# Supplement C:
## Station Access Types and Mode-Specific Considerations

The station access enhancements presented in this supplement are intended to make walking, cycling, transit, and pick-up and drop-off (PUDO) more attractive to GO customers, and to better integrate parking into safe and well-designed station areas.

**Section C-1** presents three GO station access types with similar access and mobility characteristics (see Section 2.3.2). An "interchange" station type overlay is also introduced to highlight the unique aspects and objectives for stations that provide transfers to other forms of higher-order transit (subway or LRT/BRT). A series of station access objectives is identified for each type, along with key strategies and priority investments needed to increase customer choice and support a shift to a new access option.

**Section C-2** provides a series of mode-specific considerations, recommending best practices to enhance access at all types of GO stations. These considerations should be read in conjunction with other applicable Metrolinx standards that provide more specific design guidance.

**How to Use This Supplement**

The station access types and design guidelines that follow are intended to inform GO station site planning and design by Metrolinx, municipal planning for Major Transit Station Areas (MTSAs), and the preparation and review of private development proposals for lands within MTSAs. Together they enable Metrolinx, municipalities, and private developers to use resources efficiently, coordinate work, and plan for supportive development that will help to improve customer choice and access to stations by more sustainable modes.

# C-1  Station Access Types

Table 3 presents three types of stations based on their existing access mode shares. Each station within the station-specific requirements table has been classified with an existing station access type (based on the 2019 mode share) and anticipated future station access type (based on the mode share targets for 2041).

A series of objectives are identified in sections C1.1-C1.4 for each existing station access type. The objectives can be used to inform access investments to support a shift to more sustainable access modes, aligned with the Hierarchy of Access, and enable each station to achieve its 2041 mode share targets.

A special interchange overlay designation and additional objectives are included for those stations that have connections to higher-order transit (subway or LRT/BRT) services.

**How the Station Access Types Compare to the GO Station Categorization Framework**

In addition to station access types described in this section, Section 2.3.2 of this document also refers to the GO Station Categorization Framework. Each uses different information and serves different purposes.

The **station access types** are based on *mode shares* at existing stations and are used to identify shared characteristics and objectives, and appropriate station design guidelines.

The **GO Station Categorization Framework categories** are based on *total daily GO ridership* to inform station improvements that are not related to station access (e.g., fare payment, retail, and washrooms).

| Station Access Type | Active Priority Stations | Transit Priority Stations | Mixed Modal Stations |
|---|---|---|---|
| **Primary Access Mode** | More than 28% walk/bike | More than 25% transit Less than 29% walk/bike | More than 40% drive-and-park |
| **Overlay** | Interchange Stations: Any station that connects with higher-order transit (subway or light rail) services | | |

**Table 3  Station Access Types**

While the station access type guidelines in this section are based on each station's current station access type, the station-specific requirements tables in Section 2.2 also note the forecasted station access types in 2041 (based on the Station Access Model).

# Existing Station Access Typology

LAKE SIMCOE

SIMCOE

Allandale Waterfront
Barrie South

Bradford

East Gwillimbury
Newmarket

Aurora

YORK

Barrie Line

King City

Maple
Rutherford

Bloomington
Gormley

Old Elm
Stouffville

Stouffville Line

Mount Joy
Markham
Centennial

Richmond Hill
Langstaff

Unionville
Milliken

DURHAM

WELLINGTON

WATERLOO

*

Etobicoke North

Downsview Park

Richmond Hill Line

Kitchener
Guelph Central
Acton
Georgetown
Mount Pleasant
Brampton
Bramalea
Malton

Old Cummer
Oriole

Agincourt
Kennedy

Pickering
Ajax
Whitby
Oshawa

TORONTO

Kitchener Line

Pearson Airport

UP Express

Weston
Mount Dennis

Caledonia

Rouge Hill
Guildwood
Eglinton
Scarborough
Danforth

Lakeshore East Line

Lisgar

Bloor

Union

PEEL

Kipling
Dixie

Milton
Meadowvale

Cooksville

Exhibition

Streetsville

Erindale

Milton Line

Mimico

Long Branch
Port Credit
Clarkson
Oakville
Bronte
Appleby
Burlington
Aldershot

HALTON

LAKE ONTARIO

Lakeshore West Line

## Legend

- Transit Priority
- Mixed Modal
- Active Priority
- N/A
○ Interchange
⋯ In-Delivery Station
New station names are draft, subject to change

Hamilton
West Harbour
Confederation
St Catharines
Niagara Falls

HAMILTON
NIAGARA

**Figure 18  Existing station types**

*Etobicoke North GO will be decommissioned and is planned to be replaced by a future GO Station along the Kitchener corridor. As such, no station access recommendations were identified.

# Future Station Access Typology



**Figure 19  Future station types**

*Etobicoke North GO will be decommissioned and is planned to be replaced by a future GO Station along the Kitchener corridor. As such, no station access recommendations were identified.

