.1 TOD Guideline – Optimize density around each station	16
5.2 TOD Guideline – Minimize the impacts of density.....	17

6.0 Policy Objective – Pedestrian-oriented design..... 18

- 6.1 TOD Guideline – Provide quality pedestrian connections..... 18
- 6.2 TOD Guideline – Provide a compact development form.....20
- 6.3 TOD Guideline – Provide integrated public systems.....21
- 6.4 TOD Guideline – Locate pedestrian-oriented uses at the ground level23
- 6.5 TOD Guideline – Human scaled architecture23
- 6.6 TOD Guideline – Incorporate all-season design24

7.0 Policy Objective – Make each station area a “place” 25

- 7.1 TOD Guideline – Emphasize important buildings.....25
- 7.2 TOD Guideline – Street and block layout.....25
- 7.3 TOD Guideline – Use open space creatively.....26
- 7.4 TOD Guideline – Create a focus for the local community.....26

8.0 Policy Objective – Manage parking, bus and vehicular traffic 27

- 8.1 TOD Guideline – Consider reduced parking requirements27
- 8.2 TOD Guideline – Place parking in appropriate locations28
- 8.3 TOD Guideline – Develop parking forms that complement the pedestrian nature of the area.....29
- 8.4 TOD Guideline – Encourage Transportation Demand Management strategies.....30
- 8.5 TOD Guideline – Integrate design for transit circulation and drop-off zones.....30
- 8.6 TOD Guideline – Long term redevelopment.....30

9.0 Policy Objective – Plan in context with local communities.....31

- 9.1 TOD Guideline – Work with local communities.....31
- 9.2 TOD Guideline – Provide needed community services and amenities.....31
- 9.3 TOD Guideline – Built form should complement the local context32

10.0 Station Type Characteristics33

Glossary.....35

EXECUTIVE SUMMARY

The *Transit Oriented Development Policy Guidelines* provide direction for the development of areas typically within 600m of a Transit Station - an existing LRT station or BRT station where an LRT station will eventually develop. This type of development creates a higher density, walkable, mixed-use environment within station areas in order to optimize use of existing transit infrastructure, create mobility options for Calgarians, and benefit local communities and city-wide transit riders alike.

The *Transit Oriented Development Policy Guidelines* contain six key Policy Objectives that apply to these station areas:

1. Ensure transit supportive land uses

Ensure land uses around Transit Stations support ridership by generating high levels of transit use and provide a mixed-use activity node for the local community and city-wide transportation network benefits. This provides the local community with increased services, employment, and housing options within their community.

2. Increase density around Transit Stations

Increase density around all Transit Stations to support high frequency, rapid transit service and provide a base for a variety of housing, employment, local services and amenities that support a vibrant station area community.

3. Create pedestrian-oriented design

Create convenient, comfortable, direct and safe pedestrian linkages to and from all Transit Stations in order to support a walkable station area and promote the use of transit.

4. Make each station area a “place”

Each station area should be developed as a unique environment, transforming a utilitarian transit node into a community gateway and a vibrant mixed-use hub of activity.

5. Manage parking, bus and vehicular traffic

Accommodate transit bus and private automobile circulation and parking needs, while creating a comfortable pedestrian environment.

6. Plan in context with local communities

Transit Oriented Development should benefit the local community. Through consultation with local communities, TOD should provide a wide range of supporting benefits for local communities, including increased uses and services, a variety of housing, increased transportation options, and a more walkable environment and community amenities.

Guidelines found under each Policy Objective provide options for implementing the TOD within the contexts of the different station types throughout Calgary. Together, the Policy Objectives and Guidelines provide direction for all levels of planning processes and applications in station areas, which help to clarify the City's intent for development and achieve Council approved policy.

1.0 INTRODUCTION

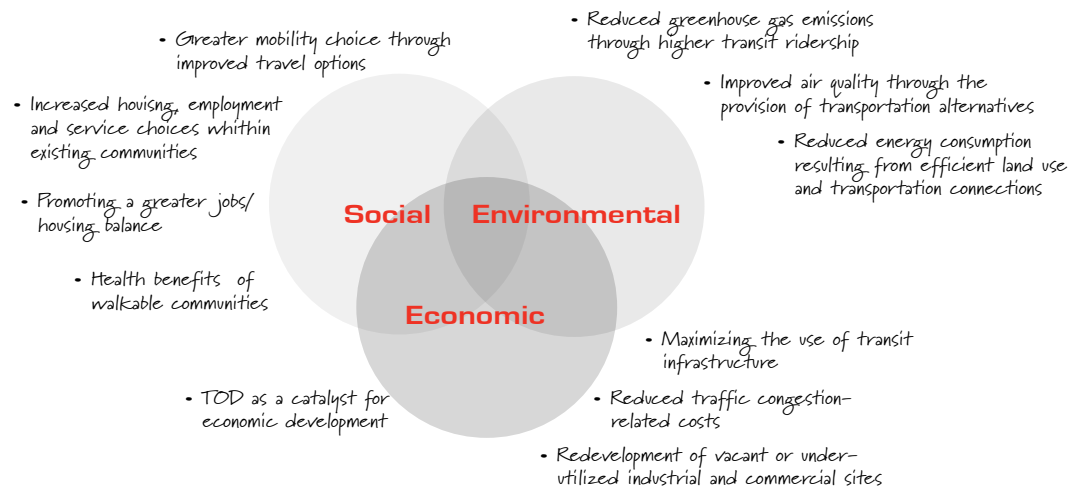
1.1 Transit Oriented Development Definition

Transit Oriented Development (TOD) is a walkable, mixed-use form of development typically focused within a 600m radius of a Transit Station – a Light Rail Transit (LRT) station or Bus Rapid Transit (BRT) stop prior to the arrival of LRT. Higher density development is concentrated near the station to make transit convenient for more people and encourage ridership. This form of development utilizes existing infrastructure, optimizes use of the transit network and creates mobility options for transit riders and the local community. Successful TOD provides a mix of land uses and densities that create a convenient, interesting and vibrant community for local residents and visitors alike.

City-wide destinations served by frequent service and multiple bus routes should also be included as areas that are appropriate for locating transit oriented development. This includes the general commercial nodes, employment concentrations and institutional nodes identified within the *Municipal Development Plan*.

1.2 Benefits of TOD

Transit Oriented Development seeks to implement a more sustainable approach to urban planning and land use. By optimizing the use of land around transit stations, the principles of Smart Growth are followed and a “Triple Bottom Line” approach can help Calgary achieve some of its environmental, economic and social objectives.



TOD can help achieve a “Triple Bottom Line” for Calgary

“Smart Growth” has become an increasingly important approach in current planning practice. It is a term to describe ways of developing more sustainable cities by supporting economic development initiatives, creating healthy environments and strengthening communities. Calgary City Council has endorsed “Advancing Smart Growth” as a key priority for The City of Calgary. Some of the leading Smart Growth principles that guide or promote TOD include the following:

- Create walkable neighbourhoods
- Foster distinctive, attractive communities with a strong sense of place
- Encourage transit use
- Provide a variety of transportation choices
- Mix land uses
- Strengthen and direct development toward existing communities
- Create a range of housing opportunities and choices.

1.3 Policy Background

The City of Calgary has adopted many policies that relate to transportation choices, transit use, quality of life and the urban fabric in general. *The Calgary Plan* (1998), *the Calgary Transportation Plan* (1995), and *the Sustainable Suburbs Study* (1995) contain important city-wide policy directions to encourage transit use, make optimal use of transit infrastructure, and improve the quality of the environment in communities.

