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Municipal Planning Leaders Forum

Chair: Mathieu Goetzke

June 10th , 2021

AGENDA

- 1) Welcome, Safety and Inclusion Moment
- 2) Station Access Planning Update
- 3) Planning for MTSAs in Peel Region
- 4) Wellness Break
- 5) TOC Guidelines Overview
- 6) Roundtable
- 7) Influence of COVID-19 on Planning: Open Discussion of Trends and Impacts
- 8) Wrap Up and Next Steps

Welcome, Safety and Inclusion Moment

GO Station Access Planning

Presentation for the Municipal Planning Leaders Forum (MPLF)

Aubrey Iwaniw, Manager, Stations Planning Metrolinx

AGENDA

1. GO Rail Station Access Plan
2. Parking Strategy
3. MTAC Engagement
4. MTSA Planning
5. Next Steps

Acronyms

SAP - GO Rail Station Access Plan

MTAC - Municipal Technical Advisory Committee

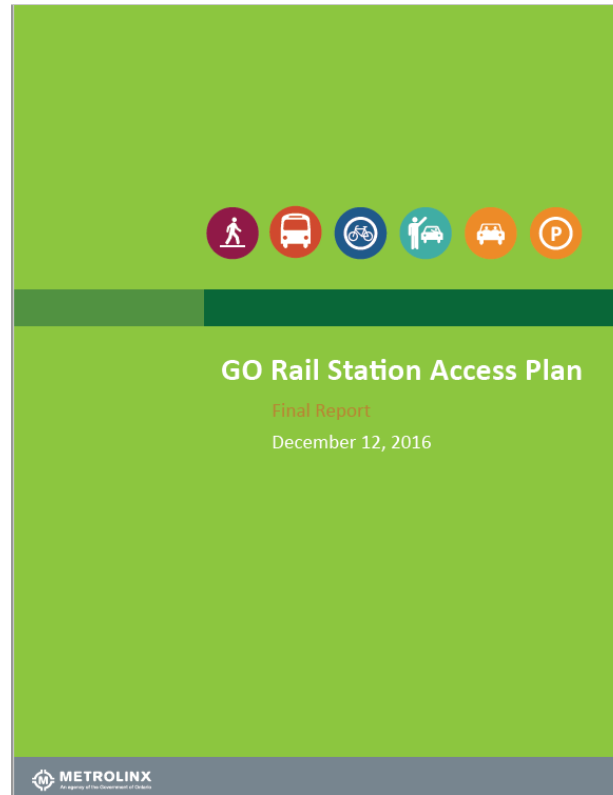
MTSA - Major Transit Station Area

GO RAIL STATION ACCESS PLAN (SAP, 2016)

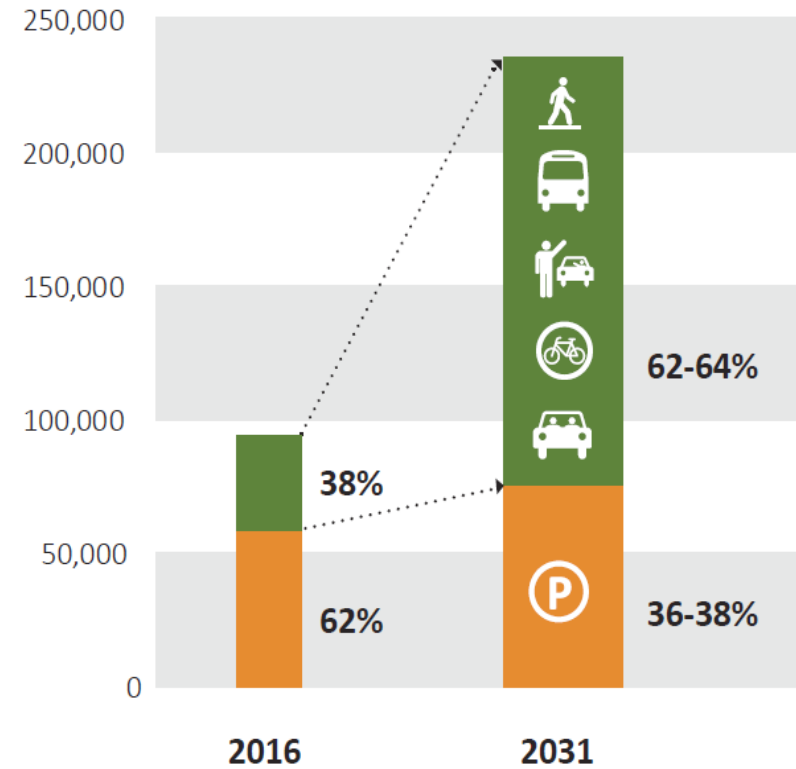
The GO Rail Station Access Plan (SAP) was developed in 2016 to support GO Expansion.

The Plan includes strategies and facility requirements for increasing station access capacity at GO stations to support ridership growth in a sustainable and financially efficient way.

Station access facilities include walkways, bikeways bike parking, bus bays, PPUDO, and car parking.



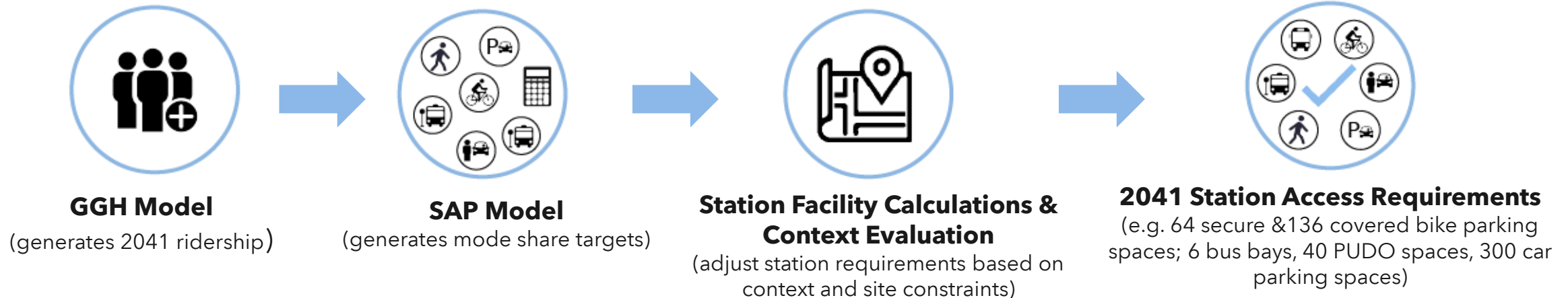
- ✓ Board Approved in 2016
- ✓ Informed by the SAP Initial Business Case (2017)



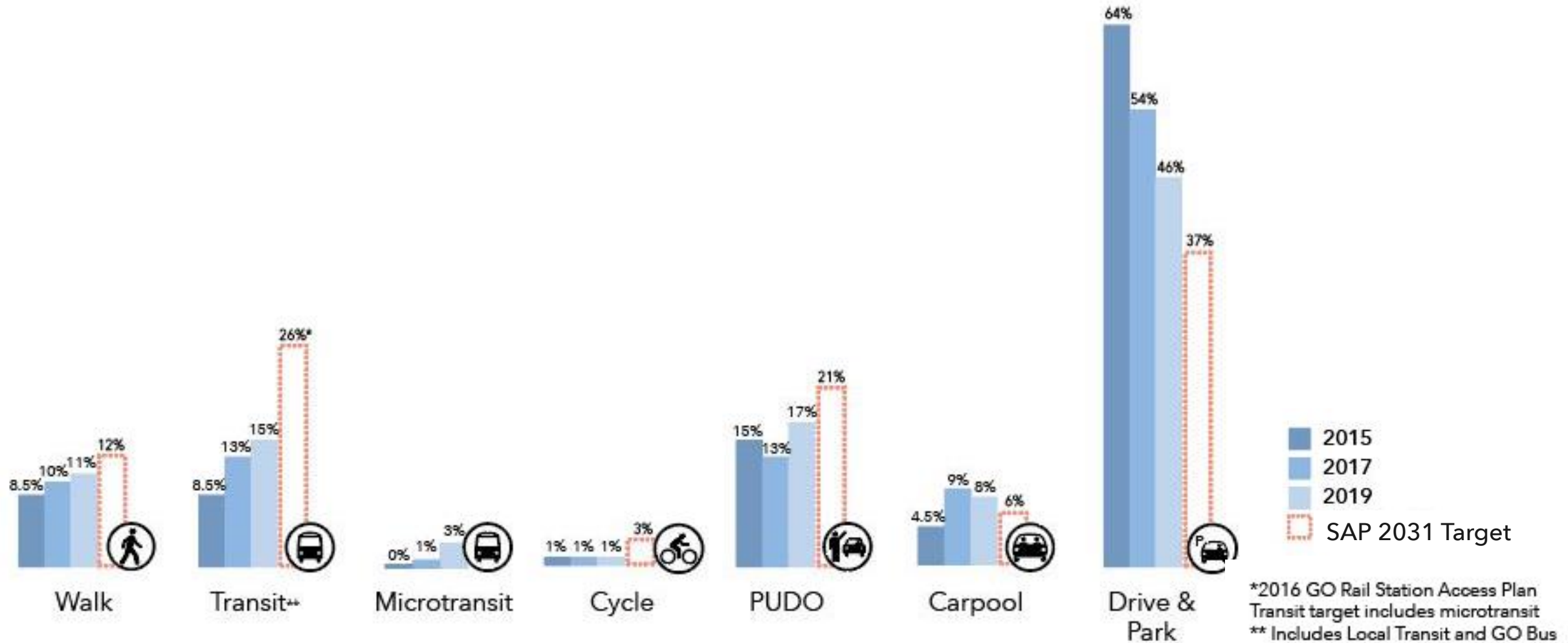
Average Weekday Riders and Mode Share

GO RAIL STATION ACCESS PLAN UPDATE (SAP, 2021)

- The SAP is being updated to ensure the document remains a reliable and useful resource for improving GO station access over time to support ridership growth.
- As part of the Update, Metrolinx is refreshing station-specific **mode share targets** and **infrastructure requirements** to reflect:
 - new station access mode share data (from 2017 & 2019)
 - updated ridership forecasting to the year 2041, including a ridership reduction of ~25%, resulting from increased telework post-COVID-19
 - local plans and priorities shared by municipalities
 - new analysis of financial performance, historical parking demand, and site-specific deliverability constraints



GO STATION ACCESS MODE SHIFT, 2015-2019



Source: 2015, 2017, 2019 GO Rail Passenger Survey

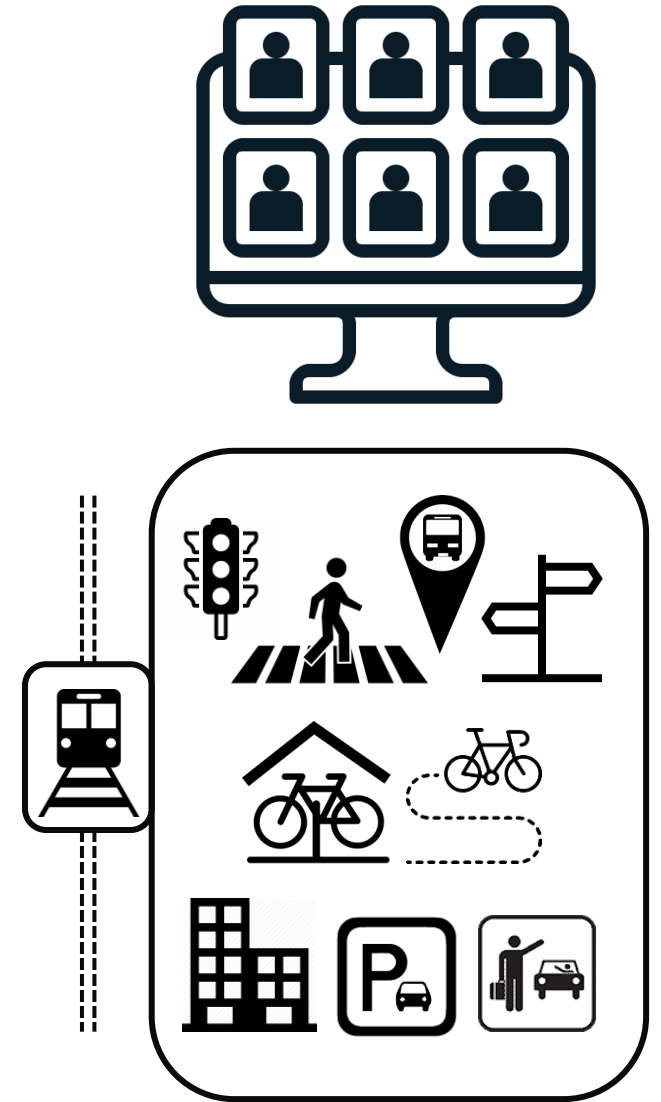
PARKING STRATEGY

- Analysis undertaken for the SAP Update supports a **continued shift away from parking** and towards other station access modes.
 - The 2021 SAP will reduce the scale of parking expansion by approximately ~12,000 spaces across the network to the year 2041, as compared to past parking expansion targets.
 - Growing ridership while reducing the park-and-drive mode share will be achieved by improving facilities for walking, local transit (including on-demand microtransit), cycling, PPUDO, and carpooling.
 - The 2016 SAP direction to no longer construct new parking structures will also be maintained.