### Legend
- Transit Priority
- Mixed Modal
- Active Priority
- Interchange
- In-Delivery Station
  New station names are draft, subject to change

LAKE SIMCOE

Allandale Waterfront
Barrie South
Bradford

SIMCOE

East Gwillimbury
Newmarket
Aurora

Barrie Line

YORK

King City
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Rutherford
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Stouffville

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Mount Joy
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Centennial
Unionville
Milliken

DURHAM

Agincourt
Kennedy

Pickering
Ajax
Whitby
Oshawa

Lakeshore East Line

WELLINGTON
WATERLOO

Kitchener
Guelph Central
Acton
Georgetown
Mount Pleasant
Brampton
Bramalea
Malton

Etobicoke North *

Kitchener Line

Pearson Airport
✈ UP Express

Weston
Mount Dennis

Bloor

Union

TORONTO

Rouge Hill
Guildwood
Eglinton
Scarborough
Danforth

Lisgar
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Niagara Falls

HAMILTON
NIAGARA

## C-1.1 Active Priority Stations

- More than 28% access by active modes (walking and cycling).

**Common Characteristics**

- Often located in existing centres or proximate to significant development with a well-connected street and block network and a mix of municipal or regional destinations.
- Typically, stations are compact given their constrained location in existing centres or built-up areas.
- Investments in station access require consideration of development adjacencies, opportunities, and impacts.

**Objectives**

Active Priority stations have significant potential to attract more customers using active modes of access due to the walk- and bike-friendly nature of the local street network and proximity to higher-density residential and commercial activity. Access investments in these stations need to leverage the surrounding context and already high active mode share by focusing on improvements that fill gaps in existing active transportation routes and facilities.

1. Align station access points with the surrounding street and block network and improve the integration of the station with surrounding pedestrian and cycling infrastructure. This may include coordination between Metrolinx and local municipalities to bridge infrastructure gaps (e.g., sidewalks, bikeways, signalized crossings) between the station lands and the surrounding networks. **[AP]**

2. Identify opportunities to extend bike and pedestrian infrastructure and complete any gaps within 800 m of the station to expand the walkshed and bikeshed to more customers. Improvements could include new crosswalks, traffic signals where required, wayfinding, and other amenities that support a safe and comfortable experience for pedestrians and cyclists. **[AP]**

3. Provide year-round maintenance of pedestrian and cycling facilities to ensure they remain safe and attractive for customers, including by ensuring timely snow and litter removal and repair of lighting and surface conditions. **[AP]**

4. Protect space for facilities such as bike share stations and secure and covered bike parking, and explore opportunities to integrate and share these facilities with adjacent development. **[AP]**

5. Work with municipal service providers, local municipalities, and private landowners to leverage new development to help improve pedestrian and cycling access to and from the station and support the accommodation of connecting transit services. **[AP] [TP]**

6. Integrate station facilities for municipal transit and PUDO to minimize impacts on surrounding uses and support the integration of the station with adjacent uses and development. Strategies for improved station integration could include distributing PUDO activities to reduce impacts on any one place and orienting bus facilities to reduce noise impacts on sensitive land uses. **[TP]**

7. Optimize bus bay configurations and minimize infrastructure requirements to support the integration of stations with surrounding development. Strategies could include the use of on-street bus facilities or dynamic bus bay assignments, where appropriate and compatible with municipal service provider operating requirements and seamless customer transfers. **[TP]**

**[AP]** Indicates an objective supporting greater Active Priority

**[TP]** Indicates an objective supporting greater Transit Priority

**[MP]** Indicates an objective to optimize multimodal priority in stations with higher vehicular mode share

*Note: To reduce repetition, some objectives apply to more than one station type, as indicated.*

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## C-1.2 Transit Priority Stations

- More than 25% access by transit.
- Less than 29% access by active modes (walking and cycling).

### Common Characteristics

- A convergence of connecting transit infrastructure with high service frequency.
- Often located in evolving employment areas and stable neighbourhoods proximate to the station.
- Often more expansive stations given their lower-density surroundings.

### Objectives

Transit Priority stations are already important places that have high transit mode access. Access-related investments need to reinforce these stations as important transit transfer points while supporting their transition to Active Priority stations that have a greater share of active modes (walking and cycling).

1. Review whether enhanced municipal transit integration is needed at stations, including by coordinating GO and municipal service provider schedules and providing short and convenient transfers between services. **[TP]**

2. Provide bus priority measures, such as dedicated access infrastructure and signal timing, and schedule coordination to minimize travel time delays for GO and non-GO customers on municipal buses that serve the GO station. **[TP]**

3. Provide safe, direct, and continuous walkways from buses to platforms, supported by crosswalks, signals, wayfinding, and other amenities. **[TP]**

4. Bridge the gap between the station and local pedestrian and cycling networks within the station area by establishing new or enhanced walkways and safe cycling routes. This may include coordination between Metrolinx and local municipalities. **[TP] [AP]**

5. Organize surface parking areas and key access routes to connect with the adjacent street and block networks to support improved walkability and redevelopment of the station area over time. **[AP]**

## C-1.3  Mixed Modal Stations

- More than 40% access by drive-and-park.
- Less than 29% access by active modes (walking and cycling).
- Less than 26% access by transit.