Some key policies in the *Calgary Plan* that support TOD include:

2-2B

“Encourage appropriate new office development to locate in transit-supportive areas through the amendment of land use classifications, and the provision of infrastructure, etc.”

2-2F

“Promote greater land use efficiency and convenience by encouraging new housing close to transit facilities and within mixed-use centres to support transit and pedestrian mobility choices.”

2-2H

“Support the utility and vibrancy of LRT stations by actively encouraging both public and private development and integration of a full range of compatible land uses (residential, employment and commercial activities) at designated sites.”

2-3.3.2E

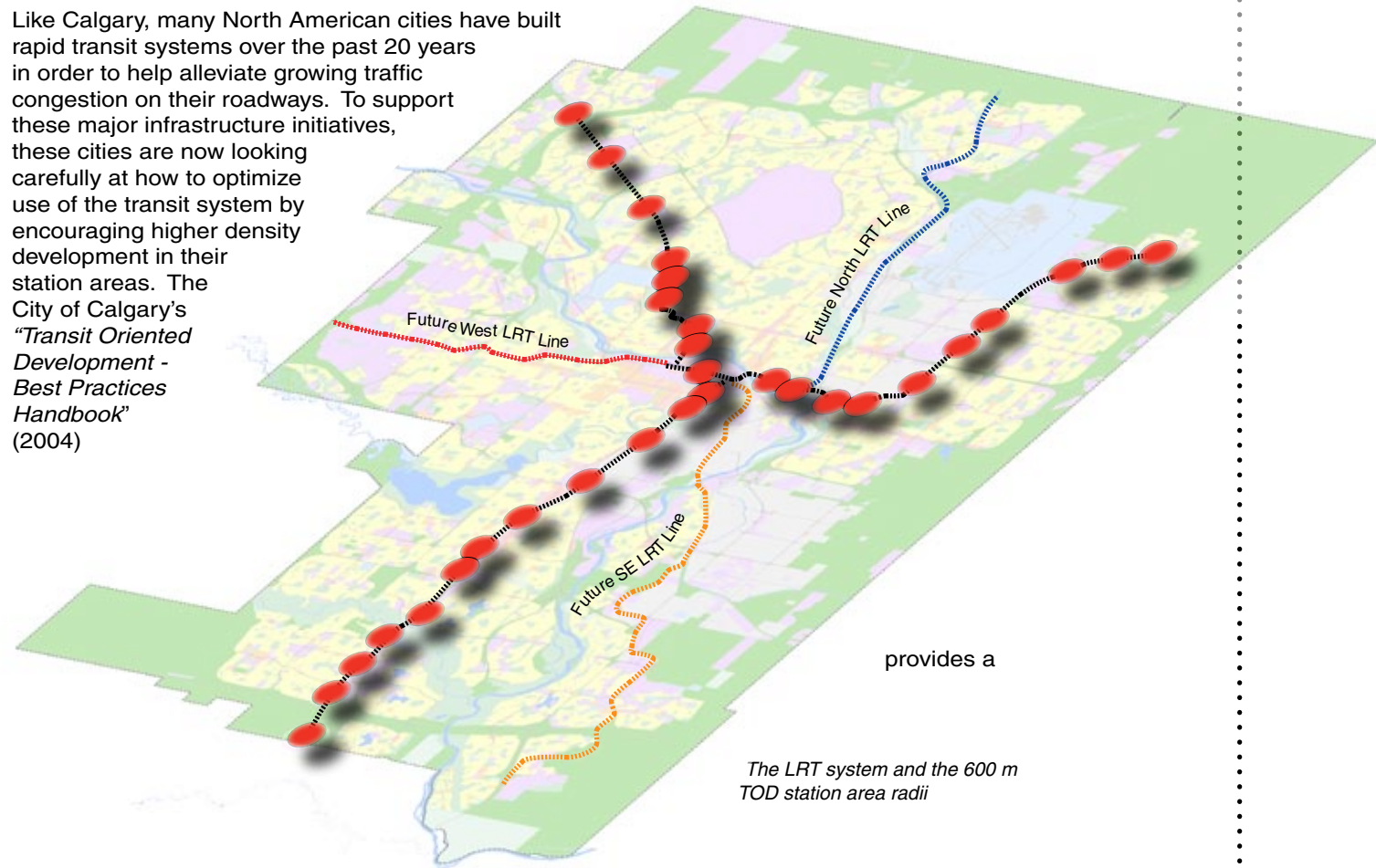
“Avoid causing speculation and instability in communities abutting LRT stations. Through appropriate planning processes such as station area plan, area redevelopment plan and/or area structure plan preparation, provide the public with an indication of Council’s intention with respect to the level of development opportunity.”

The *Transit Friendly Design Guidelines* (1998) provides direction for development along major bus corridors which complement the nodal form of development discussed in the *TOD Policy Guidelines*. This will help to achieve more transit-supportive communities across the city.

1.4 TOD: Context

The City of Calgary LRT system has been operational since 1981. Since that time, The City has invested over \$860 million in its LRT infrastructure. The system has been highly successful in attracting peak trips. There remains an opportunity to attract reverse flow peak travel and off-peak ridership. Continued investment in the system is planned, with the extension of existing lines, expanding line capacity, and the addition of new lines, with Bus Rapid Transit providing interim service. Optimizing use of the transit system and the lands in the vicinity of LRT stations will therefore become important inputs to future capital investment.

Like Calgary, many North American cities have built rapid transit systems over the past 20 years in order to help alleviate growing traffic congestion on their roadways. To support these major infrastructure initiatives, these cities are now looking carefully at how to optimize use of the transit system by encouraging higher density development in their station areas. The City of Calgary's *"Transit Oriented Development - Best Practices Handbook"* (2004)



summary of what these cities have discovered to be key planning principles and implementation tools for creating functional, vibrant and safe communities focussed around transit stations. One of the key tools for encouraging TOD has been to establish a clear city-wide vision for TOD, which sets out development policies and design expectations of the municipality. These help establish a common base of knowledge and understanding amongst many stakeholder groups and set clear goals and procedures for undertaking more detailed TOD planning at specific stations.

1.5 Purpose

The purposes of the TOD Policy Guidelines are:

- a) to **reaffirm the importance** of LRT system and stations as city-wide assets and the need to optimize the use of this investment through supportive land use policies
- b) to establish broad, city-wide **policies and guidelines** for the future intensification and development of lands in the vicinity of Transit Stations
- c) to **create certainty** in Transit Station areas for local communities, landowners and developers by clarifying the City's objectives for land use and development around Stations
- d) to provide a **framework for evaluating** land use, development permit, and/or subdivision applications in Transit Station areas
- e) to **direct policy development** of station area plans for new and existing Transit Station areas, and the preparation of, or amendments to, Area Redevelopment Plans and Area Structure Plans.

1.6 Application of TOD Policy Guidelines

The *TOD Policy Guidelines* will assist planners, developers, applicants, and communities on planning applications within the vicinity of a Transit Station. This range of applications includes:

- Station Area Plans
- Area Structure Plans, Area Redevelopment Plans, and amendments thereto
- Outline Plan/Land Use Redesignations
- Land Use Redesignations

- Subdivision applications, and
- Development permit applications

As part of the process of planning for both new and existing LRT stations, a **Station Area Plan** should be prepared which addresses infrastructure, land use, density, built form and other issues. These *TOD Policy Guidelines* are intended to inform the Station Area planning process, both in respect of new stations and redevelopment plans that may be prepared for existing stations and neighbouring communities.

