Brampton Municipal Parking Strategy
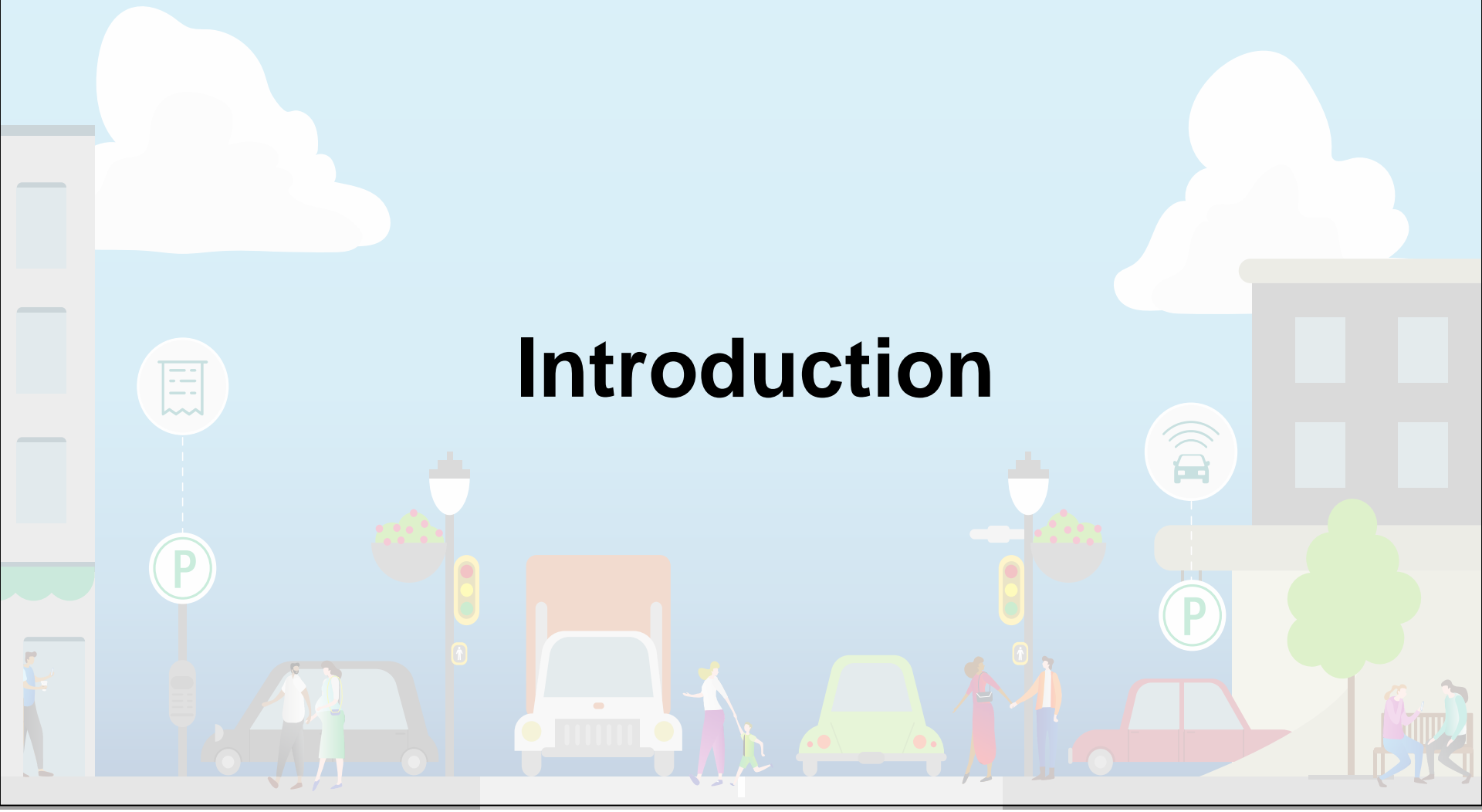
Introductory Council Session
June 28, 2021

Agenda

- Introduction

- Project Background & Objectives

- The Importance of Parking in the Urban Context

- Emerging Trends

- Modern Parking Management Strategies

- Next Steps

- Discussion

Introduction

IBI Group

- Globally integrated architecture, planning, engineering, and technology firm.

- Completed parking studies on a municipal level, site specific level, and for large institutions such as post-secondary schools.

- Project staff are recognized experts in parking management and policy.

Project Background
& Objectives

Project Purpose

The purpose of the Municipal Parking Strategy (MPS) is to develop a **forward thinking, comprehensive parking policy, management and implementation framework** for Brampton that is consistent with the **Brampton 2040 Vision** (2040 Vision), **2018-2022 Term of Council Priorities** (TOCPs), other **relevant City department objectives**, and the **2041 Metrolinx Regional Transportation Plan** (RTP).