### Common Characteristics

- Often located within lower-density employment areas or on the periphery of built-up areas with easy highway access.
- Often have limited or infrequent municipal transit service, sometimes due to being away from important transit corridors or hubs of transfer.
- Often at a distance from local activity centres and with a poor relationship and connectivity to important pedestrian and cycling corridors.
- Often represent terminus stations for the rail corridor whereby some customers drive far distances, beyond the local municipal service provider service area, to get to the GO network.
- Typically, are more expansive stations with large areas of surface parking, wide roadways, and large blocks with little dedicated pedestrian and cycling infrastructure.

### Objectives

Mixed Modal stations are important gateways to the GO Rail network that serve larger and typically more dispersed catchment areas than stations with higher levels of sustainable access.

Access-related investments in these stations need to reduce the amount of space required for parking by incentivizing customer access by higher occupancy vehicles or on-demand transit (ODT) and exploring parking management programs and redesign opportunities.

1. Optimize the use of available parking through the use of reserved and carpool spaces, as well as real-time information on parking availability for customers. **[MP]**
2. Provide safe, direct, and continuous pedestrian and cycling infrastructure on station lands, and connections to the broader area, including through the reorganization of large surface parking areas into smaller operational lots and with dedicated infrastructure along busy streets. **[MP] [AP]**
3. Orient and design PUDO facilities to ensure they support priority access by personal vehicles, shuttle, and ODT services. **[TP]**
4. Grant priority to ODT vehicles by reserving locations within PUDO areas. **[TP]**
5. Identify opportunities to enhance municipal transit integration at stations, including by coordinating schedules and providing short and convenient transfers between transit services. **[TP]**
6. Provide bus priority measures, such as dedicated access infrastructure and signal timing, and schedule coordination to minimize travel time delays for GO and non-GO customers aboard municipal buses serving the GO station. **[TP]**

## C-1.4 Interchange Stations

"Interchange" is an additional category applied to GO stations that provide connections to higher-order transit (subway or LRT/BRT).

### Characteristics

Interchange stations have unique access characteristics but also present heightened opportunities for partnerships to align resources and coordinate work on improving access by more sustainable modes.

### Objectives

In addition to the primary station type objectives for Active Priority, Transit Priority, and Mixed Modal stations, those with an interchange function require particular attention to support access to, and transfers between, connecting transit services to contribute to a more seamless transit network (as described in the 2041 Regional Transportation Plan).

1. Provide direct and comfortable transfers between connecting transit services with minimal walking distances and changes in grade (e.g., stairs and elevators). **[TP]**

2. Minimize the footprint of connecting transit facilities including by using dynamic bus bays or on-street facilities (where appropriate), and making more efficient use of space through the sharing of facilities and amenities between GO Rail and the connecting transit services. **[AP] [TP]**

3. Consider opportunities for sharing transit access facilities (e.g., bus bays, PUDO areas, bike parking) between all connecting transit services.

4. Disperse and integrate PUDO facilities on- and off-site to minimize the land use impact of accommodating PUDO requirements. **[TP]**

5. Coordinate wayfinding, including information hubs at platform and bus bay locations to orient customers to the facility, connecting transit services, the station area, and the surrounding area. **[AP] [TP]**

6. Ensure that new development helps to improve pedestrian and cycling access to and from the station and supports transfers between connecting transit services. **[AP]**

# C-2 Mode-Specific Considerations

While Section C-1 identifies stations with similar characteristics and provides targeted objectives for supporting mode shifts, the mode-specific considerations in this section present important objectives for designing station access facilities for walking, transit, cycling, pick-up and drop-off, and drive-and-park that apply to all station access types (C-1). This section includes a number of general considerations (C-2.1) and mode-specific considerations (C-2.2 to C-2.7) for enhancing station access, acknowledging that each mode has unique opportunities and challenges.

These considerations include access-related improvements that are both on- and off-site and should be read in conjunction with Metrolinx's Design Standards and Requirements, as applicable.



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## C-2.1  General Station Access Considerations

The design of GO Rail station facilities plays an important role in supporting station access and promoting a shift to more sustainable access modes that enhance customer choice. Appropriate siting, orientation, and layout of station infrastructure and amenities can support more intuitive and efficient access for all customers and limit conflict among different modes. High quality urban design, landscape architecture, and wayfinding can enhance the customer experience when accessing the station by any mode and as customers travel to their destination. Redevelopment on or near station lands can help support a further shift to greater use of active modes over time.

The following are important access-related considerations for station design.

**Metrolinx's Design Standards and Requirements seek to create consistency for the user experience, maximize independent access, and increase safety for customers with disabilities.**

### Design

1. Ensure conformity with Metrolinx Design Standards and Requirements, as appropriate.
2. Organize driveways, walkways, and bikeways to reduce conflict with vehicular traffic and extend and connect the surrounding pedestrian and cycling networks to the station platforms. Access routes must be direct, convenient, safe, and accessible.
3. Create an attractive and comfortable public realm with clearly defined pedestrian areas and a strong sense of place to support a walkable station area and promote transit use.
4. Encourage high quality design of the public realm that is sensitive to the surrounding built context and community vision.
5. Integrate the interior planning and design of the station building within the site and connecting modes to facilitate safe, convenient, and intuitive intermodal transfers.
6. Design the interior of the station building to establish clear sightlines to adjacent transit modes and important station amenities to promote customer safety and comfort.