Where **Area Structure Plans (ASP)** and **Area Redevelopment Plans (ARP)** are in place, this document will supplement the evaluation and monitoring of these existing statutory policies. Where amendments to an ARP or ASP are proposed, *TOD Policy Guidelines* should help to define new land use objectives for that plan and provide guidance to evaluate the merits of the amendment from a Transit Oriented Development perspective.

The *TOD Policy Guidelines* will guide decisions on **Land Use Redesignations** in station areas by determining whether a land use district and its list of uses and rules are appropriate for that station area. These *TOD Policy Guidelines* will respect existing, stable communities. While redevelopment may occur over time, the *TOD Guidelines* should not be used to “spot redesignate” individual sites in existing single-detached areas without the benefit of a more comprehensive planning process.

Decisions on **Subdivision applications** in station areas can be assisted through an evaluation of the policies in the *Policy Guidelines*.

The Land Use Bylaw establishes land use districts for the city and is a key implementation tool for City policy. These *TOD Policy Guidelines* are intended to supplement the evaluation criteria and help to guide discretion on **Development Permit** Applications, when the subject lands are part of a Transit Station Area.

Summary

The City of Calgary has made significant public investment and long range policy commitments to optimizing the use of public transportation infrastructure, increasing mobility choices of Calgarians, and creating vibrant, diverse neighbourhoods. It is timely and appropriate to consider how increasing transit ridership and ensuring that LRT station areas are attractive to users can optimize this commitment. This will encourage sustained capital and maintenance investment in these sites and help create more integrated, diverse and liveable communities in Calgary.

2.0 TRANSIT STATION PLANNING AREAS

2.1 Station Planning Area

The primary user group for transit and associated TOD uses is pedestrians, since all transit trips begin and end with a pedestrian trip component. The planning area for TOD around an LRT station should therefore be the distance that a pedestrian is likely to travel to take transit. This has been determined to typically be a 5 to 10 minute walk, or approximately 600 m.

As such, the Station Planning Area that the TOD Policy Guidelines will represent is a 600m radius around an LRT station. Development of lands within the 600m radius will be required to follow these planning guidelines. However, in some cases it may be appropriate to extend the station area beyond this radius. This will be considered where lands outside the 600m radius share specific station area characteristics, are not physically separated from the station, have direct pedestrian connectivity, and could accommodate transit-supportive land uses.

Equally as important, this radius may be reduced where existing, stable residential communities exist around existing stations and in new suburban communities where a smaller radius of transit-supportive development would create a more viable node around the station. Physical barriers that prevent pedestrian access to a station may also be considered in defining a station area.

Currently, the majority of LRT riders access stations via bus or car, so it is important to continue planning for these modes and their access to LRT. TOD places more emphasis on developing lands close to the station for uses other than parking that promote ridership via walking. Hence one of the TOD objectives will be to convert some of the auto trips to the station to pedestrian, cycle, or bus trips through improvements to bus service and cycle/pedestrian connections. This will diminish the impact of automobile access and parking.

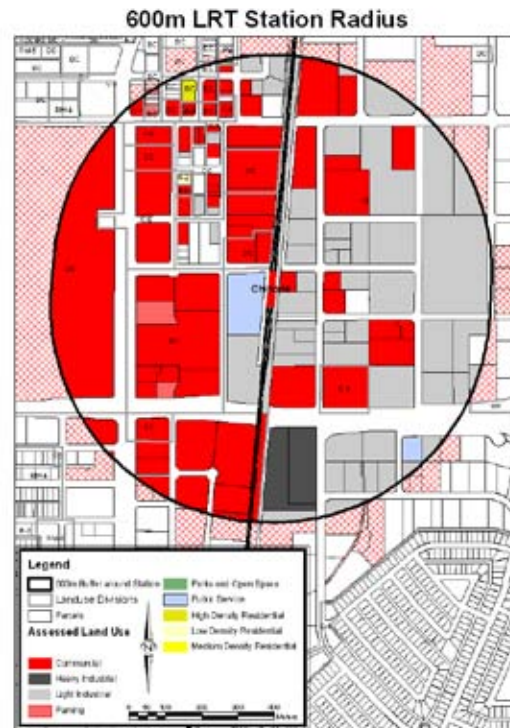
2.2 Defining Station Planning Areas

The 600 m radius is an approximate distance that should be used to define a general planning area for a LRT station. General station areas should be identified for each existing and future LRT station, to indicate where development potential is available.

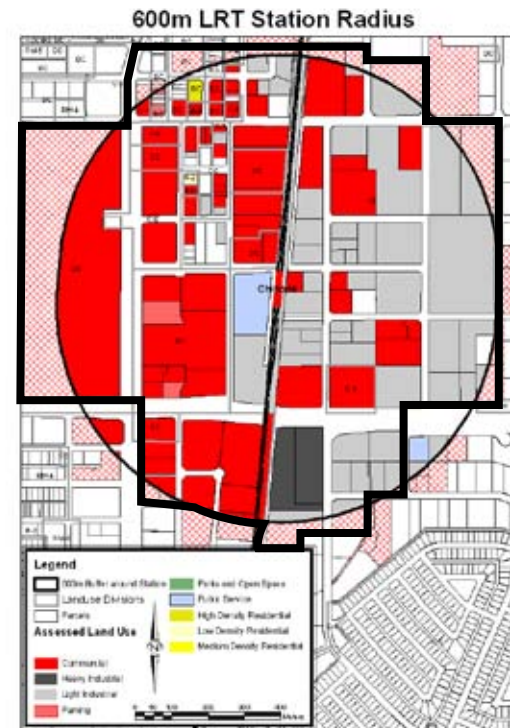
How a station planning area is determined:

- Identify a 600m radius circle centred upon the LRT platform. This includes major roadways, rights of way, adjacent rail rights of way, etc.

- Re-align the edges of the circle to logical property lines that define major roadways, environmental or topographical features, or edges of commercial/industrial districts.
- Identify these applicable lands on POSSE – the City’s file management system – to notify planners of a parcel’s proximity to an LRT station and the need to review any applications with regards to these *TOD Policy Guidelines*.
- At the station area plan stage, identification of appropriate lands to achieve TOD objectives can be accomplished through more detailed analysis, landowner and community consultation.



A 600m radius around an LRT station - Chinook Station



Potential Station Planning Area - Chinook Station

3.0 TRANSIT ORIENTED DEVELOPMENT POLICIES

One of the functions of this document is to set out the key policies for Transit Oriented Development. These policies reflect current Council strategic policy, with specific reference to new policy objectives for development around Transit Stations, literature research and review of practices in Calgary and other cities, where Transit Oriented Development has been implemented.

1. Ensure transit-supportive land uses
2. Increase density around Transit Stations
3. Create pedestrian-oriented design
4. Make each station area a “place”
5. Manage parking, bus, and vehicular traffic
6. Plan in context with the local communities

These following sections have been organized to discuss each of the six Key Policies. Each section contains a “Policy Objective” statement that provides the key policy that must be followed within a Station Area. Following are “TOD Guidelines” that provides direction and potential options on how to achieve the Policy Objective. It is the intent that these guidelines will allow for a flexible and creative approach that achieves TOD in the wide variety of contexts that it will be applied.

4.0 POLICY OBJECTIVE – ENSURE TRANSIT-SUPPORTIVE LAND USES

Ensure land uses around Transit Stations encourage high levels of transit use and provide a mixed-use activity node for the local community and city-wide transportation network benefits. This provides the local community with increased services, employment, and housing options within their community.