2021 Existing Parking Supply	2031 Total Parking Supply (2016 SAP)	Sneak Peak 2041 Parking Supply Target (SAP Update - DRAFT*)
72,702 spaces	96,396 spaces 91,354 at existing stations 5,040 at new stations	~84,500 spaces ~75,500 at existing stations ~9,000 at new stations

MUNICIPAL ENGAGEMENT ON THE SAP UPDATE

- As part of the SAP Update, 14 video-based workshops were held with members of Metrolinx's Municipal Technical Advisory Committee (MTAC) in January 2021, with participation by municipal planning, transportation and transit staff in every lower and upper-tier municipality in the existing GO rail service area.
- For each existing GO station, we asked municipal stakeholders:
 - Do you agree with the general opportunities identified in the 2016 SAP?
 - What area-specific land use or transportation plans should be accounted for by the SAP for this station?
 - What specific challenges and opportunities should be considered to enhance multi-modal access to and from this station?



COMMON THEMES WE HEARD FROM MUNICIPALITIES

- Recognition of **GO stations as community destinations**, rather than just commuter transfer points.
- A **willingness to engage** with Metrolinx and coordinate station improvements with local initiatives.
- A common desire to **reduce auto-mode share** and set more ambitious multi-modal targets (variable to station context).
- A desire to **'bridge the gap'** between local **Active Transportation (AT) networks** and GO station lands.
- Support for **leveraging TOC opportunities to improve multimodal connectivity**, e.g. through finer grained street networks and new connections.
- An emphasis on the needs of **Municipal Service Providers (MSPs) for local transit**, including
 - minimizing delays for non-GO customers onboard local buses when serving GO stations (e.g. with on-street laybys, transit priority measures);
 - accommodating adequate bus and driver facilities at GO stations that serve as end-of-line hubs for MSPs; and,
 - developing On-Demand Microtransit (ODMT) strategies.
- The need to develop **context-specific station access strategies** that reflect the local setting, including development and transit context.

MAJOR TRANSIT STATION AREA PLANNING

- MTSA planning is an opportunity to improve multi-modal connections between GO stations and local communities, particularly by:
 - bridging the gap between on- and off-site connections
 - delivering walking, cycling and local transit facilities and services in surrounding communities
- These 'off-site' improvements are critical to ensuring our investments on-site at GO stations are part of a connected network, and can produce the mode shifts we need to grow ridership in a sustainable way.
- Metrolinx staff are available to review local plans and adjacent development applications and participate in local studies in order to maximize alignment between on- and off-site station access investments and opportunities.

Delivery Opportunities

On-site (Metrolinx)

CPG Procurements

(on-site infrastructure)

TOC Program

(on-site infrastructure)

Commercial Partnerships, Marketing

(on-site infrastructure and TDM programs)

Operations

(on-site programs; operations, maintenance/state of good repair and minor on-site improvements)

Off-site (Partners)

Municipalities & Local Transit Agencies

(Off-site service and infrastructure)

Private Developers

(Off-site infrastructure)

NEXT STEPS

- The SAP Update is targeted to be completed in Fall 2021
 - In advance of publication, municipalities are encouraged to reach out to Metrolinx for updated station area requirements and recommendations as an input to local planning studies and projects, beginning in July 2021.
- Reach out!
 - If your municipality is undertaking plans, studies or capital works at or near a GO station, reach out to aubrey.iwaniw@metrolinx.com. We have a team of station planners ready to work with you to align our plans and help bring change to MTSAs across the GO rail network.

Planning for Major Transit Station Areas in Peel

June 10, 2021

Duran Wedderburn, Principal Planner &
Joy Simms, Acting Principal Planner - Regional Planning
and Growth Management
Roman Kuczynski, Supervisor - Transportation Planning



Outline

- Planning for Growth to 2051
- MTSA Study, Challenges, and Opportunities
- Delineation and MTSA Profiles
- Draft Policy Framework and Implementation

Official Plan Review & Municipal Comprehensive Review





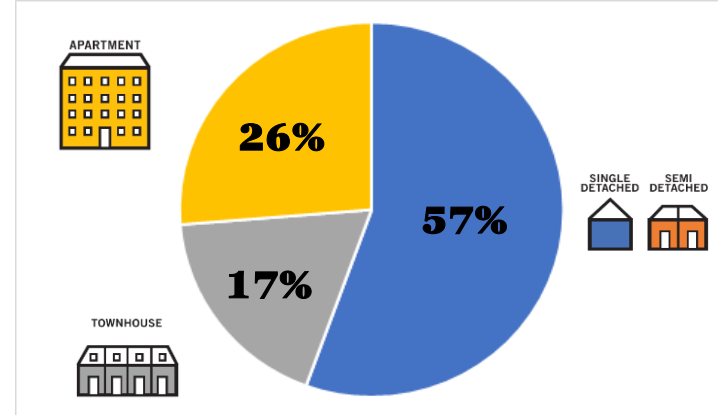
2051 Population Forecast

Population Forecasts to 2051
Draft Municipal Allocation

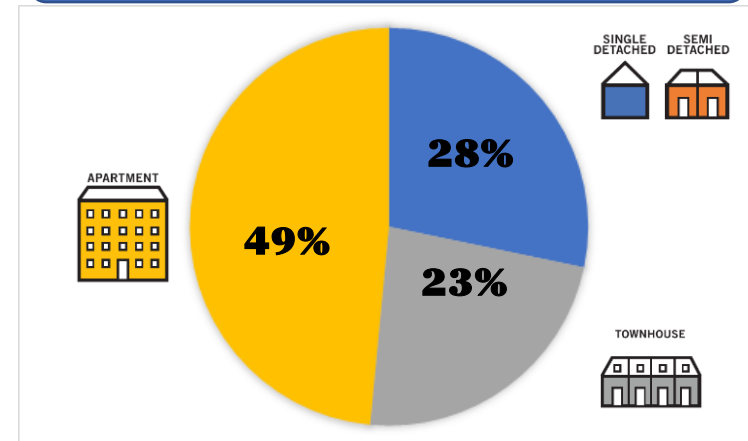
	2021	New 2051
Municipality	Population	Population
Caledon	81,000	300,000
Brampton	698,000	985,000
Mississauga	799,000	995,000
Peel	1,578,000	2,280,000

The Region of Peel is forecasted to accommodate an additional 700,000 people by 2051

Historical Growth By Unit Type (%)
2001-2021



New Growth By Unit Type (%) 2021-2051





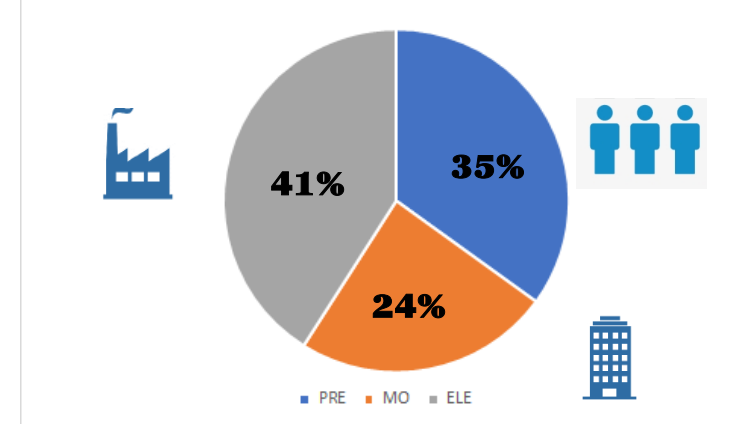
2051 Employment Forecast

Employment Forecasts to 2051
Draft Municipal Allocation

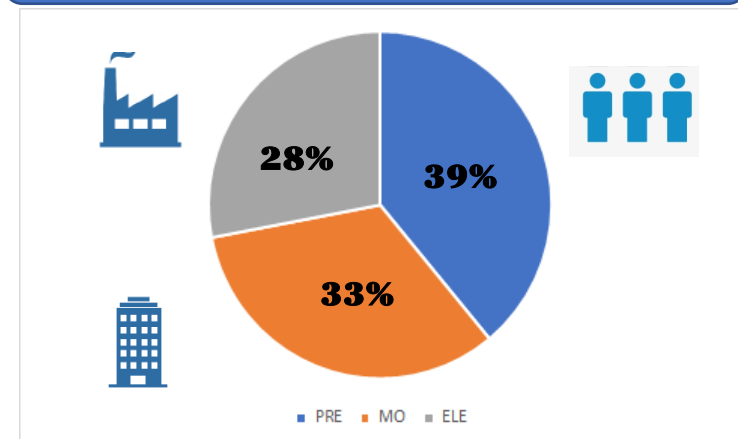
	2021	New 2051
Municipality	Employment	Employment
Caledon	27,000	125,000
Brampton	209,000	355,000
Mississauga	500,000	590,000
Peel	736,000	1,070,000

The Region of Peel is forecasted to accommodate an additional 330,000 jobs by 2051

Historical Growth by Employment Type (%) 2001-2021



New Growth By Employment Type (%) 2021-2051





MTSA Study



MTSA Corridors/Hubs

Light Rail Transit

- Hurontario LRT (Growth Plan Priority)

GO Train

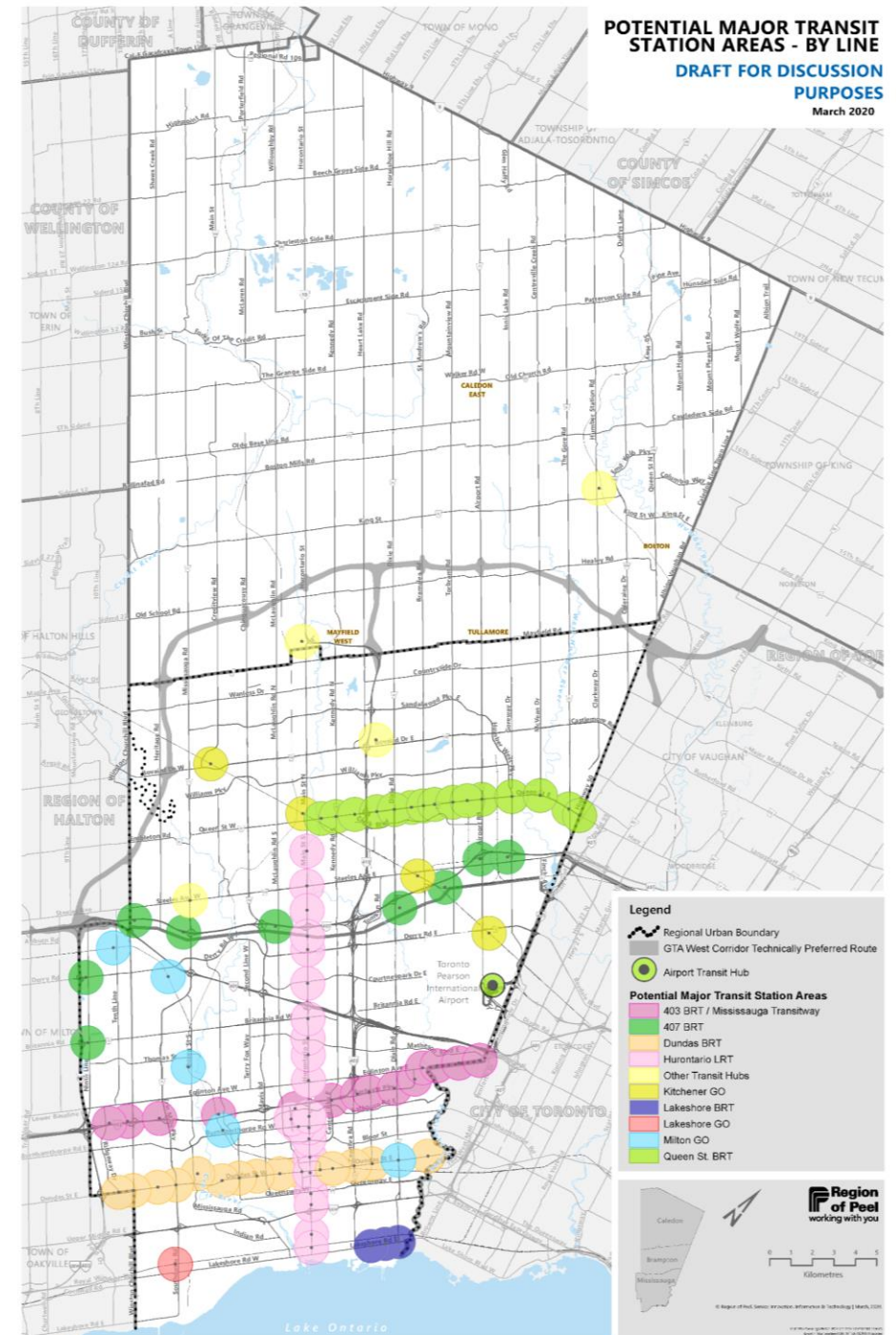
- Lakeshore West GO (Growth Plan Priority)
- Kitchener GO (Growth Plan Priority)
- Milton GO
- Bolton GO