### Access

7. Create accessible station sites and buildings that can be approached, entered, egressed, and used by persons with disabilities as for any other customer with a similar level of convenience, safety, dignity, and customer experience, in conformity with Metrolinx standards.

## Wayfinding

8.  Create intuitive transit stations with consistent and clear station design. Wayfinding must support a logical sequence of predictable spaces, clear sightlines, and barrier-free movement for users travelling to and from the station, as appropriate for the station access type.

9.  Ensure that the design of new signage and wayfinding for new stations and the retrofit of existing stations signage and wayfinding conforms to Metrolinx standards for greater consistency across the GO Rail network. Coordinate station wayfinding with local communities to streamline access to and from area destinations, such as by incorporating wayfinding signage at key destinations or decision points in the surrounding station area.

## Station Redevelopment

10. Align station access routes such as walkways, bikeways, and drive aisles with existing and future patterns of streets, blocks, and pedestrian connections. The block pattern will inform the organization of new Transit-Oriented Community development that is integrated with the GO station through direct and clear pedestrian and cycling connections over time.

11. Focus and integrate a mix of uses at transit-supportive densities at and around GO stations to support greater levels of walking and cycling access over time.

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## C-2.2  Walking

Supporting pedestrian access to GO stations is the highest priority in the Hierarchy of Access. Walking is the most cost-effective means of accessing the GO Rail network. It requires minimal station infrastructure and allows for more efficient use of GO station properties and facilities. With the introduction of increased service through the GO Expansion plan and the planned intensification around transit stations through the province's Transit-Oriented Communities initiative, there is significant potential to increase ridership growth from residents and workers who are within walking distance of the station.

Metrolinx's 2019 Rail Passenger Survey reported that on a system-wide basis, approximately 14% of GO Rail customers walked to their station. However, within 800 m of the station, walking accounted for the majority of access trips. The highest levels of pedestrian access are typically found in areas that feature finer-grained street networks with short blocks and high intersection densities, limited parking, and generally medium- to high-density development.

Despite the financial, social, and environmental benefits of walking for customers, there remain several challenges for pedestrians at GO stations. These challenges exist more noticeably in urban areas with less density:

- Poor network connectivity, particularly in the station area, where fragmented or indirect pedestrian routes result in longer walk times;
- Conflicts with vehicles along major streets and at intersections;
- Conflicts among modes that can create uncomfortable and unsafe walking conditions at stations;
- Dispersed development that can leave pedestrians more exposed to inclement weather than in urban areas; and
- The difficulty in trip-chaining (stopping at multiple locations on the way to or from the station) on foot in areas where amenities and destinations are dispersed.

The following are important considerations to support pedestrian access.

## C-2.2.1 On-Site Connectivity

1. Provide safe, direct, and continuous walkways from the closest local road(s) to more than one platform access point.
2. Prioritize connections that minimize walking distances between the station and local destinations, and those that increase the station walkshed.
3. Separate walkways and pedetrian routes from vehicular traffic with grade seperation or curbs to increase safety and accessibility and avoid pedestrian and vehicle conflict.

### Amenities

4. Provide an attractive pedestrian environment that is safe and comfortable, supported by crosswalks, dedicated signals, and wayfinding.
5. Design and orient amenities such as waiting areas, self-service kiosks, service counters, waste receptacles, washrooms, Wi-Fi, and retail to pedestrians, to support the journey and experience of those on foot.
6. Provide year-round maintenance of walkways and pedestrian areas, including snow clearance, garbage removal, and surface repairs, to ensure they remain safe and attractive throughout the year.

### Comfort

7. Frame station access paths with landscape elements that guide people toward the station and platform while maintaining sightlines.
8. Incorporate landscaping to maximize shade along pedestrian routes and provide soft landscaping with varied trees and plantings to enhance the customer experience.
9. Provide accessible curbs and crosswalks where pedestrian paths intersect with roads.
10. Incorporate Crime Prevention Through Environmental Design techniques to optimize passive surveillance.

## C-2.2.2 Off-Site Connectivity

1. Connect the station site to adjacent communities and fill gaps in the pedestrian network through new or enhanced sidewalks, local pathways, and bridges or underpasses, as appropriate to increase the station walkshed. Opportunities to remedy the gap between on-site and off-site walkways must be prioritized and coordinated between Metrolinx, the local municipality, and private developers.
2. Build or retrofit a network of complete streets leading to and from the station to balance the movement of pedestrians, cyclists, transit, and vehicles.
3. Install crosswalks with clear signage and markings along key routes leading to and from the station to guide pedestrians and alert road users to the designated crossing points.

### Comfort

4. Create an attractive and comfortable public realm with a strong sense of place to support a walkable station area and promote transit use.
5. Prioritize sidewalks, pathways, streets, and intersections in proximity to the station for higher quality pedestrian amenities, such as new and improved crossings, lighting, seating, and waste receptacles.