4.1 TOD Guideline – Transit-supportive land uses

Transit-supportive land uses encourage transit use and increased transportation network efficiency. As such, the pattern of land uses around LRT stations should be characterized by:

- high employee and/or residential densities
- promoting travel time outside of the am/pm peak periods
- attracting reverse-flow travel on roads and LRT
- encouraging extended hours of activity, throughout the day and week
- attracting pedestrian users / generates pedestrian traffic

Primary transit-supportive land uses include:

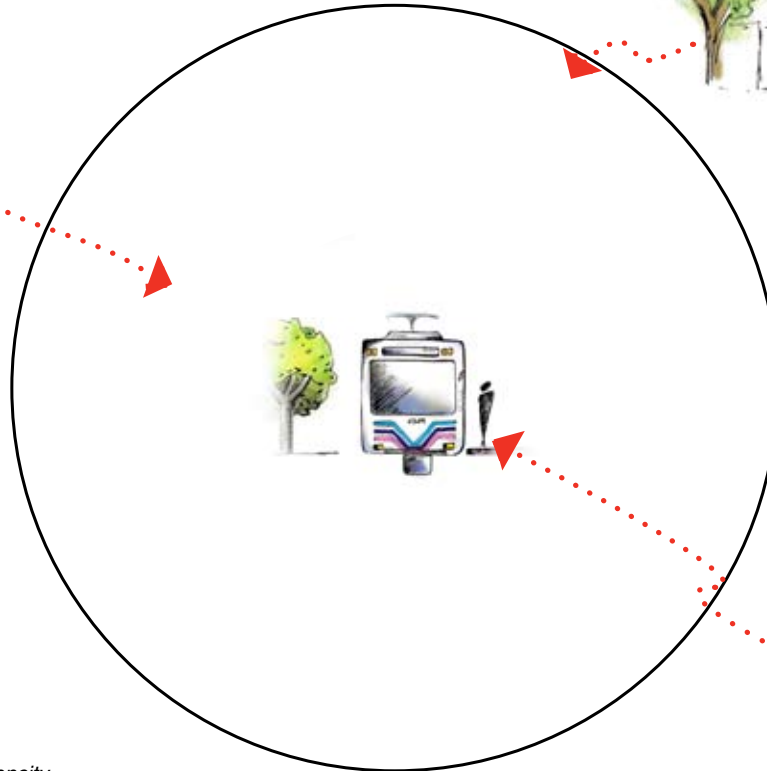
- Employment uses
 - o Call centres
 - o Commercial office

- Light manufacturing contained within a building
- Research and development contained within a building
- High school and post-secondary institutions
- Residential – medium to high density
 - Small lot single detached in new communities
 - Townhouses
 - Walk-up apartments
 - High-rise apartments

Uses that provide support services to primary transit-supportive uses and transit riders and/or off-peak ridership include, but are not limited to:

- Retail
 - Pedestrian-oriented street retail
 - Shopping centre retail with strong pedestrian connections
- Service
 - Child care facilities
 - Fitness clubs
 - Hotels
 - Medical clinics
 - Personal services
 - Restaurants

- Entertainment, recreational and cultural facilities
 - Library
 - Movie theatres
 - Recreational centres



Medium to high density residential developments are transit-supportive and can come in a variety of forms.

4.2 TOD Guideline – Mix land uses

- A station area should allow for a mix of residential, employment and supporting retail and service uses.
- The mix of land uses may be horizontally or vertically integrated; that is, the mix of uses may be found within a particular building, or incorporated in multiple buildings throughout the planning area. This provides a variety of uses within a compact, walkable station area and creates a synergy between the varying types of development.



Mixing land uses can occur horizontally across a site, or vertically within a building.

4.3 TOD Guideline – Limit non transit-supportive land uses

As the focus of TOD is the transit rider and pedestrian, it is important that auto-oriented development does not overwhelm the station area. Non-transit supportive land uses are oriented primarily to the automobile and not the pedestrian or transit user. These types of land uses:

- generate high levels of vehicle activity
- are oriented towards automobile use
- consume a large amount of land through low-density form
- require extensive surface parking areas
- create negative impacts for pedestrians such as isolation from building frontages, long windswept walks, and numerous vehicle crossings on sidewalks, and/or
- typically does not attract extended hours of activity.

Uses that are typically considered as “non-transit supportive” are:

- Stand-alone auto-oriented uses and formats
 - o automotive parts, repair and service
 - o car dealerships
 - o car washes
 - o drive through facilities
 - o gas/service stations
 - o commercial surface parking

- Low intensity industrial
 - o bottle depot
 - o warehouse storage and movement of goods
 - o outdoor storage
- Low density commercial:
 - o big box retail
 - o large format grocery stores
- Low-density residential:
 - o single-detached on standard or large lots ($\geq 40'$)

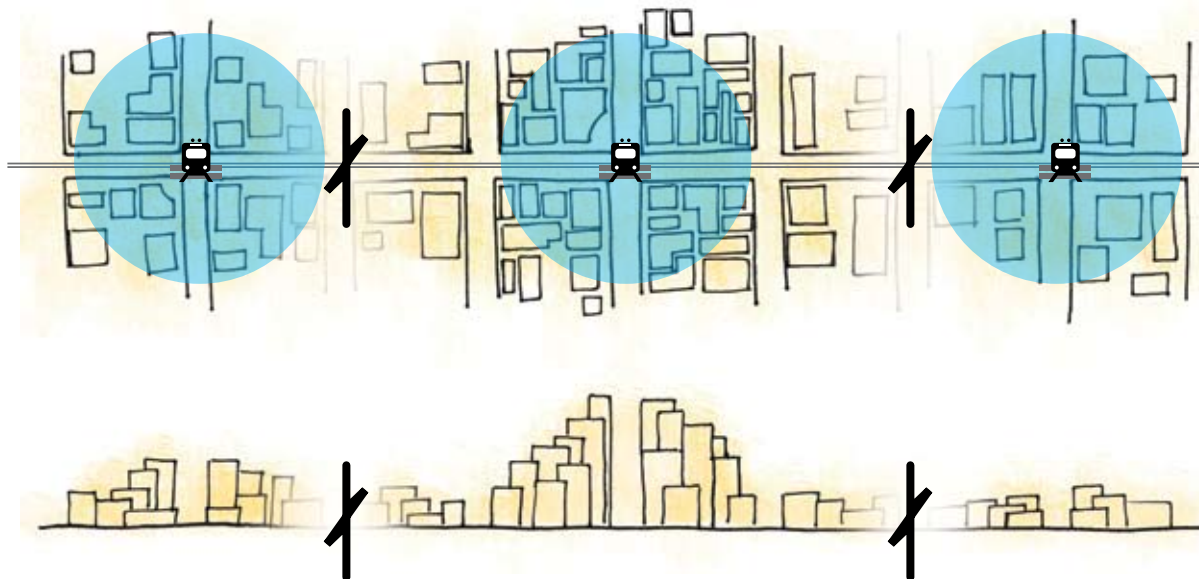
Non transit-supportive land uses should not be located in the immediate station area where there is high pedestrian activity and bus traffic. These uses may be considered towards the edge of a station planning area where higher intensity uses may not be feasible, or as part of a larger comprehensive transit-supportive development. In all cases, key pedestrian and urban design elements discussed in this document should be employed.

5.0 POLICY OBJECTIVE – INCREASE DENSITY

Increase density around all Transit Stations to support high frequency, rapid transit service and provide a base for a variety of housing, employment, local services and amenities that support a vibrant station area community.