Bus Rapid Transit

- 403 BRT/Mississauga Transit Way (Growth Plan Priority)
- Dundas BRT
- Queen Street BRT
- 407 Transit Way BRT
- Lakeshore Road BRT

Transit Hubs

- Future Airport Transit Hub
- Other Transit Hubs





Challenges & Opportunities

Challenges

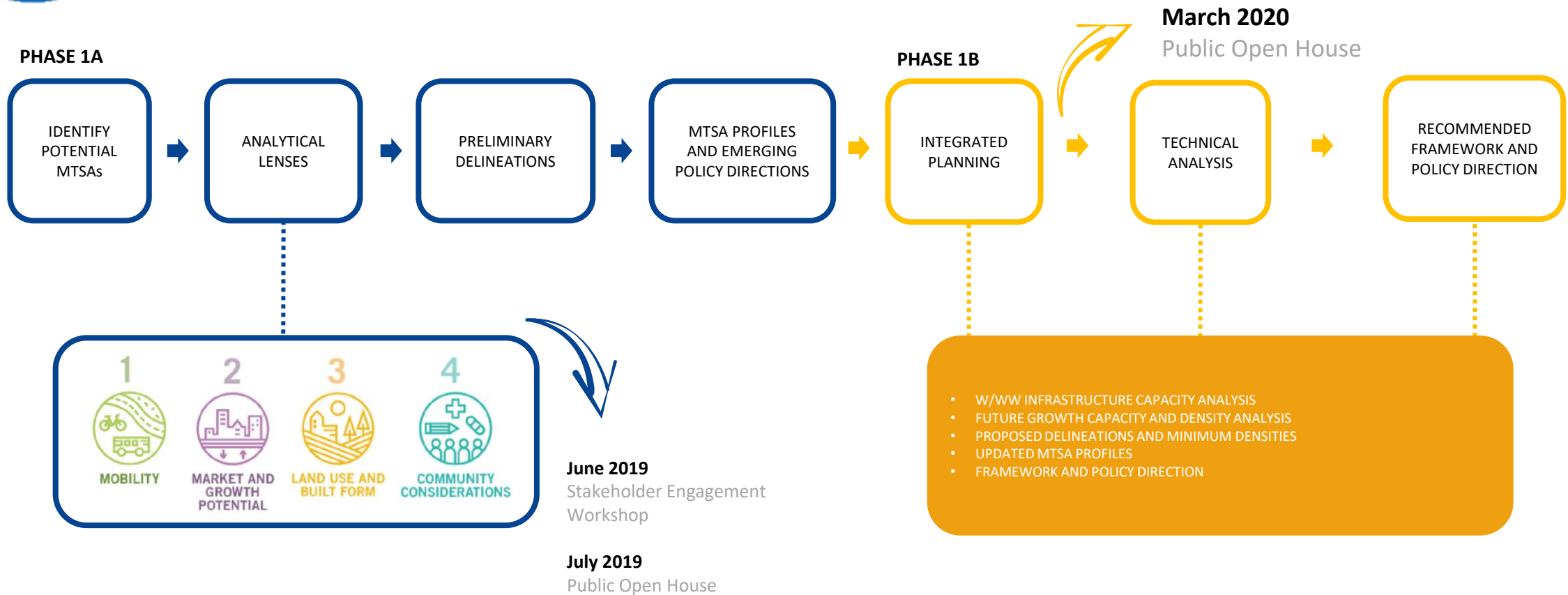
- Evaluating and prioritizing the readiness of 90+ potential MTSA's
- Recognizing the unique contexts of the various stations across Peel
 - Intensification potential versus increasing active transportation connections
 - Protecting viable Employment Areas
- Aligning development with both transit and servicing infrastructure investment
- Balancing existing policy framework and growth aspirations (developers, residents, transit agencies, municipalities)

Opportunities

- Working with local municipal partners and stakeholders to create a Regional Official Plan MTSA framework that reflects strategic priorities and the local planning context
- Creating transit-oriented communities & reducing auto dependency as Peel grows



Study Process & Methodology





Context Examples

HUB-1 – Bolton GO

- Designated greenfield area
- Future GO Station & Mixed Use
- Some existing dry industrial employment

Current Density: 11 ppj/ha





Context Examples

HLRT-11 – City Centre (Square One)

- Urban Growth Centre
 - Intersection of two Priority Transit Corridors
 - Large parking lots but major development activity is ongoing and to continue around Square One
- Current Density: 52 ppj/ha***



403-4 – Creditview

- Low density residential built form
 - Little to no redevelopment potential
 - Hwy 403 and rail corridor physical boundaries
- Current Density: 42 ppj/ha***





Context Examples

LWGO – Clarkson GO

- Hydro corridor limits pedestrian and vehicular crossings
- Managing land use compatibility in PSEZ
- High & low density residential areas
Current Density: 40 ppj/ha



KIT-2 – Bramalea GO

- PSEZ, active industrial uses
- The rail and Hwy 407 limit the active transportation network
- Employment conversion pressure
Current Density: 34 ppj/ha



Public Engagement

What we heard:

- Opportunity to attract office and employment uses
- Improve connections by active transportation to surrounding communities.
- Commuter stations can be community hubs.
- Conflict between vehicle users and the transit system as MTSAAs develop.
- Official Plan limitations on what land uses can be converted
- Managing transition (tall and sprawl built-form impact surrounding residential areas)
- Provide equal/equitable service to currently underserved communities and limit displacement

MAJOR TRANSIT STATION AREAS: FUTURE
IMAGINING FUTURE ROLES & STATION TYPES

A. URBAN HUB Busy mixed use destinations with strong transit service & a concentration of community amenities

ASPIRATIONAL CHARACTER IMAGES Existing URBAN HUB STATIONS will continue to grow and change. Other areas in Peel Region may also become new URBAN HUBS.

MOBILITY	MARKET & GROWTH POTENTIAL	LAND USE AND BUILT FORM	COMMUNITY CONSIDERATIONS
CYCLING INFRASTRUCTURE	HIGH DENSITY AROUND INFRASTRUCTURE	TRANSIT ORIENTED DEVELOPMENT	COMMUNITY FACILITIES
BUS RAPID TRANSIT	MEDIUM DENSITY AROUND INFRASTRUCTURE	MIXED USE / RETAIL AT BRIDGE	PROGRAMMING AND COMMUNITY SPACE
WALKABILITY	LOW DENSITY AROUND INFRASTRUCTURE	INTEGRATED WITH TRANSIT	
SAFE INTEGRATION OF DIFFERENT USERS	AFFORDABLE HOUSING OPTIONS	MULTIFUNCTIONAL ANCHOR	

Place a dot on the characteristic you think is most important for Urban Hubs in each column!

FUTURE MTSA TYPES: URBAN HUB

MAJOR TRANSIT STATION AREAS: FUTURE
IMAGINING FUTURE ROLES & STATION TYPES

B. LINE STATIONS Touchpoints along transit routes that

ASPIRATIONAL CHARACTER IMAGES Existing LINE STATIONS also become

MOBILITY	MARKET & GROWTH POTENTIAL
LINE PARKING	LIMITED DEVELOPMENT OPPORTUNITIES
TRANSIT STOP	LOW DENSITY BUILT FORM
TRANSIT EXPERIENCE	HIGHER DENSITY OPPORTUNITIES
MULTI-USE PATH CONNECTIONS	CAPTURING TRANSIT RIDERSHIP

Place a dot on the characteristic you think is most important for Line Stations in each column!

FUTURE MTSA TYPES: LINE STATIONS

MAJOR TRANSIT STATION AREAS: FUTURE
IMAGINING FUTURE ROLES & STATION TYPES

C. CONNECTOR STATIONS Areas defined by key transit route & road crossings, connecting neighbourhoods & amenities

ASPIRATIONAL CHARACTER IMAGES Existing CONNECTOR STATIONS will continue to grow and change. Other areas in Peel Region may also become new CONNECTOR STATIONS.

MOBILITY	MARKET & GROWTH POTENTIAL	LAND USE AND BUILT FORM	COMMUNITY CONSIDERATIONS
HIGH TRANSIT SERVICE	INTEGRATED PARKING FACILITIES	TOPOGRAPHY SOLUTIONS	VISIBILITY AND ACCESSIBILITY
DELINEATED CROSSINGS	SUPPORTING SERVICES	OUTDOOR SPACES	NEIGHBOURHOOD ASSET
INTERSECTIONS FOR ALL USERS	MIXED USE DEVELOPMENT	LANDSCAPE COMPONENT	SAFETY AND LIGHTING
BEAUTIFUL STREETS	ACCESS TO HEALTHY FOOD	PARK & OPEN SPACE AMENITIES	FLEETS/LEAN OPERATIONS NEXT TO STATION

Place a dot on the characteristic you think is most important for Connector Stations in each column!

FUTURE MTSA TYPES: CONNECTOR STATIONS



MTSA Delineation and Station Profiles



MTSA Profiles Overview

- 91 total MTSA's profiled
- MTSA numbering aligns with numbering standard on the draft ROPA

1

- Density calculations based on Boundary Delineation and 800m radius
- Methodology outlined in Phase 1A

2

- General Information (Growth Plan Priority, Corridor, Location)

3

- MTSA Capacity Ratings
- Definition and detail on technical analysis in report Phase 1B

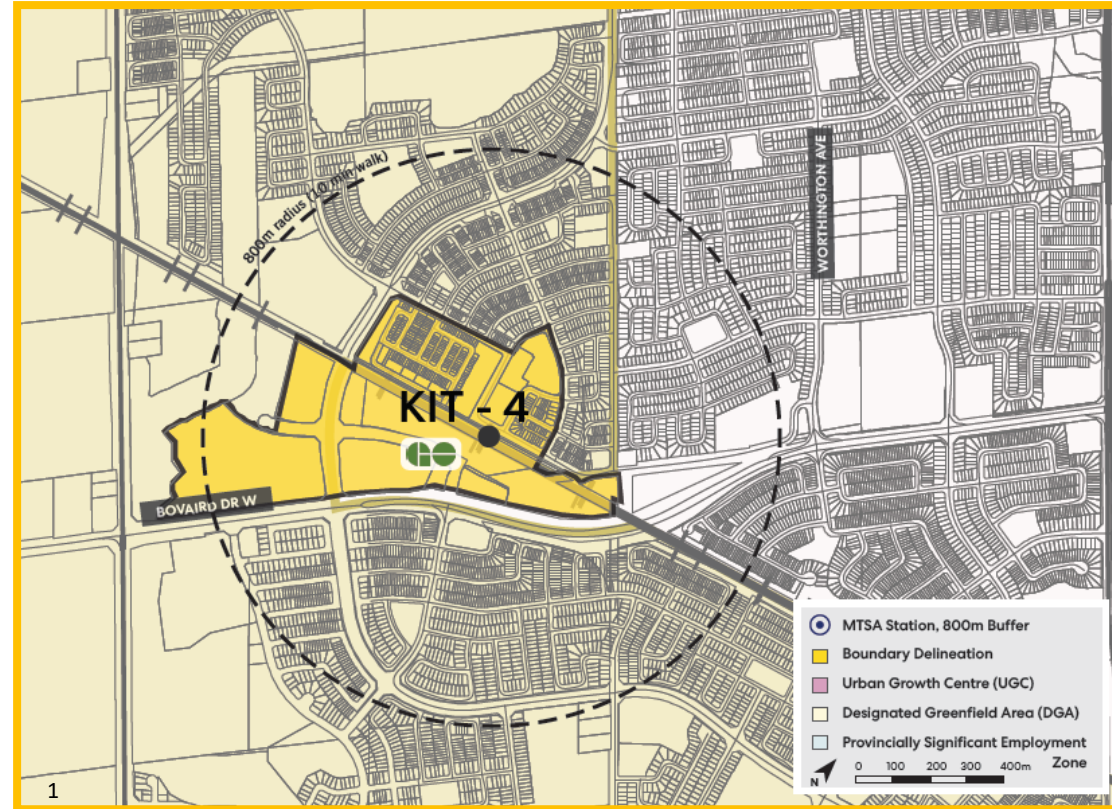
4

- Recommendations
- Detailed description and methodology in Phase 1B

5

- Proposed Regional Official Plan Classification and Minimum Density

6



MTSA 800m Radius - 2016 Baseline	
Area (ha)	201
Population	6,104
Employment	418
Total Density (ppj/ha)	32.5
MTSA Boundary Delineation - 2016 Baseline	
Area (ha)	43
Population	736
Employment	35
Total Density (ppj/ha)	18
Growth Plan Minimum Density (ppj/ha)	150
Additional People and Jobs to Achieve Growth Plan Minimum Density (ppj)	5,672

2

Municipality: City of Brampton Growth Plan Priority: Yes
 Corridor: Kitchener GO Combined Station: n/a

3

Development Capacity Rating: ●
 Zoning Capacity Rating: ●
 Infrastructure Capacity Cost Rating: ●

4

RECOMMENDATIONS:

- No apparent policy or implementation barriers exist. However, regular monitoring and other maintenance-type measures should be explored to support and enhance existing conditions and activities.
- Based on the development and infrastructure capacity of the MTSA, it will be delineated and can meet or exceed the Growth Plan minimum density.