### Trip Generation

6. Focus and integrate a greater mix of uses at transit-supportive densities at and around the transit station to make it easier for customers to reach the station and area destinations on foot. A mix of employment, housing, regional attractions, public services, and public spaces are critical for increasing ridership and maximizing the benefits of transit investment.

## C-2.3  Transit

First- and last-mile connections to GO Rail stations can be served by bus and on-demand transit (ODT) services, and their access can be prioritized. Municipal and regional bus services are also an essential complement to the GO Rail system, helping to support ridership and link local communities to the regional transit network.

Metrolinx's shift to more frequent all-day, two-way service creates an opportunity to explore tools for right-sizing bus facilities (to optimize bus bay configuration and utilization), and for minimizing infrastructure requirements (tailored to each station access type). Concurrently, the 10-Year GO Bus Strategy plans for a staged transition to regional express service with a focus on linkages between destinations outside of Toronto and with some key nodes situated at GO stations along the 400-series highway network, potentially increasing demand for bus bays at these GO stations.

ODT is another opportunity to improve transit access by connecting customers to GO stations in locations underserved by traditional transit. As a flexible, on-demand service, ODT can improve convenience for customers and reduce travel times, thereby making transit an attractive alternative to drive-and-park.

In 2019, approximately 15% of passengers relied on transit to access a GO station. Both transit and auto-based modes are typical modes of access for longer-distance journeys to the station. Increasing the transit mode share is dependent on improvements to transit access relative to auto-based modes and offers the greatest potential to achieve a mode shift away from drive-and-park. Transit competes directly with private vehicle access, a mode that remains a mainly free, convenient option at many stations.

To make transit more convenient and affordable for customers, the following programs were initiated:

**1. GO Co-fare Discounts with Transit Partners**: As of March 14, 2022, travel was made free between GO Transit and most local transit agencies through GO Transit co-fare agreements. This increased co-fare discount of 75% to 100% includes connections to and from GO and these local transit systems: Durham Region Transit, Milton Transit, Grand River Transit, Guelph Transit, Oakville Transit, MiWay, Brampton Transit, Hamilton Street Railway, Burlington Transit, Bradford West Gwillimbury Transit and York Region Transit.

**2. GO Youth Concessions:** On March 14, 2022, PRESTO discounts for youth and post-secondary students were increased to 40 per cent off the full adult fare, almost double the current discounts. This applies to GO Transit and UP Express customers who are 13 to 19-years-old or anyone enrolled in full-time post-secondary education. Kids under 12 will continue to ride free on GO Transit.

**3. GO Affordability Pilot in Region of Peel:** Starting March 14, 2022, riders with an Affordable Transit Program fare type under the Peel Region Affordable Transit Program are being reimbursed 50 per cent of the PRESTO adult fare when travelling on GO Transit using a PRESTO card. The pilot will be rolled out to other transit systems in a phased approach.

On-demand transit (ODT) services are municipally-run, demand-responsive transit services that typically use smaller vehicles than buses and serve areas with lower trip densities. ODT may use both pick-up and drop-off (PUDO) and bus bays at GO stations.

Achieving an increased transit mode share will require that the following challenges be addressed:

- Traffic delays, both on-site and off-site, which disrupt bus travel speed and reliability;
- Infrequent bus service or bus scheduling that does not align with GO Rail schedules;
- Conflicts between pedestrians, buses, and other vehicles, which can impede bus traffic flow and create unsafe and uncomfortable conditions for waiting transit customers;
- Weak or indirect connections between the station building and bus stops, which increases travel times for transferring customers; and
- Remaining gaps in fare integration among transit services, which is a disincentive for some transferring customers.

The following guidelines are important considerations to enhance the viability of transit access to GO stations.

## C-2.3.1  On-Site
## Connectivity

1. Design transit facilities and connecting local street intersections to speed transit access and egress through priority measures that minimize transfer and waiting times for both terminating and non-terminating municipal transit services.
2. Separate bus access routes from other vehicles, bicycle, and pedestrian traffic where possible. The configuration for a bus loop needs to be selected based on site constraints and optimal traffic flow patterns.
3. Create clear, direct, and short transfers between transit modes and routes, including ODT, accessible conventional transit, and specialized transit.
4. Locate bus facilities to minimize travel distances to the rail platform.
5. Increase the priority of ODT vehicles within PUDO areas through dedicated locations that minimize travel time between ODT and GO Rail services.

## Amenities

6. Provide a high level of customer amenity in passenger waiting areas to enhance customer comfort, safety, and information, including seating, waste receptacles, and shelter.

### C-2.3.2 Off-Site Connectivity

1. Coordinate local feeder transit service schedules and routes to improve connectivity between municipal transit services and the GO network.

2. Adopt transit priority measures at station entrance locations, including dedicated access and egress lanes and signalized entrance points to ensure the efficient movement of surface transit into and out of the station.

3. Adopt transit priority measures between the station, the surrounding community, and key transit corridors including transit priority lanes and signals to reduce travel times between the station and the community.

4. Complement the reduction of commuter parking by coordinating with municipal service providers to improve the frequency and convenience of feeder transit services to stations.