5.1 TOD Guideline – Optimize density around each station

- Density should be increased around Transit Stations while relating to the surrounding context and particular station type. Density should be placed in locations with the best access to transit and the local public systems.
- Locate the highest density uses and building forms (e.g. apartments, office towers) as close as possible to the LRT station building.
- In new communities, densities should be established for a station planning area and not included as part of the gross community density targets of 6 to 8 units per acre.



Density around Transit Stations should be increased, with the highest density near the station.

5.2 TOD Guideline – Minimize the impacts of density

The highest densities in a TOD station area should occur on sites immediately adjacent to the station. Consideration for impacts of height on shadowing and massing should be made in determining transitions as well. In addition, a minimum density may be established on parcels adjacent to the LRT station to ensure the desired intensity is achieved.

- Create transition between higher and lower intensity development by stepping down building heights and densities from the LRT station building.
- Ensure that building massing and shadowing impacts are minimized. Shadow studies may be required to ensure that new development does not create significant shadowing on existing communities.
- Use transit facilities, public spaces and roadways as organizing elements for placement of density, height and shadow.
- Create proper edge treatments such as compatible building scale, parking location, and landscaping between new development and existing communities to minimize impacts and ensure integration.



Density should transition from high to lower density, ensuring compatibility with adjacent communities.

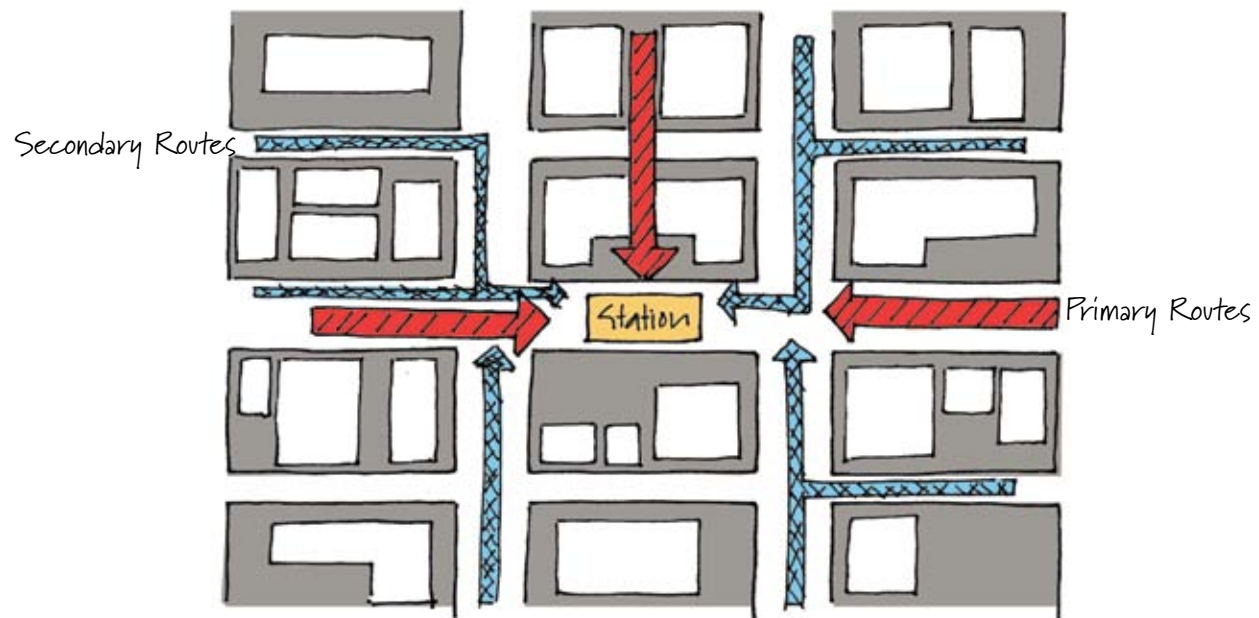
6.0 POLICY OBJECTIVE – PEDESTRIAN-ORIENTED DESIGN

Create convenient, comfortable, direct, and safe pedestrian linkages to and from all Transit Stations in order to support a walkable station area and promote the use of transit.

6.1 TOD Guideline – Provide quality pedestrian connections

- A convenient, comfortable pedestrian-oriented route has the following qualities:
 - o Routes are short
 - o Routes are continuous and barrier-free
 - o Routes are safe
 - o Routes are easily navigable
 - o Routes are designed for the local climate
- Primary and secondary pedestrian routes should be identified in the TOD station area.
 - o *Primary Pedestrian Routes*– These routes run directly between the LRT platform and station site and major pedestrian destinations in the surrounding community. These routes will attract high pedestrian volumes, associated pedestrian oriented services and act as the major connections to the station. Primary routes would typically include wider sidewalks and may include station access bridges, public easements, and regional pathways. In addition, buildings along these primary routes would be oriented to the street – buildings built to the street with minimal setbacks and direct building entrances oriented to, and connected from the sidewalk.

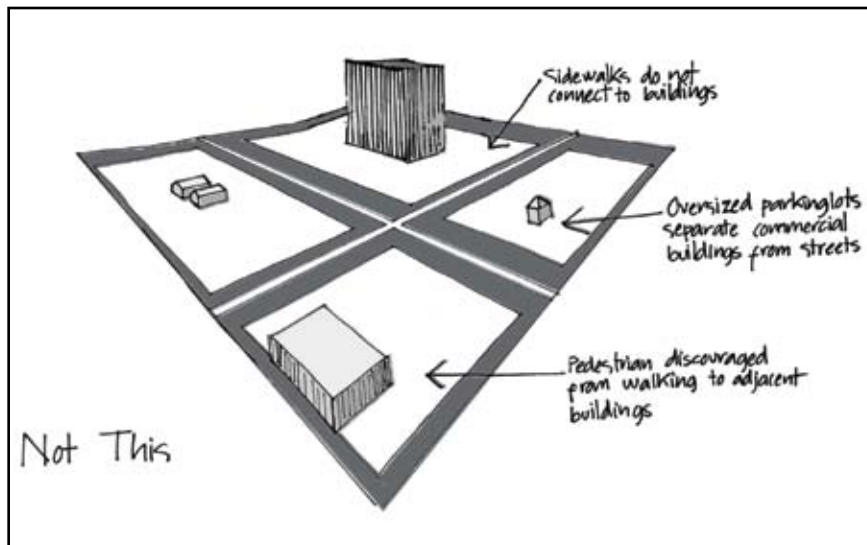
- o *Secondary Pedestrian Routes* – These routes do not provide a direct link to the LRT station site but feed into the primary routes. These routes would typically be at ground level and include standard sidewalks and private accesses to individual buildings.



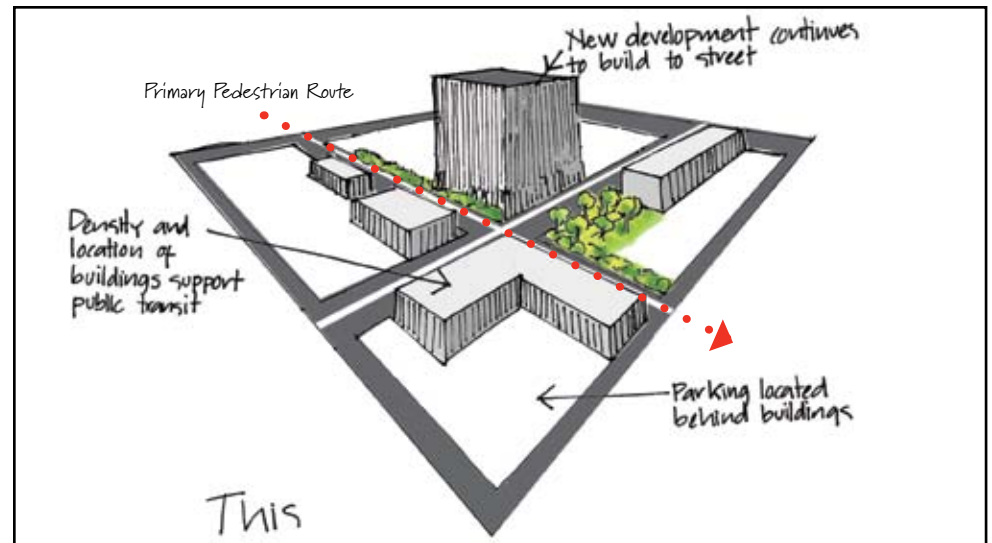
Primary and secondary pedestrian connections provide access to the Station and throughout the area.