Request for Proposal | RFP2020-232

Develop a Municipal Parking Strategy

Submitted to City of Brampton
by IBI Group
February 5, 2021

Project Objectives

- Develop a vision and guiding principles that are consistent with provincial, regional, and forward-looking municipal plans and address public input

- Develop a modern city-wide parking policy framework that is sensitive to Brampton's context

- Develop a future direction for the City's parking operations and enforcement with regard to on-street and off-street parking assets
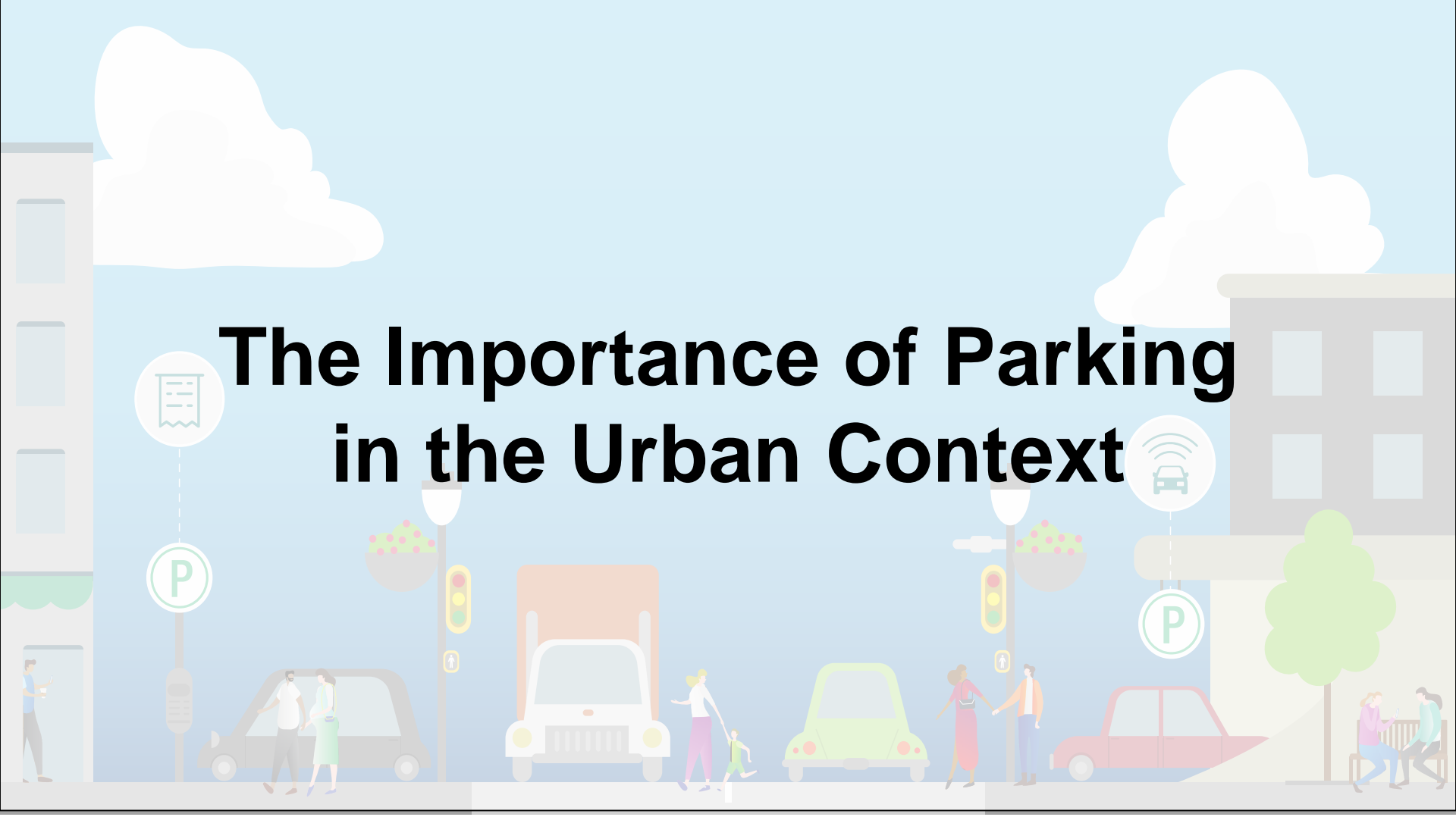
Project Background

- Brampton's population and employment are projected to grow by over 40% by 2051

- Brampton is shifting towards greater intensification with goals to reduce parking supply