5. Explore the potential for ODT services where densities may be too low to support conventional fixed route transit services.

6. Coordinate arrival and departure times for accessible transit services to make interregional travel more convenient.
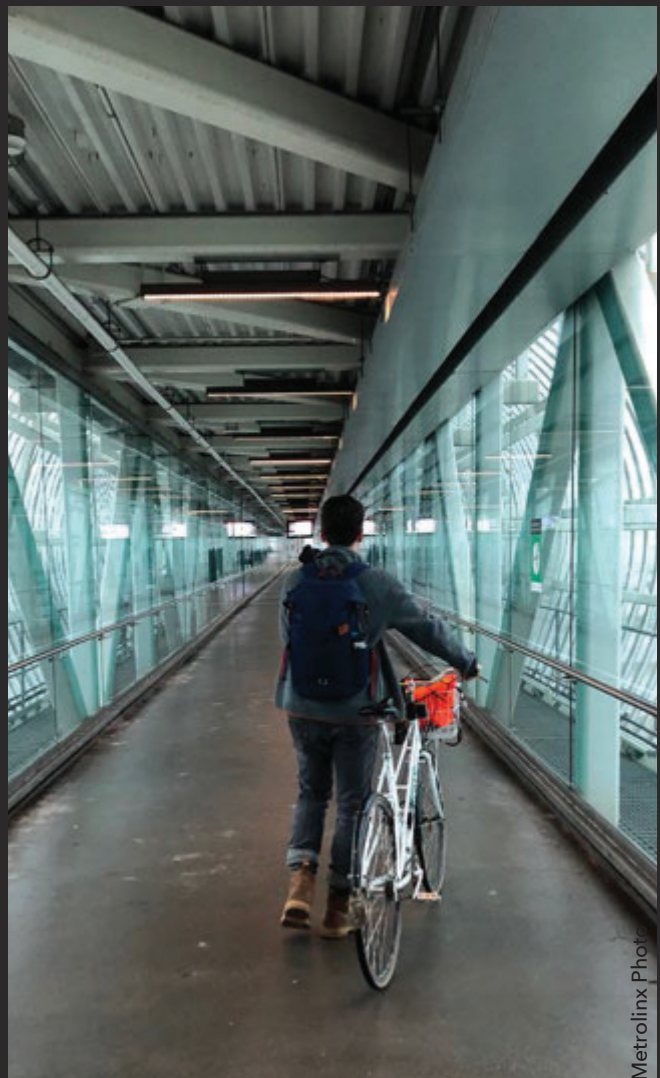


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## C-2.4  Cycling

Approximately 1% of GO Rail passengers arrived at GO stations by bicycle in 2019. While this represents a fraction of GO customers, cycling is a viable alternative mode of access for passengers located between 1 and 5 km from the station, many of whom would otherwise drive to the station.

A shift toward higher cycling access levels can help reduce demand for parking at stations and aligns with Metrolinx's prioritization of more sustainable modes of station access and increasing customer choice. In the context of the COVID-19 pandemic, there was an increase in active travel that coincided with new investments in cycling infrastructure. There is the potential to develop cycling as a mode of station access.

Despite the tremendous opportunity that cycling represents to support first- and last-mile connectivity, customer uptake is hindered by a number of challenges, including:

- An overall lack of safe cycling infrastructure and supporting amenities, such as a connecting network of dedicated and protected cycling routes between stations and the surrounding areas;
- On-site conflict points, particularly where cycling routes pass through PUDO areas, bus loops, and vehicle turning areas;
- Inconveniently located bicycle parking facilities that are not close to the station entrance or adjacent to connecting bikeways;
- Limited availability of bicycle parking at the end destination, as well as peak period restrictions on bringing bicycles aboard GO trains (due to capacity limitations), prevent riders from continuing their journey from their alighting station; and
- Cold and inclement weather, which is a deterrent for some cyclists.

The following are important considerations to support cycling access. See the Metrolinx Design Standards and Requirements for more detail.

## C-2.4.1  On-Site Connectivity

1. Provide safe, direct, and continuous bikeways leading from local streets and pathways to on-site bike parking locations. Routes must be step-free, avoid significant grade changes, and be supported by marked crossings, signage, and dedicated signals.
2. Align station bikeways with local cycling routes and community trails to support seamless connections.
3. Provide dedicated bikeways to minimize conflicts between pedestrians and cyclists. Where dedicated bikeways are not possible, implement multi-use paths leading to covered and secure bicycle parking.
4. Support the integration of bike share service by preserving space for facilities in station upgrades.

### Amenities

5. Provide secure and covered bicycle parking at stations with a split of one-third secure of existing and new supply and two-thirds covered.
6. Locate secure and covered bicycle parking areas in highly visible locations in the vicinity of platform access points. Comfortable, direct, and continuous walking routes must connect bike storage locations to platforms and other access modes.
7. Provide year-round maintenance of bikeways, including snow clearance, garbage removal, and surface repairs, to ensure they remain safe and attractive throughout the year.
8. Provide additional bicycle amenities (e.g., bike repair stands and pumps) at stations with higher volumes of cycling activity or that connect to regional cycling routes.