5

CLASSIFICATION: Primary

Regional Official Plan Minimum Density: 150 ppj/ha Additional People and Jobs to Achieve ROP Minimum Density: 5,672

6

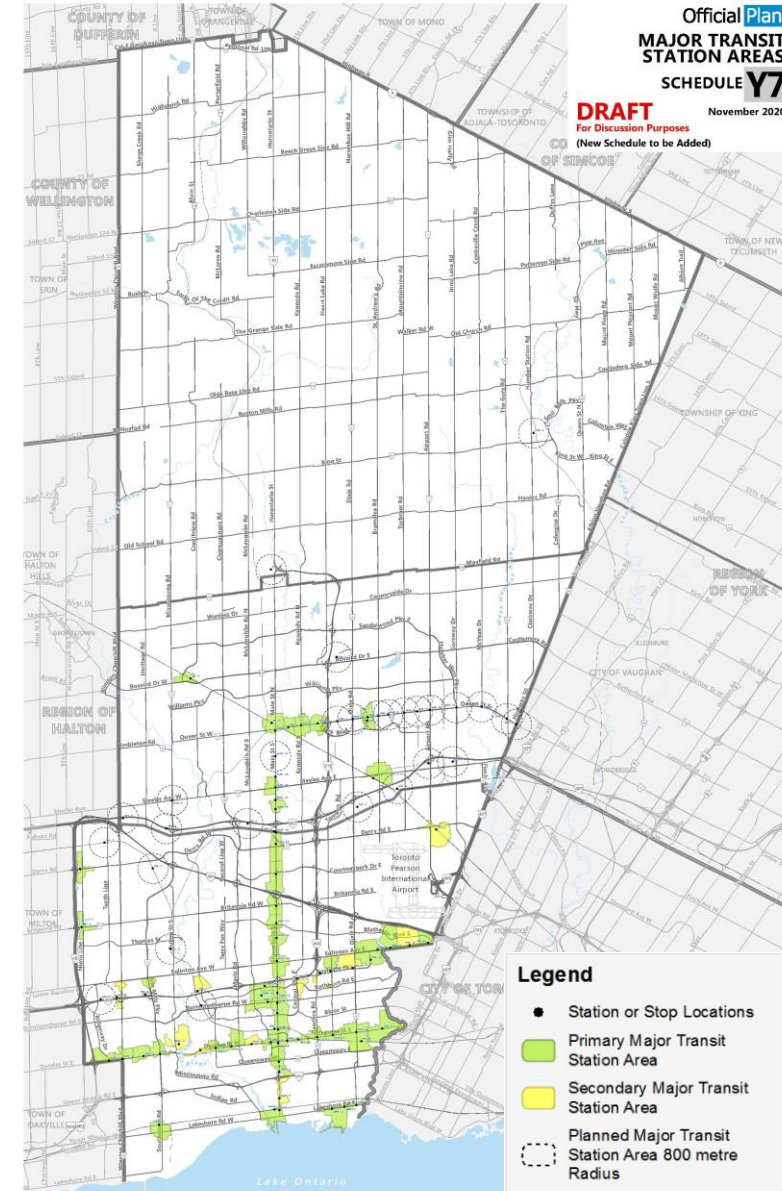
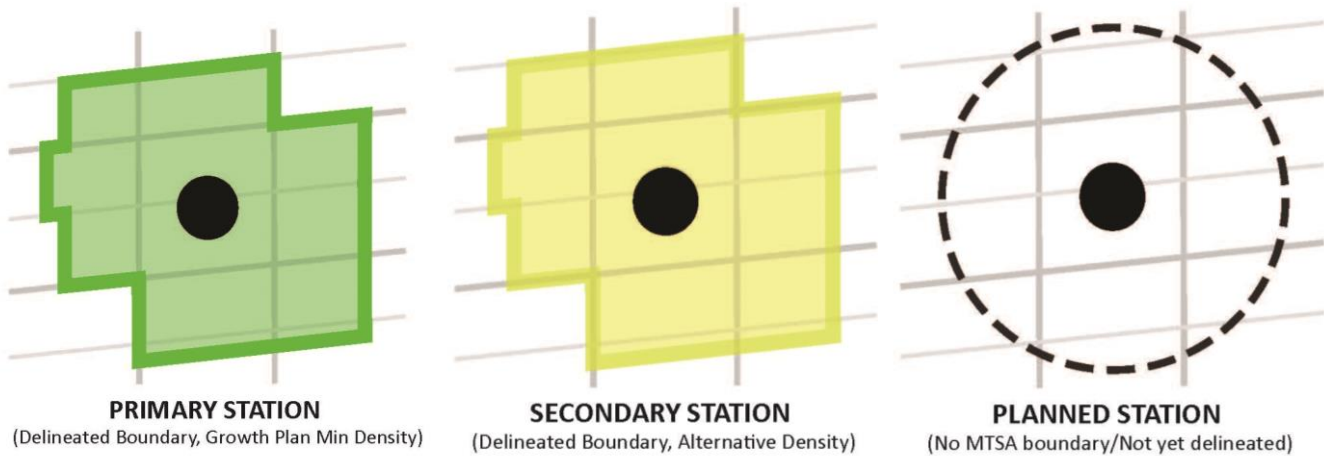
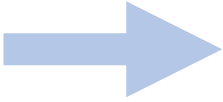


Policy Framework and Implementation



MTSA ROPA & Schedule

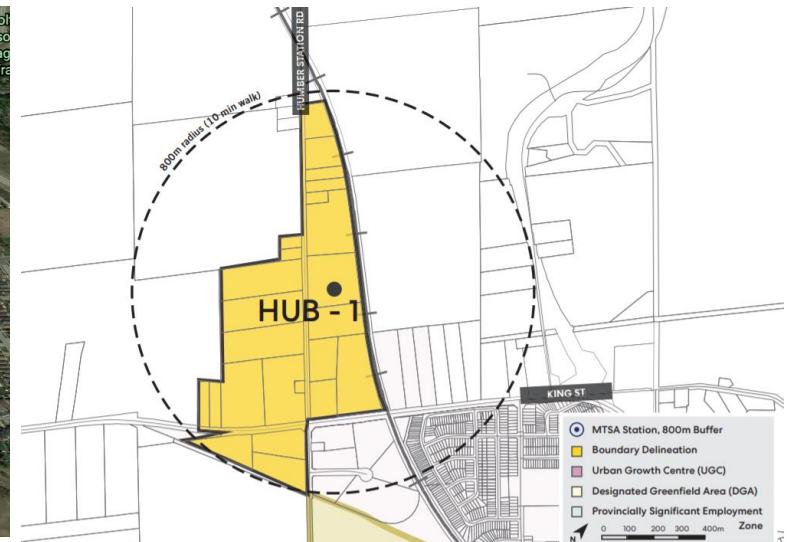
- Establish a framework
 - Station classification to define the types of transit stations, considering when and how they may develop (schedule Y7)
 - minimum densities on Table Y1





Context Examples

HUB-1 – Bolton GO
Current Density: 11 ppj/ha
Planned MTSA -
Undelineated, interim policies



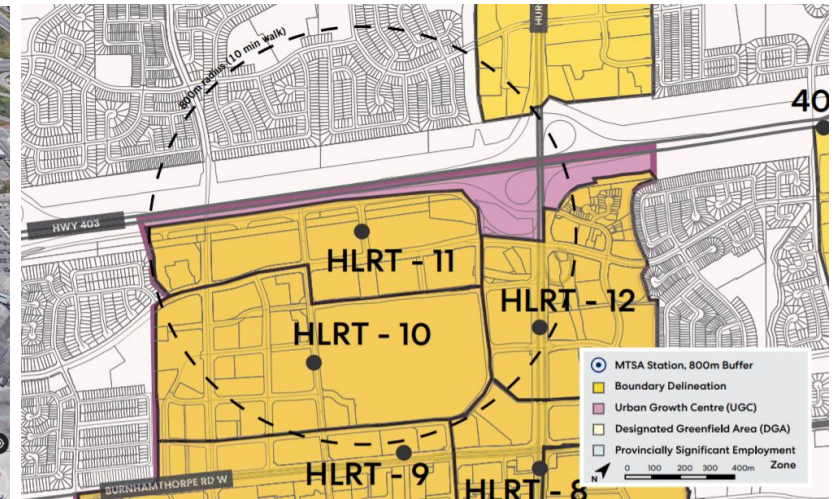


Context Examples

HLRT-11 – City Centre (Square One)

Current Density: 52 ppj/ha

Primary MTSA - 400 ppj/ha



403-4 – Creditview

Current Density: 42 ppj/ha

Secondary MTSA - 50 ppj/ha



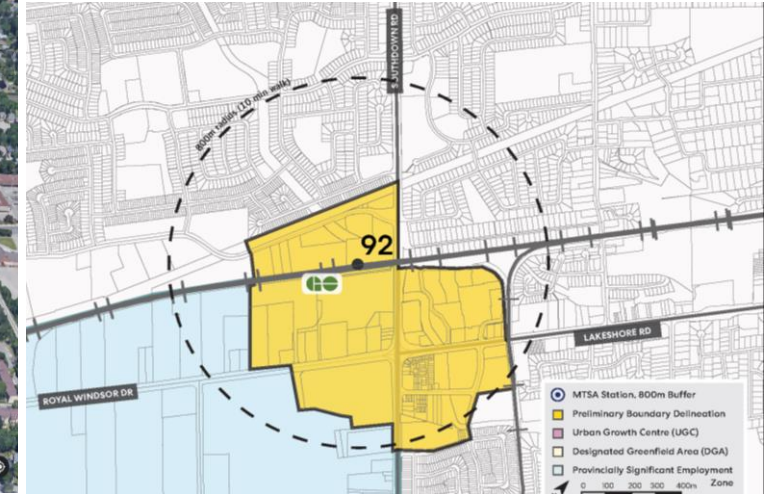


Context Examples

LWGO – Clarkson GO

Current Density: 40 ppj/ha

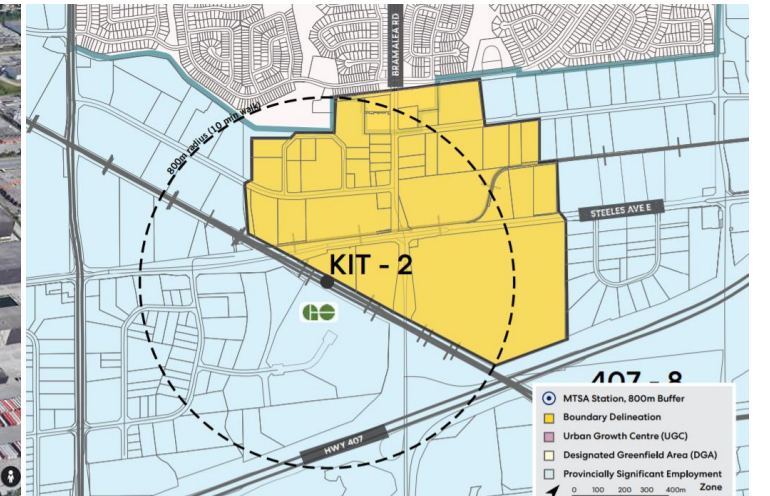
Primary MTSA - 150 ppj/ha



KIT-2 – Bramalea GO

Current Density: 34 ppj/ha

Primary MTSA - 150 ppj/ha





Local Implementation & Studies

Beyond Planning Act requirements, local policies will:

- Establish character and land use
- Prohibit land uses & built forms that would jeopardize meeting minimum densities
- Protect planned MTSA's for future transit-oriented development
- Protect lands for transit infrastructure
- Address land use compatibility
- Protect and mitigate against natural and human-made hazards
- Phase infrastructure and services to support complete communities
- Include strategies to increase multi-modal access and connectivity
- Implement the Healthy Development Framework
- Address land uses in select MTSA's identified for flexible employment polices
- Describe future implementation actions (IZ, CIPs, TOD guidelines, etc.)