6.2 TOD Guideline – Provide a compact development form

- Buildings should be grouped together to allow for easy pedestrian access between buildings and to frame the pedestrian spaces, which makes for easily legible routes

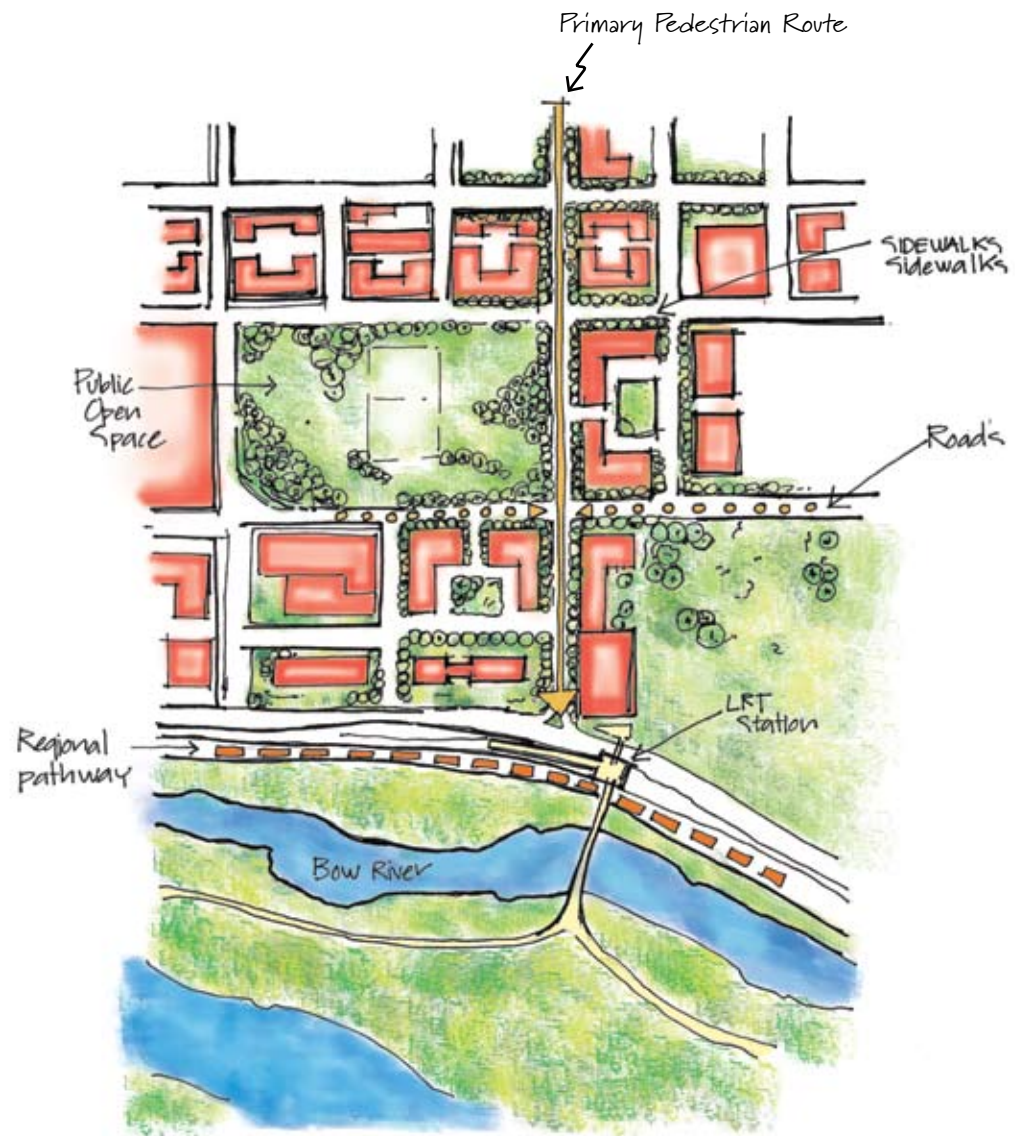


Development patterns in TOD station areas should be compact.



6.3 TOD Guideline – Provide integrated public systems

- Public systems are essential to ensure a fully integrated station area. Elements of the public systems should include:
 - Primary and secondary pedestrian routes
 - Bicycle routes
 - Roads
 - Sidewalks
 - Regional pathways and local walkways (both public and private)
 - Pedestrian/cycle overpasses and underpasses
 - Public open space
 - Transit stations
 - Bus stops
- Development should be integrated with all elements of the public system in order to create pedestrian comfort and an effective network for all travel modes within the station area.
- Regional pathways and bicycle routes should be located close to, but physically separated from a Transit Station, vehicle drop-off zones or bus stops to avoid potential conflicts with cyclists and transit passengers. This allows for thru-traffic by cyclists, with local linkages connecting directly to the Station and bicycle parking.



*An integrated public system is essential for TOD.
The Bridges development, Calgary, AB.*

6.4 TOD Guideline – Locate pedestrian-oriented uses at the ground level

- As TOD is focused on pedestrian comfort, the ground floor should contain uses that are appealing to pedestrians, such as retail, personal service, restaurants, outdoor cafes, and residences.

6.5 TOD Guideline – Human scaled architecture

- Buildings should be designed to ensure that pedestrian comfort is of primary importance in station areas
 - Doorways and windows should be oriented to the street level in order provide ease of entrance, visual interest and increased security through informal viewing
 - Architectural variety (windows, variety of building materials, projections) should be used on the lower storeys of a building in a TOD station area in order to provide visual interest to the pedestrian
 - Buildings higher than 4 to 5 storeys should step back higher floors in order to maintain the more human scale along the sidewalk and reduce shadow impacts on the public street.

6.6 TOD Guideline – Incorporate all-season design

- Primary pedestrian routes, developments and transit facilities should incorporate climate and weather protection. This can include covered waiting areas, building projections and colonnades, awnings, bus stops, use of landscaping etc. These design elements will make waiting for, and getting to and from transit stops more comfortable.



Buildings in TOD stations areas should create a comfortable environment for the pedestrian.

7.0 POLICY OBJECTIVE – MAKE EACH STATION AREA A “PLACE”

Each station area should be developed as a unique environment, transforming a utilitarian transit node into a community gateway and a vibrant mixed-use hub of activity.

7.1 TOD Guideline – Emphasize important buildings

- Public or high profile buildings (i.e. LRT station, large commercial, prominent residential) should be highly visible landmarks within the TOD area.
- These buildings should have distinctive design features that can be easily identified and be located on high exposure sites, at the terminus of a sight line or view
- Taller buildings should have distinctive rooflines to further create a landmark location

7.2 TOD Guideline – Street and block layout

- New streets and walkways should be incorporated into the existing local road pattern
- Streets should have sidewalks on both sides of the road that can accommodate high-volume pedestrian activity
- Street layout should be oriented toward the transit station.
- Where possible, street and building configuration should be designed to create vistas, or to terminate views with a landmark feature, building, or public space

7.3 TOD Guideline – Use open space creatively

Public and private open space should be developed to complement LRT stations. This would emphasize the station as a public place, provide a comfortable and interesting waiting/drop-off area, and give the community a gathering point.