## C-2.4.2  Off-Site Connectivity

1. Create safe and direct cycling routes to GO stations from major destinations and regional cycling networks. Opportunities to bridge the gap between on-site and off-site bikeways through trail connections, bikeways, and improved crossings must be prioritized and coordinated between Metrolinx and municipalities.
2. Create cycling communities with a comprehensive and connected network of safe cycling routes comprised of quiet neighbourhood streets, off-street bikeways, and separated bike lanes.
3. Build or retrofit a network of complete streets leading to and from GO stations to create a balance between the movement of pedestrians, cyclists, transit, and vehicles.
4. Integrate shared bicycle parking and opportunities for bike share services in new developments.
5. Integrate bike share facilities at and around GO stations with complementary facilities at key destinations within a convenient, rideable distance of the GO station.

### Wayfinding

6. Provide wayfinding and signage that facilitates the efficient navigation of the transit station area and improves access to the station from local cycling networks.

> **Open data platforms can be a useful tool for providing an inventory of cycling routes and amenities that can be integrated as a resource into a variety of digital tools and cycling-supportive applications.**

## C-2.5 Pick-Up and Drop-Off

Passenger pick-up and drop-off (PUDO) is becoming an increasingly important mode of access for GO customers due to more frequent GO services and the growing customer use of ride-sharing services. However, where dedicated PUDO space is not provided, customers may be dropped off in unsafe locations.

In 2019, PUDO accounted for approximately 17% of GO Rail passenger access trips. PUDO typically serves passengers travelling to and from distances that are too long for walking or cycling to the station, and from areas without convenient transit access. While PUDO can contribute to station area congestion, investment in PUDO facilities can reduce the demand for parking and related land requirements.

Despite the strong demand for improved and expanded PUDO access, its growth is hindered by:

- An absence of PUDO facilities at some stations where demand exists;
- Capacity constraints at stations with existing PUDO facilities due to high ridership and more frequent GO Rail service;
- Facility design and layout that limits operating efficiency and comfort for PUDO users;
- Increased demand for and conflict with ODT services; and
- Conflicts with drive-and-park users, resulting in increased travel time.

**PUDO facilities are the preferred station location for private vehicles, ride-sharing, and ODT where municipalities use smaller vehicles that are not safe to mix with bus traffic. The use of ride-sharing is growing significantly in terms of mode share and the availability of services across the GO Rail network. The growth of ride-sharing is expected to continue and will place increased demand on PUDO facilities at GO stations.**

**Over time, it will be critical to design PUDO facilities to be responsive to the anticipated growth of technology-enabled mobility options, including ride-sharing and ODT.**

The following are important considerations to support PUDO access.

### C-2.5.1 On-Site

**Configuration**

1. The Metrolinx Design Standards and Requirements identify the preferred PUDO configuration based on future ridership, service patterns, and local context. The preferred PUDO for each GO Rail station is provided in Section 2.2.

**Connectivity**

2. Prioritize PUDO facility access to and from the local road network over drive-and-park traffic.
3. Clearly demarcate PUDO areas at station entrances and preserve clear sightlines to PUDO facilities.
4. Locate PUDO facilities on the shortest possible accessible route to the station building and platform entrance, while following the Hierarchy of Access.
5. Locate loading areas to facilitate safe and convenient access to the station building, passenger waiting area, rail platforms, and bus platforms.
6. Provide PUDO facilities at stations to increase accessiblility for customers with disabilities, as well as customers arriving by private vehicle or ride-share.

**Comfort**

7. PUDO facilities need to have one-way traffic flow with the opportunity for recirculation to reduce vehicular conflicts and maximize traffic flow efficiency.
8. PUDO facilities must be designed and located to avoid conflicts with other modes.
9. Pedestrian movements to and from the PUDO facility to the station building or rail platforms must be aligned parallel to traffic flow to limit pedestrian and vehicle conflict.
10. The PUDO facility needs to be visible from enclosed passenger waiting areas.

### C-2.5.2 Off-Site

**Development**

1. Explore the potential to integrate PUDO at adjacent developments to increase convenience for users and dilute the flow of traffic to and from the station.

## C-2.6  Drive-and-Park and Carpool

Metrolinx's focus is on supporting ridership growth by reducing the predominance of drive-and-park as the primary station access mode, and by improving options (over time) for customers to get to GO stations by walking, transit, cycling, and PUDO.

Drive-and-park continues to be the single most prevalent mode of station access across the GO Rail network, in part as a result of legacy conditions that have prioritized parking facilities and subsidies that have incentivized driving over other modes. However, while the 2019 Rail Passenger Survey reported that about 45% of passengers accessed the stations by car and used over 72,000 parking spaces operated by Metrolinx, these numbers have dropped significantly since 2015 and are expected to continue dropping, with a forecasted drive-and-park mode share of 32% by 2041.