Related Initiatives

Inclusionary Zoning

- To apply in primary and secondary MTSA
- ROP policies to establish IZ framework to be included in Peel 2041+
- Analysis underway including an overview of local municipal demographics, housing market impacts, housing needs, and demand
- 10% of the (rental or condo) building GFA must be provided at affordable rates
- Market analysis and peer review to be complete by Q3 2021

Regional Major Office Incentives Program

- 5-year program approved April 22, 2021
- Applies in local Community Improvement Plan areas
- Offered for eligible major office developments of 20,000 sq. ft. (1,858 m²) or above
- Financial incentives via Tax increment equivalent grants



Next Steps

- Review and address comments from 90-day circulation to Province
- Continued stakeholder engagement, consideration of comments, and revisions
- Fall 2021 statutory consultation
- Final ROPA recommendation late 2021 or early 2022



Resources

Peel MTSA Study

<https://www.peelregion.ca/officialplan/review/focus-areas/major-transit-station-areas.asp>

Peel 2041 Official Plan Review

<https://www.peelregion.ca/officialplan/review/>

Regional Major Office Incentives Program

<https://www.peelregion.ca/officialplan/review/focus-areas/growth-management.asp#regional>

Project Contacts

duan.wedderburn@peelregion.ca; joy.simms@peelregion.ca; roman.kuczynski@peelregion.ca

WELNESS BREAK - Take 5

Transit-Oriented Communities (TOC) Guidelines Overview

Design Guidelines for Subway Stations Integrated within Development

Gunta Mackars, Vice President, Design Metrolinx

What we will cover today:

- Background on the Guidelines
- Purpose of the Guidelines
- How to Use the Guidelines
- Working with the Municipalities
- The Team
- Engagement and Consultation Process
- Select Content / Key Topics
- Next Steps



Background - TOC Program

- The Province of Ontario is pursuing a “Transit Oriented Communities” program to build vibrant, higher density, mixed-use communities that are connected to new subway stations
- The Program will be implemented by partnering with third-party development partners to build new communities integrated with subway stations.
- All TOC sites are acquired permanently by the province for the dual purpose of transit construction and later TOC, and are based on technical/project requirements, land use planning considerations and economic viability.

Benefits of TOC

- increasing transit ridership and reducing traffic congestion
- increasing housing supply (including affordable housing) and jobs
- catalyzing complete communities based on good planning principles
- offsetting the cost of station construction which would save tax payers’ money
- stimulating the economy through major projects for years after COVID-19

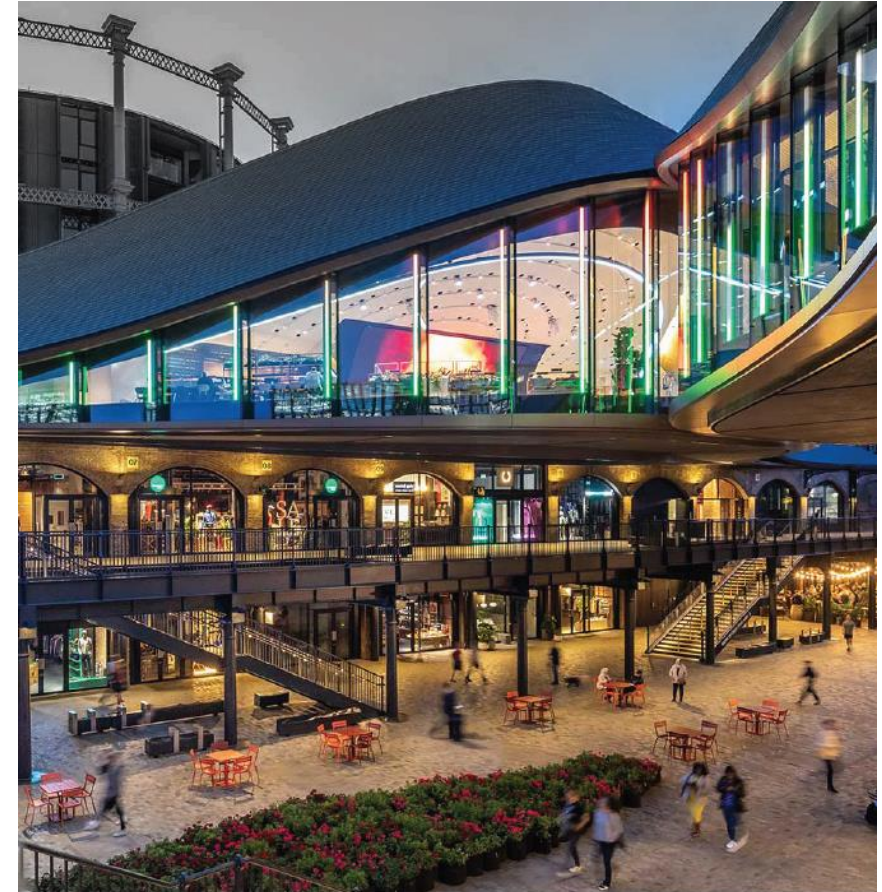
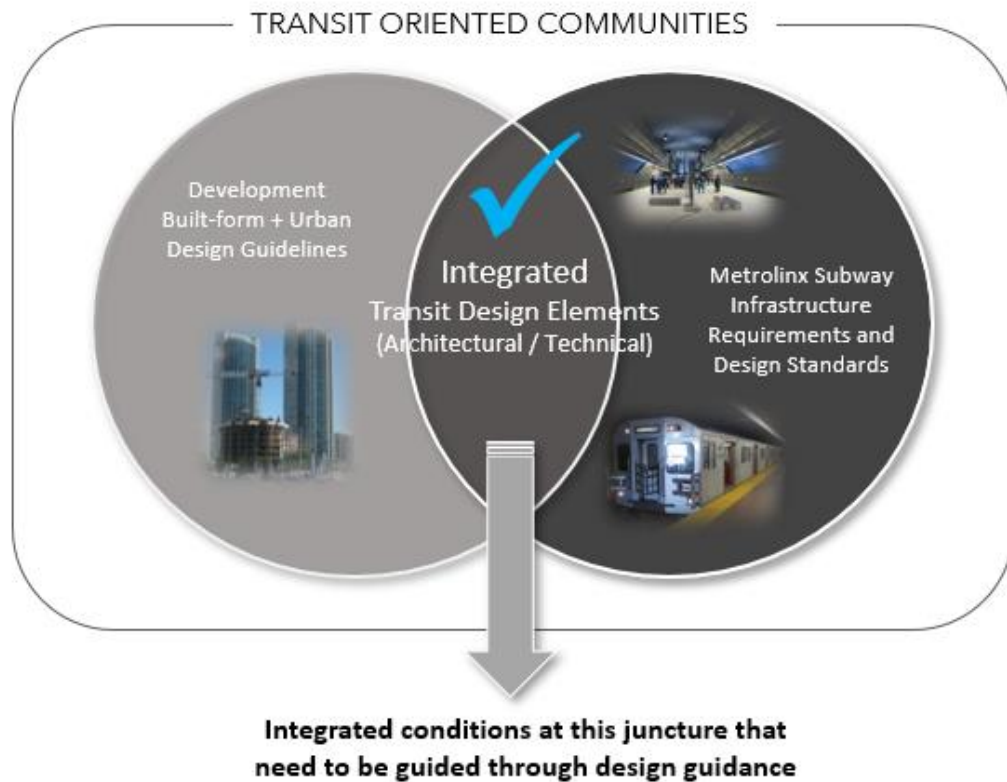


Figure 2: King's Cross, London

Purpose of Guidelines

TOC DESIGN GUIDELINES SUBWAY STATIONS INTEGRATED WITH DEVELOPMENT



Help manage the Interface between Development and Transit Infrastructure:

- **Integration** methods and common typologies between development and subway infrastructure
- **Clarity of functions, needs and technical coordination** between private development and public transit infrastructure
- **Areas of influence** that shape the customer experience
- **Design guidance** that may be appropriate to include or refer to from other streams of TOC analysis and design requirements work

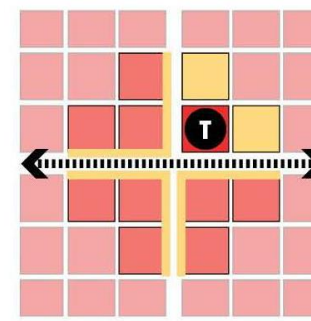
Benefits

(excerpt)



How will the Guidelines be used?

- **Ensure Coordination:** Bolster holistic design thinking on matters of coordination between development and stations and the complexities related to integration and interface
- **Inspire:** Serve as an inspirational document, speaks to North American and global TOC precedents and examples
- **Inform Conceptual Design:** Assist with generating concept designs early in the planning, design and negotiating stages of development proposals
- **Developer's Checklist:** Provide a high-level design reference framework and checklist for the development industry
- **Complimentary Guidance to Other Requirements:** Serve as a precursor and bridge to other development design requirements and guidelines
- **Pre-Design Stage Document:** It outlines strategic considerations to maximize the benefits of the TOC program.
- **A 'Living Document':** Content developed around what we know today. Lessons learned and new information will be gathered and documented to inform future updates



1

Connectivity

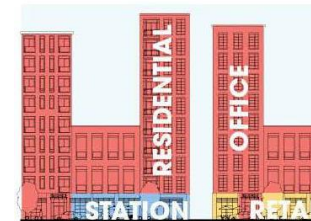
Design a porous fine grain neighbourhood to provide routing options and to ensure intuitive wayfinding to the station.

2

Design for Density

Encourage increased ridership by increasing density closer to the station.

Development
Station
Retail



3

Mixed Use

Create planning strategies that encourage a mix of uses that include residential, employment, retail and commercial in creating complete communities and connecting people to destinations

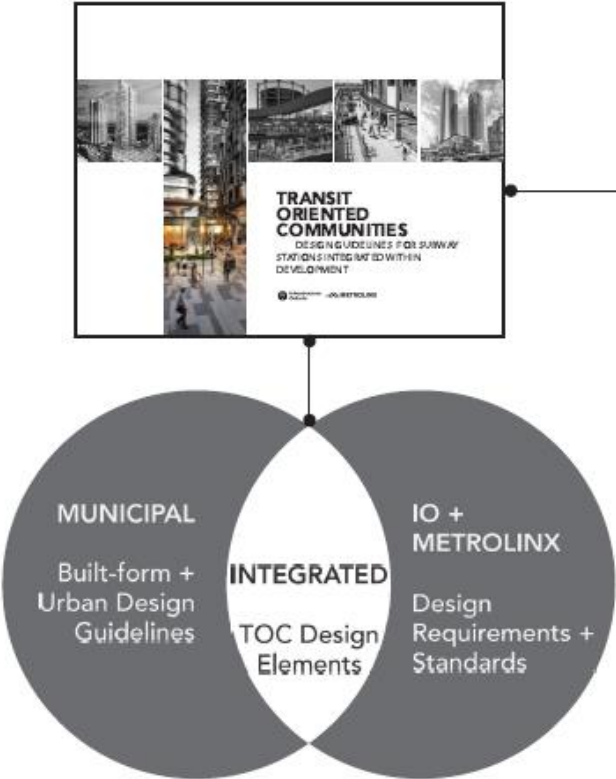
4

Walkability

Ensure emphasis on continuous street frontages with animated ground floors and complimentary uses that support the customer journey to the station.

Relationship to Other Requirements and Standards

This document is intended to provide high-level design guidance, and is not intended to replace existing design requirements/standards developed for subways by others including municipalities.