7.4 TOD Guideline – Create a focus for the local community

- Development in the station area should provide a destination for both transit users and local residents
- Elements should include local gathering places, shopping, services and transit connections.

8.0 POLICY OBJECTIVE – MANAGE PARKING, BUS AND VEHICULAR TRAFFIC

Accommodate transit bus and private automobile circulation and parking needs, while creating a comfortable pedestrian environment.

8.1 TOD Guideline – Consider reduced parking requirements

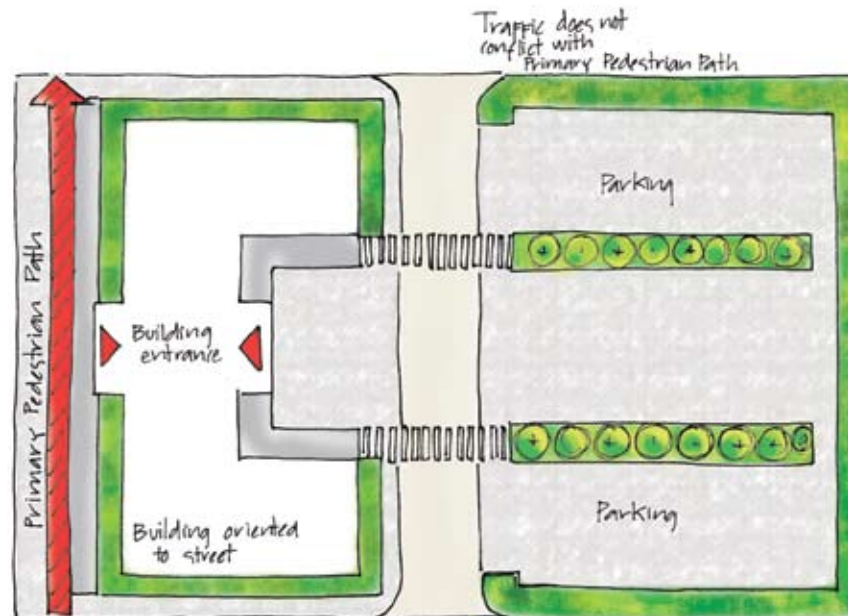
Transit Oriented Development, through its transit-supportive uses, increased density and pedestrian design provides mobility options and reduces automobile trips through increased transit ridership and potential for decreased vehicle ownership. As such, the reduction of standard parking requirements should be strongly considered in TOD station areas.

- A reduction of the required Bylawed parking stalls should be considered in TOD station areas.
- In addition to proximity to a Transit Station, parking relaxations should be considered when a site “earns” further locational/parking management benefits such as:
 - o Shared parking where different uses require parking at different times of the day
 - o Proximity to Park n’ Ride sites which could be considered for accommodating parking during off-peak hours
 - o On-street parking within TOD station areas as part of the parking supply for a development
 - o Longer-term (class 1) secure bike parking with shower and locker facilities
- A cash-in-lieu policy for parking in TOD areas should be considered as part of a parking management strategy for a station area

8.2 TOD Guideline – Place parking in appropriate locations

Parking areas should be designed appropriately in order to maintain the pedestrian comfort in the TOD station area.

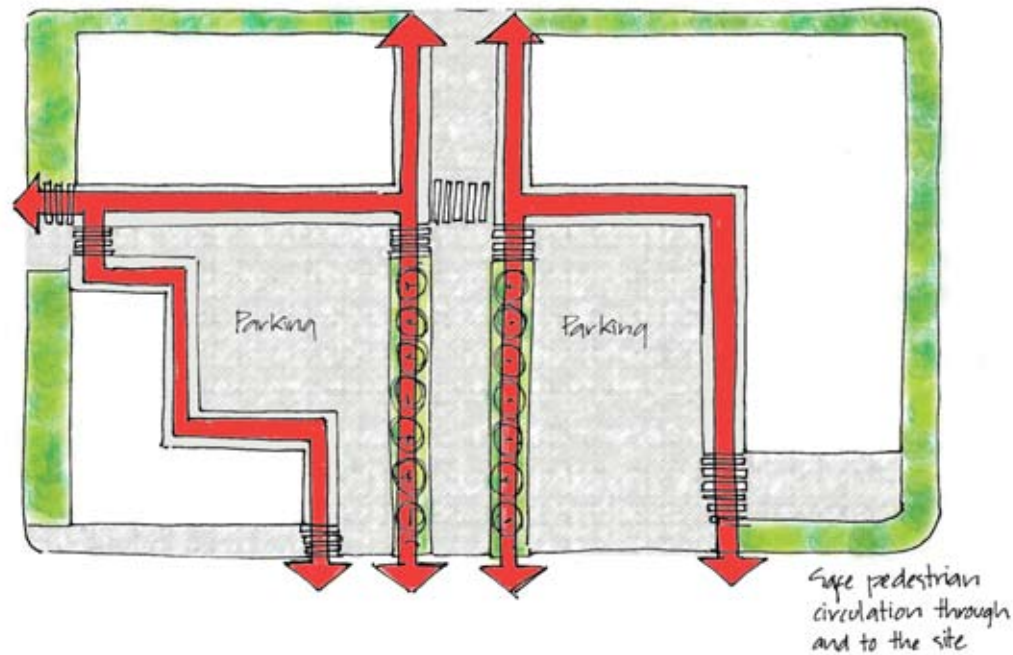
- Major parking areas should be accessed from collector and arterial roads around the station areas, without impacting existing communities or the pedestrian environment closest to the station. Direct and convenient pedestrian connections should lead from these parking areas to primary destinations such as the Transit Station, major office areas, high-density residential, etc.
- Along Primary Pedestrian Routes that lead to Transit Stations, parking lots should be located to the rear or side of the building.
- Parking lots should be designed and located to minimize the number of vehicle crossings over Primary Pedestrian Routes.



Parking areas should be located to minimize conflict with pedestrian.

8.3 TOD Guideline – Develop parking forms that complement the pedestrian nature of the area

- Surface parking should be broken into smaller cells through landscaping and walkways
- Lighting in surface parking areas should be directed within the site
- Surface parking areas should accommodate safe, direct pedestrian traffic through the provision of landscaped walkways to and from, as well as through the site.
- Parking structures should have active street-level facades, including commercial uses and/or building articulation and glazing.



Parking areas should be provide safe pedestrian access to the site, and safe circulation internationally.

8.4 TOD Guideline – Encourage Transportation Demand Management strategies

Other strategies may assist in reducing the need for on-site parking in TOD areas. When present, these strategies should be considered in the evaluation of developments in station areas:

- Encouraging local shuttle service for employment centres or shopping centres
- Facilitating community car-sharing and car-pooling by providing preferential parking spots for car-share/car-pool vehicles
- Promoting Transportation Demand Management (TDM) initiatives such as flex-time hours, telework, bike/walk to work programs, etc.
- Work with businesses to encourage transit ridership programs for employees

8.5 TOD Guideline – Integrate design for transit circulation and drop-off zones

- Park n' Ride sites will be accommodated in station areas in accordance with approved Council policy. Parking facilities should be located and designed following the guidelines for parking provided above.
- Bus access to station areas should be a primary consideration in the design of the station and local roadways. This provides a more comfortable transition between modes of public transportation. Where possible, bus drop-off areas should be from local roadways with quick and direct access to the station platform.
- Kiss & Ride drop-off sites, where motorists can drop off or wait for a transit passenger, should be provided where feasible. These facilities should provide quick and direct access to the station platform, but not be the focus of the public systems design. These should avoid being placed prominently at the station, but rather placed in locations where the vehicle can enter and exit the station area conveniently and the passenger has a direct connection to the station.