**Given the high cost and liability considerations associated with structured parking, the extensive land area required for surface parking, the impacts of parking on creating transit-supportive places, and the limited capacity of surrounding local road networks, unrestricted parking expansion is not a viable or sustainable option.**

Challenges include:

- Parking demand management and right-sizing of facilities must be considered in ridership recovery strategies following the COVID-19 pandemic. In the recovery phase and over the long term, there is the risk that an oversupply of parking will induce greater parking demand, which will require monitoring.

- Increased use of car-sharing and technology-enabled mobility services, which dynamically match commuters travelling to similar destinations, may increase demand for parking.

- There is a current lack of technology and a need for new technologies to improve the booking process for parking reservations and provide real-time information on the availability of parking.

- There is a misalignment between existing reserved parking products and customer travel behaviours, with the need for new products that provide greater flexibility and better utilize the parking supply.

The following are important considerations to optimize available parking to enhance safety and usability, while integrating parking within Mixed Modal stations.

### C-2.6.1  On-Site

**Connectivity**

1. Provide a complete system of vehicular roads and access points that promote efficient circulation and maintain fluid access to and from local streets.
2. Separate parking access points and drive aisles from connecting transit services entering and exiting the station, where possible.

**Layout**

3. Organize drive aisles and parking areas to minimize vehicle conflicts with pedestrians and cyclists by reducing the number of crossing points with pedestrian and cycling routes.
4. Organize large surface parking areas into smaller lots to manage traffic flow, facilitate better site navigation, and provide safe pedestrian walking routes from parking spaces to the rail platform.
5. Divide large lots using clear, simply-paved paths that connect to main pathways.
6. Protect for future intensification or development opportunities through the layout of lots, drive aisles, and utilities.
7. Orient and design new structured parking to protect for future development opportunities and consider long-term plans at and around stations.

**Provision**

8. The target number of general parking and reserved parking spaces for each GO station is provided in Section 2.2, based on future ridership and local context.
9. Develop and integrate cost-effective mechanisms to monitor parking utilization, to assess parking demand and the need for demand management programs.
10. Explore the use of modular or alternative parking solutions, such as co-located and shared or leased parking solutions to provide flexibility and minimize costs. Modular parking locations are provided in Section 2.2.
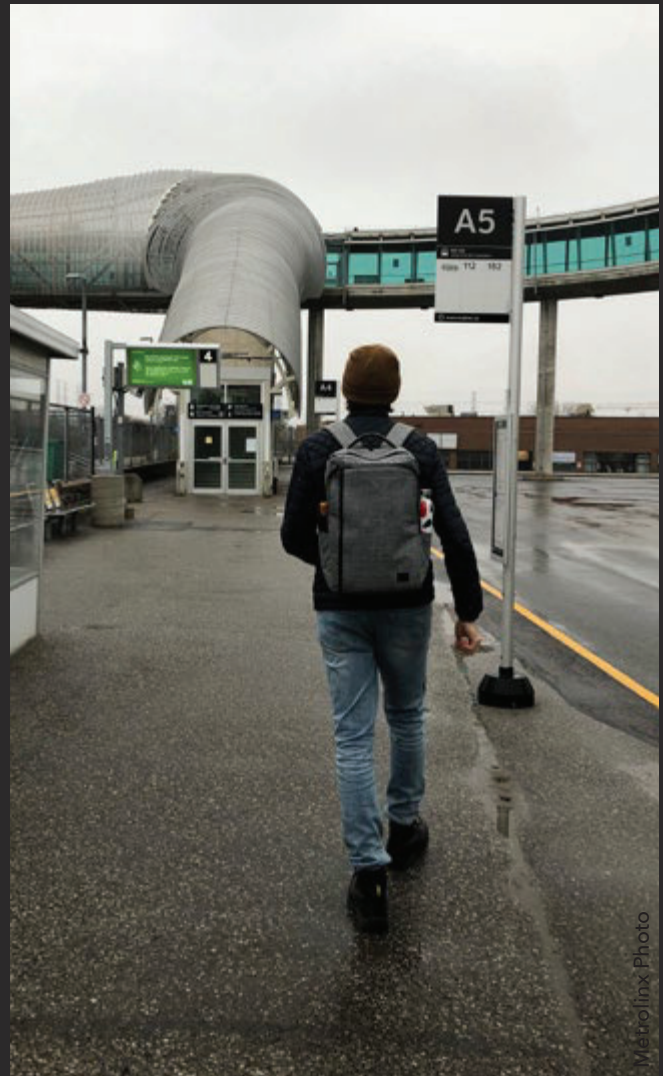
**Comfort**

11. Use rehabilitation of existing parking areas as an opportunity to incorporate improved landscaping to enhance the customer experience.
12. Design drive aisles to passively encourage speed reduction.

> **Targeted parking expansion will prioritize surface parking over the development of structured parking due to the relatively high cost and inflexible nature of parking structures. Metrolinx's market driven parking strategy will outline when structured parking may be appropriate.**

## C-2.6.2 Off-Site Efficiency

1. Minimize surface parking areas, integrate parking within development, and orient and design any approved new structured parking structures.

2. Develop TDM plans for station areas and integrate station-specific travel plans into the planning approvals process for new developments.

3. Develop short- and long-term area-wide parking strategies with minimum and maximum parking standards and shared use parking practices.



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