- DS-00 Master Front End
- DS-02 Universal Design Standard
- DS-03 Metrolinx Wayfinding Design Standard
- DS-03 P1 and P2- Metrolinx Sign Implementation Manual
- DS-07 Bike Infrastructure Design Standard
- DS-09 Subway Station Architecture Design Standard
- DS-11 Metrolinx Third Party Entrance Connection Requirements
- TTC Design Manual
- Metrolinx Adjacent Development Guideline for Priority Transit Projects





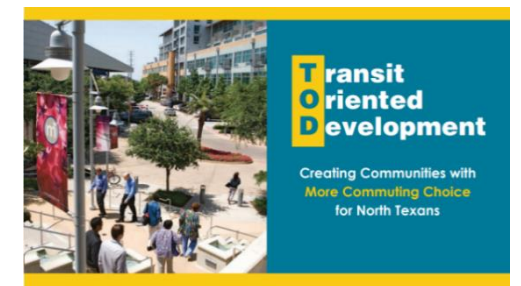
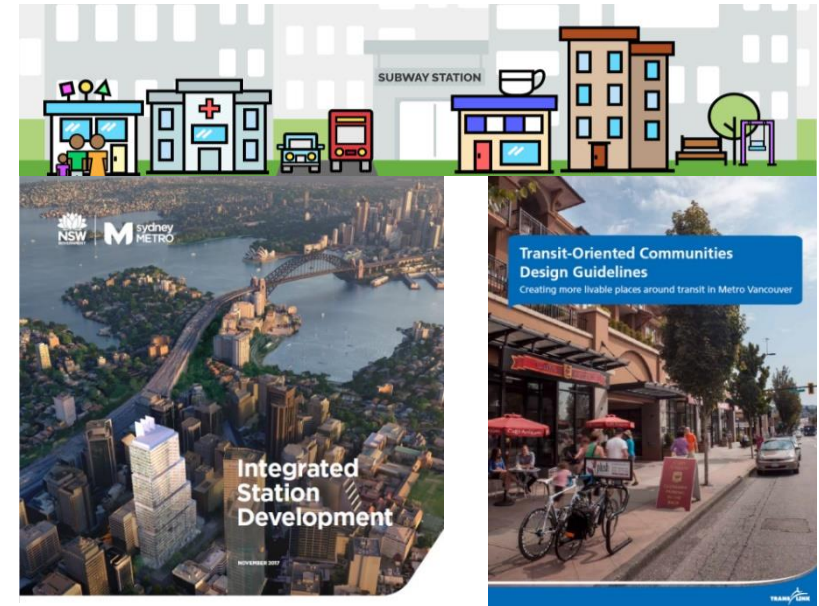
What is the Municipalities' role in the Guidelines?

Partners: Municipalities are critical partners in the successful delivery of TOC developments with shared provincial-municipal objectives

Integration: The Guidelines provide insight, awareness, and highlight the **technical complexities of integration** between development and subways infrastructure with an emphasis on coordination of key components.

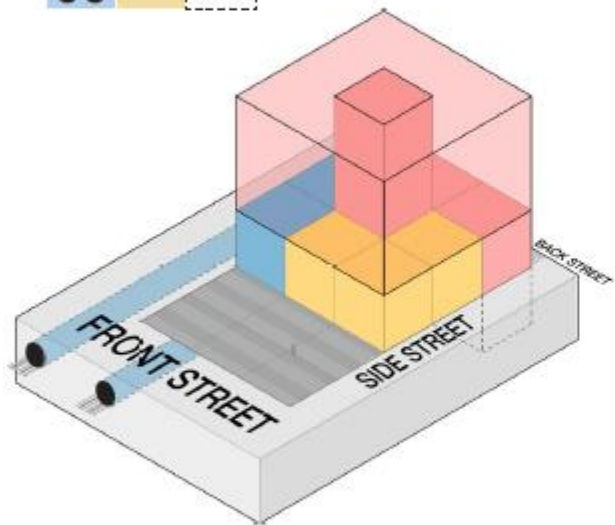
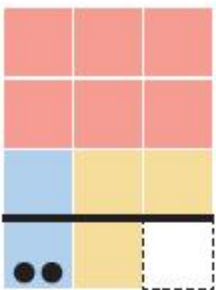
Influence: The Guidelines do not speak to the design of development, buildings or the shaping of built-form associated directly with the development as the **province will look to the municipalities to influence.**

Co-ordination: To assist with requirements for streetscape, public realm, intuitive wayfinding, denoting/design of transit entrances, and to support the customer journey to the station, etc.

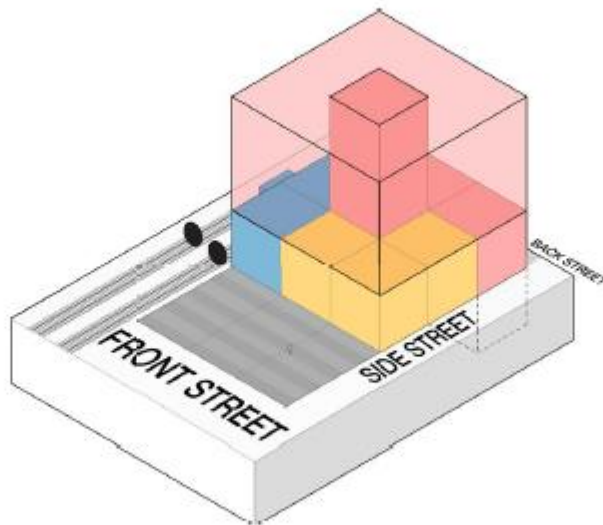
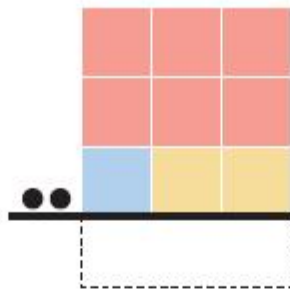


Station Typologies

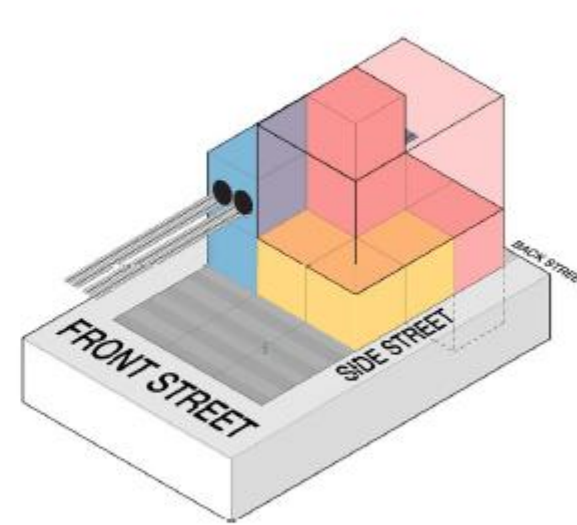
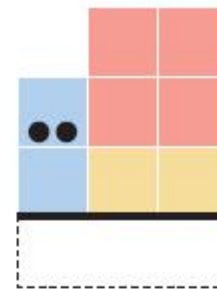
(excerpt)



Below Grade Station Typology



At Grade Station Typology



Elevated Station Typology



Complexity of Integration

(excerpt)

UNDERSTANDING INTEGRATION

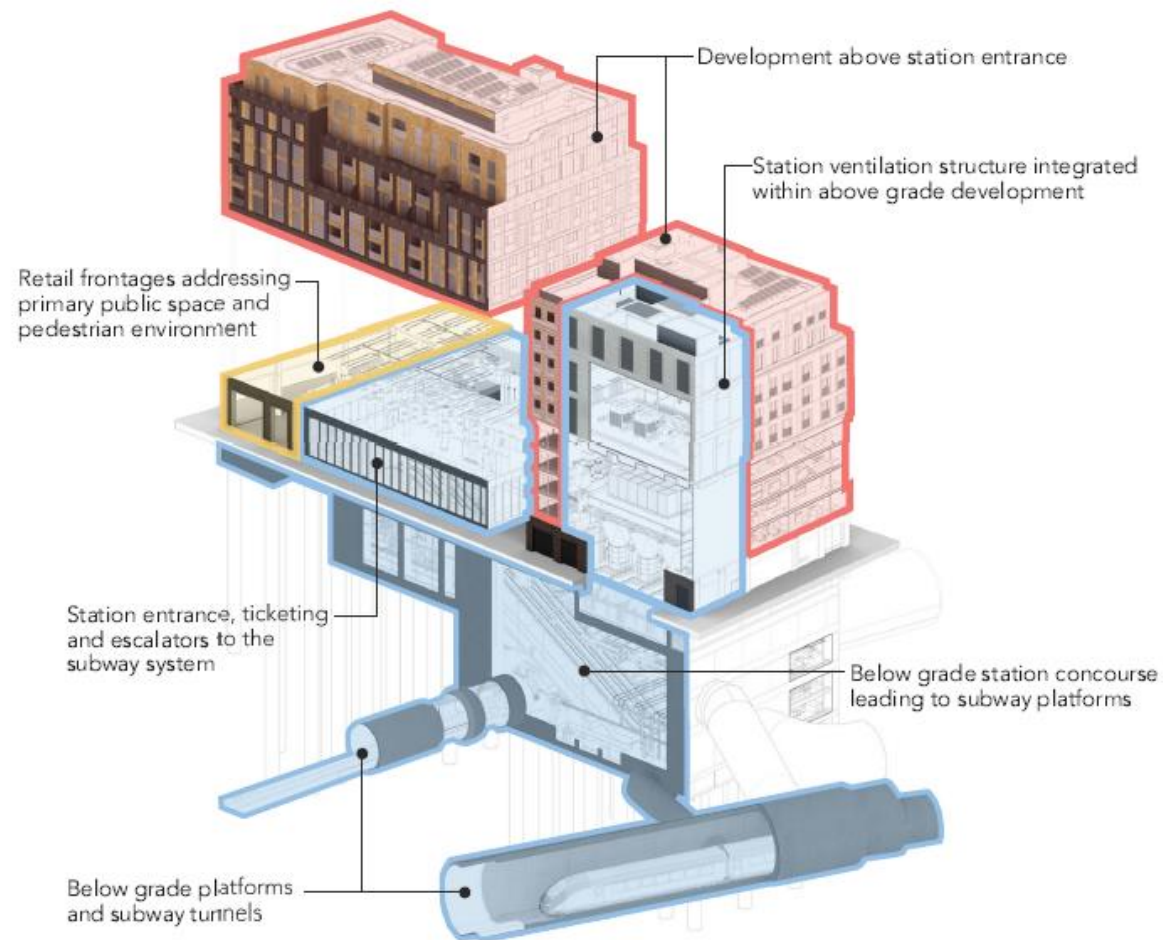
TOC requires collaboration among all partners to achieve mutually beneficial outcomes.

Integration between development and transit subway infrastructure presents a number of unique technical challenges and opportunities. Each TOC will require tailored responses that speak to the unique circumstances of their location and urban context. TOC processes must be developed for coordination with other public infrastructure, construction delivery methods, and phasing approaches.

TOC development challenges are explored in this document using two graphic devices: the matrix and the cube. Two distinct categories of challenges are explored:

- Strategic Coordination
- Technical Interface

Design teams need to understand and address the challenges outlined in this section in the early stages of the design process.



Access Prioritization

(excerpt)

2.3.1 HIERARCHY OF ACCESS

GOAL: Intuitive wayfinding and prioritizing transit users.

STRATEGY: Provide safe and seamless access for active transportation. Anticipate the interface with other forms of mobility through site design.

GUIDANCE: Design TOC public realm in general and subway station entrance in specific based on the hierarchy of access that prioritizes active transportation followed by pick up/drop off, transit and ride share.