8.6 TOD Guideline – Long term redevelopment

- Surface parking should be designed to allow redevelopment with parking structures and/or other development.

9.0 POLICY OBJECTIVE – PLAN IN CONTEXT WITH LOCAL COMMUNITIES

Transit Oriented Development should benefit the local community. Through consultation with local communities, TOD should provide a wide range of supporting benefits for local communities, including increased uses and services, a variety of housing, increased transportation options, and a more walkable environment and community amenities.

9.1 TOD Guideline – Work with local communities

- Local communities can provide valuable local knowledge on services and amenities needed by the community, housing forms, key pedestrian destinations, current pedestrian habits, parking management concerns etc.
- Local landowners and communities should participate in station area plan planning processes. Information should be made available to them and opportunities to be consulted made available at opportune times.
- All communities within the catchment area of the LRT station should provide input into station area planning processes. This principle applies especially to the creation of station area plans, as other types of planning applications (i.e. Development Permit, Land Use Amendment, etc.) have established circulation processes.
- Applicants are encouraged to consult with local communities early in the planning process to ensure a common understanding of important community issues related to a particular site or area.

9.2 TOD Guideline – Provide needed community services and amenities

- New development in station areas should provide services and amenities needed by local communities. These could include new housing forms to support community demographics, employment options, convenience retail and personal services, day-care, public gathering spaces, etc.

9.3 TOD Guideline – Built form should complement the local context

Each station exists in a particular community context. Development should complement the existing development and help to enhance the local character while creating a walkable, vibrant station area.

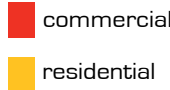
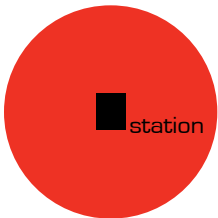

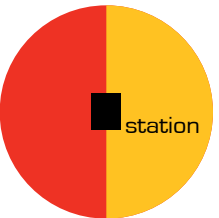


- Transitions between established residential areas and the new TOD area should provide a sensitive interface. Low rise, medium density residential or low-profile mixed use development may be used as an appropriate transitional use between adjacent low density residential and the TOD area.
- Public pedestrian systems should integrate new and existing developments in the area.

10.0 STATION TYPE CHARACTERISTICS

As discussed, there are a wide variety of contexts in which TOD is to be achieved. The following table sets out a matrix of station types and their characteristics, and the kind of development that may be appropriate to the various station types and settings.

The table can provide general direction for the land uses, density and compatibility issues that are important to a particular type of station. This will assist with applications in a station area, particularly when there is no guiding policy direction beyond the *TOD Policy Guidelines*.

A station may not fit precisely into one or another category. The location attributes of a particular station will determine whether characteristics fit into one or more categories.

	Stations in existing areas with existing Transit Station			New communities and future stations	
Station Type	Commercial Neighbourhood	Residential Neighbourhood	Multi-Neighbourhood	New Neighbourhood	New Town Centre
 <p>commercial residential</p>					
Location	Adjacent or within commercial, industrial, and/or institutional.	Adjacent or within existing residential, with some commercial	Adjacent to both residential and commercial, with the two areas separated by a major barrier (major road / expressway; heavy rail line)	Adjacent or within future residential, with some commercial. A radius less than 600m may be appropriate.	Within future mixed-use Town Centre.
Land Uses	<ul style="list-style-type: none"> • Employment (commercial, office, industrial, institutional) • Residential • Supporting retail & services 	<ul style="list-style-type: none"> • Residential • Commercial / Office • Mixed use • Supporting retail & services 	<ul style="list-style-type: none"> • Residential • Employment (commercial, office, industrial, institutional) • Mixed use • Supporting retail & services 	<ul style="list-style-type: none"> • Residential • Commercial / Office • Mixed use • Supporting retail & services 	<ul style="list-style-type: none"> • Residential • Employment (commercial, office, industrial, institutional) • Mixed use • Supporting retail & services
Density	<ul style="list-style-type: none"> • High intensity employment • Medium-high density residential (townhouse, 4-5 storey apartment, high-rise apartment) 	<ul style="list-style-type: none"> • Medium intensity employment / commercial • Medium density residential (townhouse, 4-5 storey apartment) 	<ul style="list-style-type: none"> • Medium intensity employment / commercial on residential side; high intensity on commercial side • Medium density residential on residential side (townhouse, 4-5 storey apartment); medium-high residential on commercial side (townhouse, 4-5 storey apartment, high-rise apartment) 	<ul style="list-style-type: none"> • Medium intensity employment / commercial • Small lot single family-medium density residential (townhouse, 4-5 storey apartment) 	<ul style="list-style-type: none"> • Medium-high intensity employment / commercial • Medium density residential (townhouse, 4-5 storey apartment)
Compatibility challenges	<ul style="list-style-type: none"> • Minimal compatibility issues – commercial / industrial interface 	<ul style="list-style-type: none"> • Sensitive interface adjacent to existing residential • Can go towards medium intensity development on/ adjacent to commercial 	<ul style="list-style-type: none"> • Sensitive interface adjacent to existing residential • Can go higher intensity development on/adjacent to commercial 	<ul style="list-style-type: none"> • Transition to higher density closer to the station. 	<ul style="list-style-type: none"> • Transition to higher density and greater mix of uses closer to the station.

TRANSIT ORIENTED DEVELOPMENT POLICY GUIDELINES GLOSSARY

Primary pedestrian route - Routes that run directly between the LRT platform and station site and major pedestrian destinations in the surrounding community. These routes will attract high pedestrian volumes, associated pedestrian oriented services and act as the major connections to the station. Primary routes would typically include:

- wider sidewalks and may include access bridges,
- public easements, and
- regional pathways.

In addition, buildings along these primary routes would be oriented to the street – buildings built to the street with minimal setbacks and direct building entrances oriented to, and connected from the sidewalk.

Public systems – An integrated network of elements that create effective movement for all modes of transportation within a station area. These elements include:

- o Primary and secondary pedestrian corridor
- o Bicycle routes
- o Roads
- o Sidewalks
- o Regional pathways and local walkways (both public and private)
- o Pedestrian/cycle overpasses and underpasses
- o Public open space
- o Transit stations
- o Bus stops

Reverse flow – The direction of traffic flow that is opposite the direction of highest traffic volume on a given corridor during peak periods (usually rush hour).

Secondary pedestrian route - Routes that do not provide a direct link to the LRT station site but feed into the primary routes. These routes would typically be at ground level and include standard sidewalks and private accesses to individual buildings.

Station Area Plan – A comprehensive land use plan and development strategy for properties within an approximate 600m radius of a Transit Station platform. The exact boundaries of that planning area will be defined through detailed analysis of the station area including individual parcels and their development and redevelopment opportunities, public systems and adjacent community characteristics. This type of plan may be stand-alone, or as part of a larger plan (ASP or ARP, for example).

TOD Station Area – the land within a 600m radius around a Transit Station. The actual radius may be extended or reduced according to context.

Transit Station – a Light Rail Transit (LRT) station or Bus Rapid Transit (BRT) stop prior the arrival of LRT