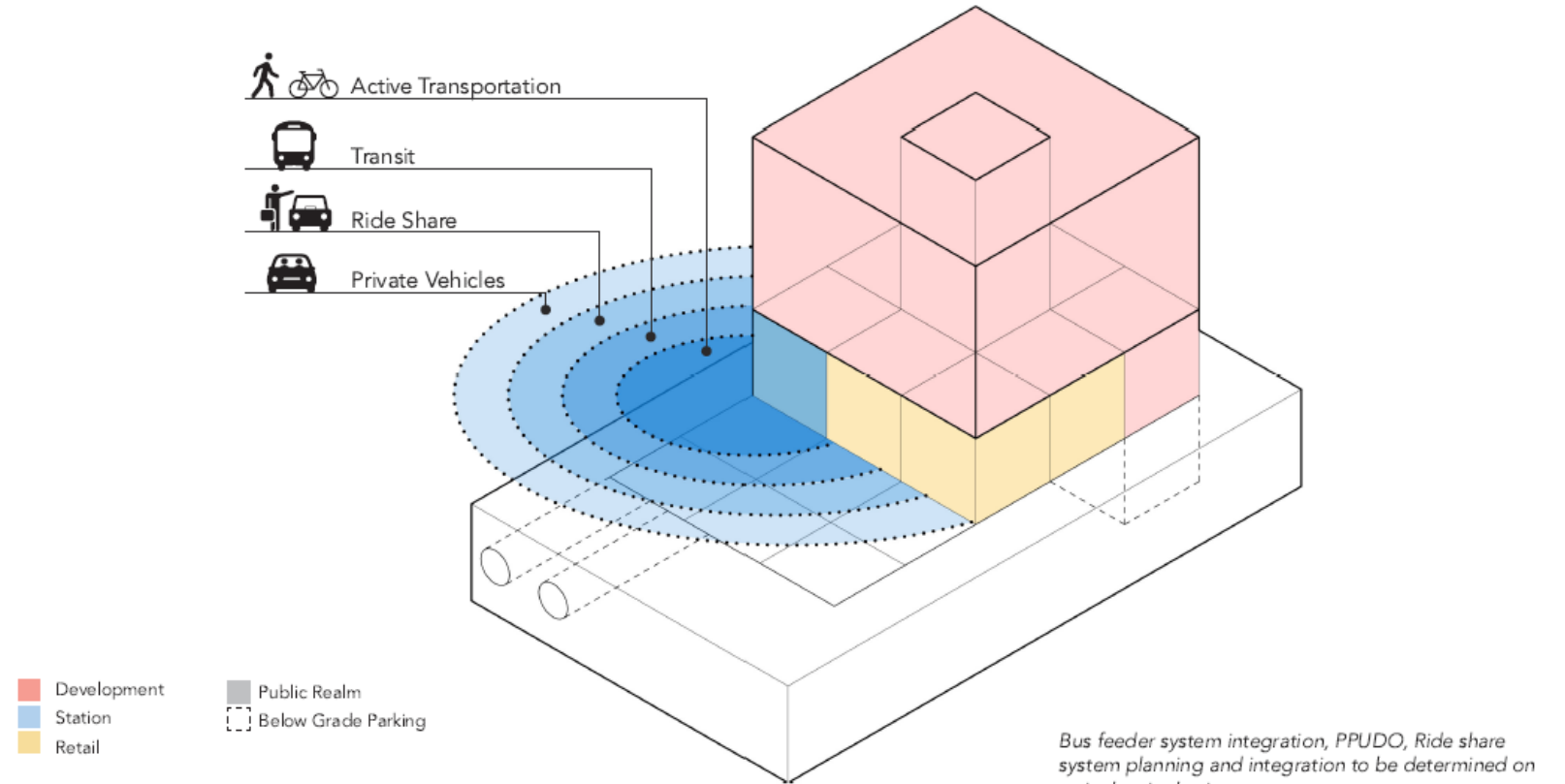


Figure 24: Hierarchy of Access

Promoting Active Frontages: considering public realm integration

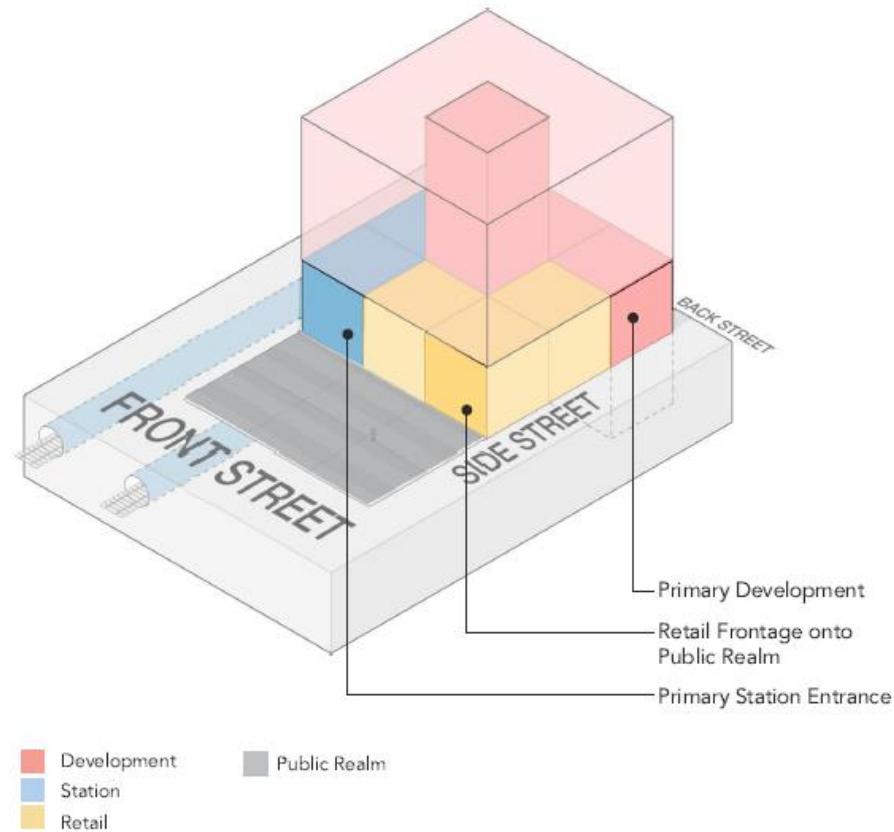
(excerpt)

2.3.2 OPTIMIZING THE GROUND FLOOR STRATEGY

GOAL: Maximize active frontages

STRATEGY: Setting priorities for ground floor uses.

GUIDANCE: Ground floor uses should be programmed in coordination with the location of the station entrance, providing amenities to support the customer experience.



Consideration of Below Grade Experience

(excerpt)

2.3.4 BELOW GRADE EXPERIENCE

GOAL: Maximizing daylight below grade to improve wayfinding and quality of customer experience.

STRATEGY: Strategic site TOC integration with below grade network of paths and connections.

GUIDANCE: Prioritize below grade daylighting for intuitive wayfinding, wellness and enhanced below grade experience.

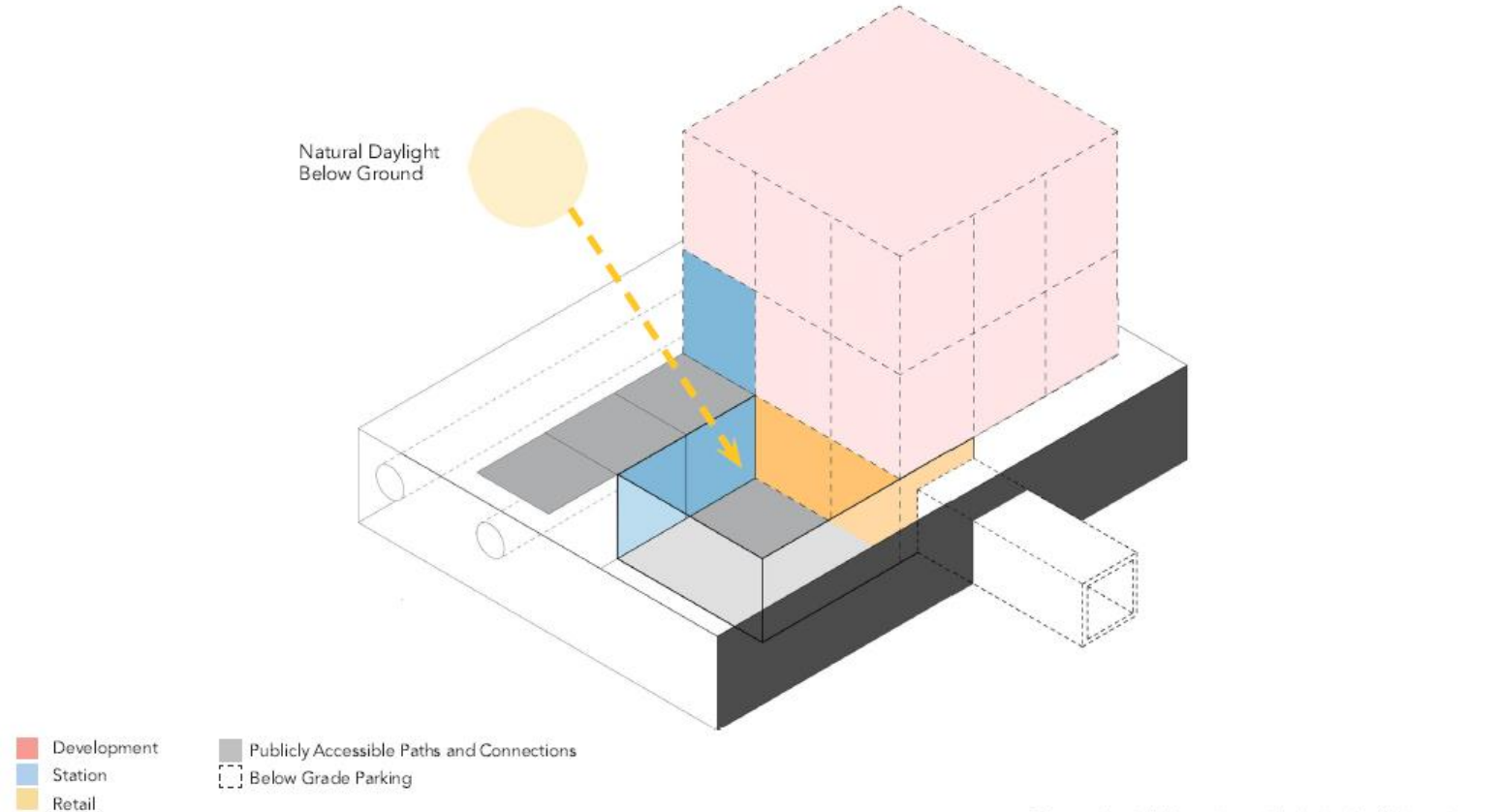


Figure 30: Below grade interface customer journey

For smaller infill locations with limited public realm, consider double height station headhouses and materiality to facilitate natural light.

Integration with Bus Terminals

(excerpt)

2.3.7 BUS TERMINAL INTEGRATION

GOAL: Seamless integration between different modes of travel within the TOC.

STRATEGY: Anticipating the interface with the urban context, the development, the public realm and other forms of mobility through site design.

GUIDANCE: Ensure optimal integration of transit needs and operations with the development to maximize TOC opportunities.

The key drivers for the bus integration are operational efficiency and customer experience while protecting and maximizing development opportunities. This section is expected to encourage strategic debate on a site by site basis to achieve the optimal site design.

The following provides high level guidance for bus terminal integration with the TOC:

- p) Ensure a **safe and comfortable customer experience** between subways and buses including providing adequate platforms and layover spaces.
- q) Prioritize **walkability** between the development site, subways and buses. Ensure transfer walking distances between Bus and other modes are as short as possible.
- r) Configure bus terminals to ensure **seamless transfer between** the bus bays, the development site and subways.



Figure 38: Marine Gateway, Vancouver
Courtesy of www.marinegateway.com

Checklist for Site Considerations

(excerpt)

DEVELOPMENT INTEGRATED WITH SUBWAY STATION SITE CONSIDERATIONS	NOTES
REGIONAL CONTEXT	
Is the site located in an urban centre?	
SITE CONTEXT	
Is the development integrated with the subway station?	
Are there any special transit considerations? Bus Interchange?	
LOCAL CONTEXT	
Is the development consistent with the local aspirations and goals?	
Does the local context provide immediate development opportunities?	
CONNECTIVITY	
Does the development site include high quality connections for TOC pedestrians and cyclists?	
Does the site plan for multi block developments include walkable block sizes no more that 150m in length?	
Are all the development's internal streets open to the public 24/7?	
DENSITY	
Does the proposed development provide the highest intensity of use that is appropriate to the existing neighbourhood context?	
Does the proposed development avoid providing auto-oriented uses and focus on pedestrian and transit oriented uses?	
Does the proposed development minimize off street parking and maximize provision for ground floor space and outdoor public realm?	
MIXED USE	
Does the proposed development provide a mix of uses that will complement the surrounding area uses to maximize its contribution to a complete community?	
Does the proposed development provide high quality public open spaces and plazas?	
WALKABILITY	
Does the proposed development provide an animated ground floor that addresses the street and contribute to the walkability of the street?	
Does the facade of the proposed development create interest, comfort and materiality at human scale to contribute to place making	
Does the development provide high quality streetscapes that are accessible to all?	
Does the development provide adequate high quality short and long term bicycle parking?	
Does the development provide protection from the elements?	
Is Illumination consistent throughout the development, providing pedestrian scaled lighting?	
Are all proposed streets designed as complete streets with high quality accessible sidewalks, bicycle paths, pedestrian and bicycle crossings and intersections?	
Does the design of the public realm put people first?	

The Team



IO TOC Subways Program: Client and staff reps participating on Core Team



MX Design Division: Project management and staff reps participating on Core Team

MX Internal Stakeholders: Business Units

Customer Infrastructure Design (Customer Experience + Wayfinding), Universal Design, Sustainable Design, Sponsor Office, Rapid Transit Project Planning and Transportation Planning, Project Delivery and Technical Services Teams, Customer Insights, Design Implementation, Facilities Engineering and Assurance, Fare Integration, Advertising Sales/Marketing, and Priority Projects Technical Assistants.



Lead Consultant: Expertise on urban design and broader city building considerations (public realm, pedestrian/customer journey, etc.)



Consultant: Expertise on integration methods, typologies and complexity related to development integration with transit facilities and infrastructure through transit oriented communities lens

Roundtable

Influence of COVID-19 on Planning: Open Discussion of Trends and Impacts

Paul Smetanin, President and CEO, Canadian Centre for Economic Analysis

COVID-19 AND TRANSIT (RECAP)





- Short Term**
 - Significant Decrease in Overall Trip Making
- Short Term**
 - Concerns about Crowding and Shared Space
- Short Term**
 - Significant Decrease in Immigration
- Short Term?**
 - Significant Increase in Remote School
- Short Term?**
 - Shift to cars and active modes (where feasible)
- Long Term**
 - Significant Increase in Telework
- Long Term?**
 - Shifts in Home and Work Location (decentralization)

Transit Recovery

Fall 2020 vs. 2019
(Fare Card Taps - Avg Weekday)

All GTHA	-60 to -70%
Toronto Streetcar & Subway	-70 to -80%
Toronto Buses	-40 to -60%
GO Commuter Rail	-85 to 90%

LONGER-TERM IMPACTS

Factor	Long-Term Impact
 <h2 data-bbox="361 318 698 362">Remote School</h2>	<p data-bbox="1345 297 2435 389">Some increase is expected for post-secondary and adult learning but amount and impact is likely modest.</p>
 <h2 data-bbox="361 468 1016 514">Shift to cars and active modes</h2> <ul data-bbox="361 525 1258 632" style="list-style-type: none"> Mix of decreases in multi-car homes and additions: 8% of households shed a car in Peel, 7% of households added a car in downtown (MX COVID Survey) 	<p data-bbox="1345 504 2435 596">“Sunk” costs will influence future choices but there is no evidence of a significant increase in vehicle registrations.</p>
 <h2 data-bbox="361 672 665 716">Remote Work</h2> <ul data-bbox="361 728 1258 872" style="list-style-type: none"> Only 26% of downtown workers are currently working on location all the time (TRBOT Survey) Firms report 2-2.5x increase vs. pre-pandemic to continue post-COVID /w downtown offices leading (StatsCan) 	<p data-bbox="1345 675 2369 768">Many businesses expect a significant increase in telework to continue. Expected level varies by sector.</p> <p data-bbox="1345 789 2219 833">✓ Has been focus of MX analysis work to-date</p>
 <h2 data-bbox="361 903 1197 1005">Shifts in Home and Business Locations (decentralization)</h2> <ul data-bbox="361 1016 1258 1196" style="list-style-type: none"> 69% of Ontarians stated that the pandemic had no impact on plans to move (April 2021, Right at Home survey) While WFH has increased the desire for more space, only 18% of Ontarians would sell to move a smaller community (April 2021, Right at Home survey) 	<p data-bbox="1345 903 2435 1048">Some urban dwellers have moved to suburban and rural areas. However, sales and prices are increasing across the region and size of shift is challenging to pinpoint.</p> <p data-bbox="1345 1105 2402 1249">Sublease office space on market is significantly increasing in downtowns but no clear shift to suburban locations.</p>

Expected Impact on Commuting Volumes by 2041:

Work-from-Home and P2G

March 2021

**CANADIAN CENTRE FOR
ECONOMIC ANALYSIS**

Objectives

- To understand the significance and sensitivity transit demand in the GGH by 2041:
 - Municipalities reaching P2G population and job targets
 - Accelerated industry structural changes in remote working habits (eg. made evident by COVID19)
- All results have been aligned to P2G assumptions

Note demonstration project
Scope of analysis was to use P2G
assumptions

Weakness of current analysis is conformity with P2G assumptions
More sig than WFH effects. Current work begins the conversation
abt WFH impacts between regions and inherent strong asspts
behind P2G

WFH data is from 2020.

Approach: Remote Work

US data for occupations
 Industries and occupations
 Higher incomes have higher ability to work remotely
 Younger age groups, lower incomes..... greater reliance upon them to pay for transit

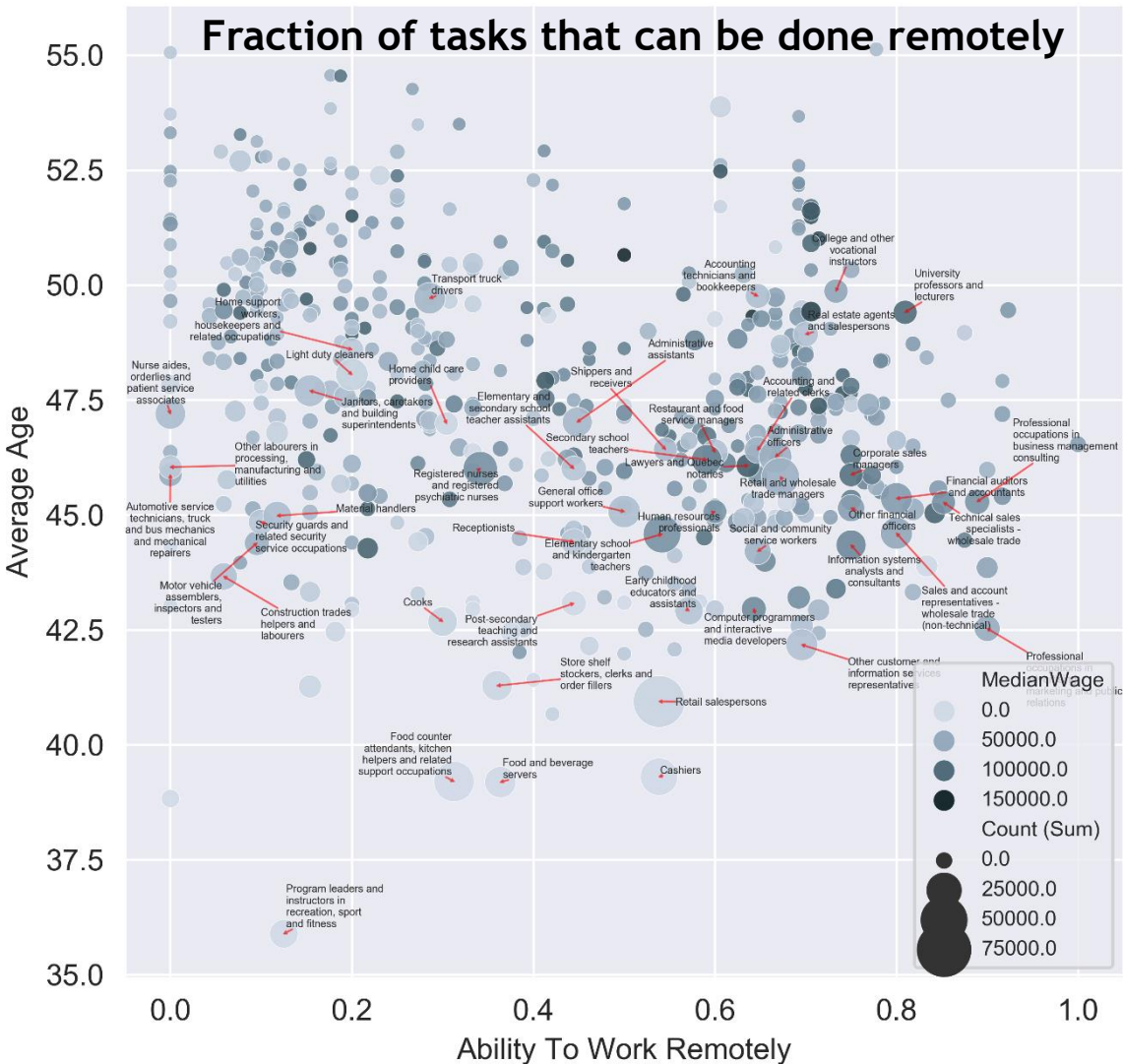
Occupations: varying ability to work remotely

Industry has a mix of occupations, some of which are more amenable to remote work than other

Occupations tend to vary with age as well resulting in an age bias for remote working

- Toronto is shown as an example

CD : Ontario, Toronto



Results: Impact of Remote Working

- Current WFH is 160% higher than pre-pandemic levels
- Post pandemic WFH expectation is 50% higher than pre-pandemic levels

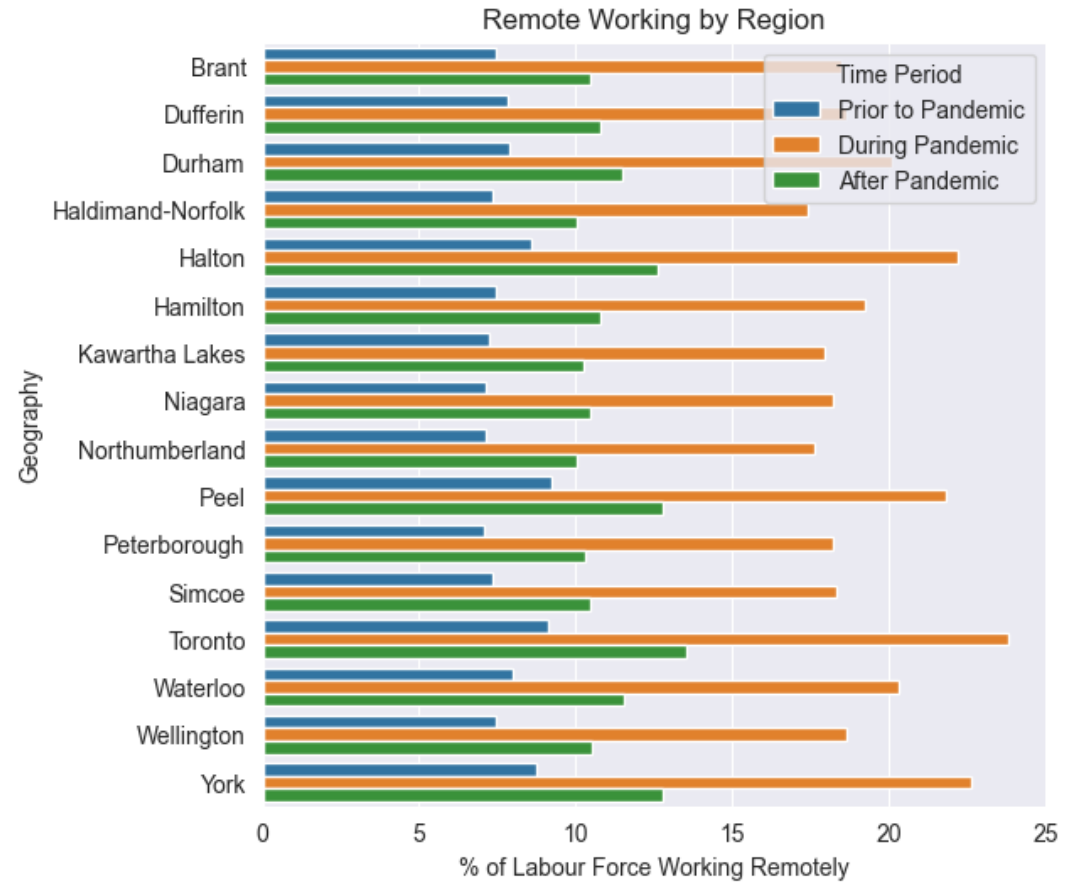
P2G assumptions have an impact on this

P2G regions level so inter-region is between Peel and Toronto for example, or York and Toronto. Impact of WFH within Peel, or within Toronto not captured in 'inter-region'. Everyone who lives in the City of Toronto but commutes downtown not included in the inter-region transit demand (no technical reason in the modelling, but it was just a quick demonstration project)

WFH impact upon inter-region transit demand is marginal at about a 0.5% difference by 2041

Post-pandemic WFH changes vary across regions driven by different industries

Compared to pre-pandemic levels, City of Toronto and York Region will see the highest WFH relative change. Peel Region the least.



Other observations & considerations

Transit mode and constraints on growth are material factors for public transit demand:

- Approx. 9.5% to 28% increase in public transit demand depending upon private vehicle use assumptions and under P2G

Ability of households to move:

- Dwelling formation rates: Industry is unlikely to meet P2G targets creating further affordability pressures and limiting the ability to move close to location of work
- Building forms and unit sizes: missing middle, over-housed versus under-housed, productivity of infrastructure
- Affordability: City of Toronto centric for younger cohorts, new immigrants and singles given high formation rates of smaller dwelling spaces
- Occupations vary with age: Results in an age bias for remote working. Younger employees tend to lack the ability to WFH and have lower wages but are the cohort that will pay for transportation use

Job formation and proximity to jobs

- Infrastructure is a scarce resource. This trend is expected to accelerate once financial reality of pandemic settles in, affecting location and availability of infrastructure for job formation (eg. Toronto will still remain desirable).
- Despite policies to the contrary (eg. P2G), City of Toronto continues to dominate job growth versus population growth
- Availability of established office space could continue to attract jobs to the City (with existing businesses using smaller footprints)
- Non-traditional transit patterns if people work ½ day in office

DISCUSSION QUESTIONS

- How are municipalities considering post-COVID disruptions or impacts in their ongoing Municipal Comprehensive Reviews?
- How do you expect increased Work from Home (WFH) will impact demand for employment land use in your municipality?
- How do you expect residential demand will be impacted in your municipality?

Wrap Up and Next Steps