- Major investments in transit infrastructure, decreasing parking demand
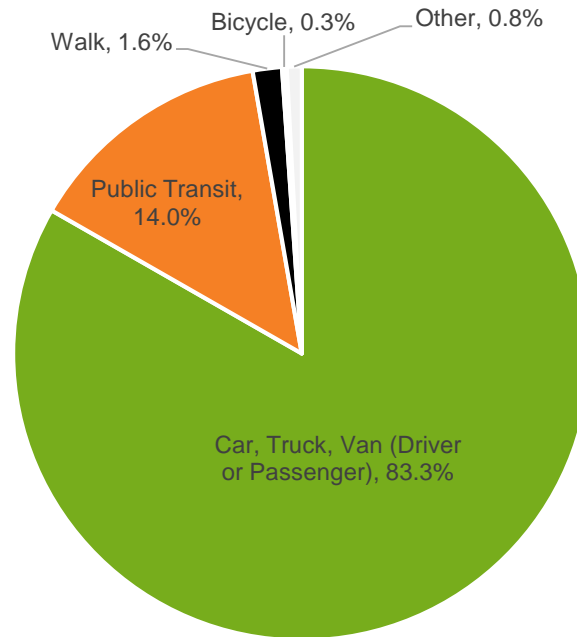
- Goods movements is a key economic activity

# The Importance of Parking in the Urban Context

Parking

- Parking is an essential part of a transportation network

- Automobiles are the most common mode of commuting

- Existing low density land use patterns have contributed to auto-dependency

Brampton 2016 Main Mode of Commuting

Walk, 1.6%   Bicycle, 0.3%   Other, 0.8%

Public Transit, 14.0%

Car, Truck, Van (Driver or Passenger), 83.3%

Negative Impacts of Parking

- Increases automobile use (induced demand)
  - Urban sprawl and congestion
  - Greenhouse gas emissions
  - Health impacts
- Increases housing costs
- Inefficient use of space, decreases accessibility for non-automobile users
- Impermeable surfaces contribute to runoff and the urban heat island effect

BRAMPTON
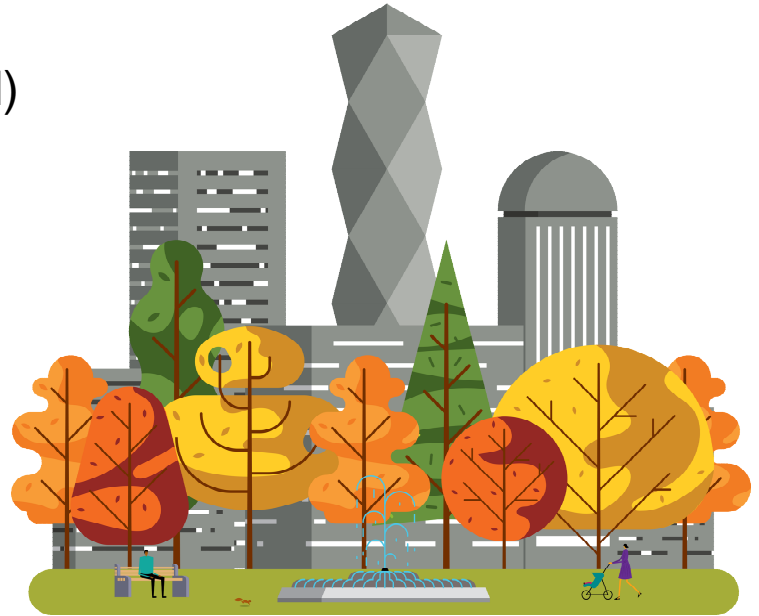
Parking in North America

- Parking is often over-supplied and over-prioritized in the North American context

- Each individual car has approximately 4-5 parking spots

- Parking should be approached strategically to meet the demands of the local context while minimizing negative impacts
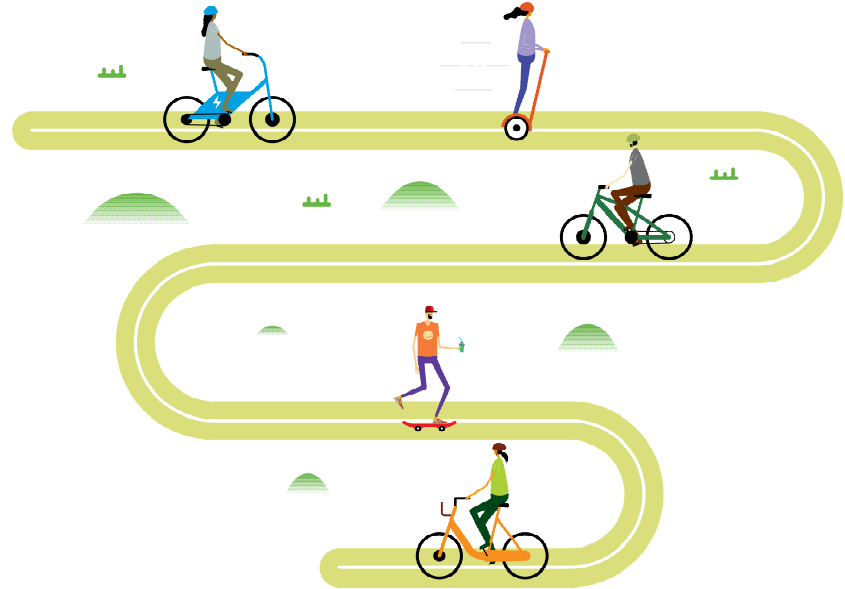
Image Source: Bloomberg

Emerging Trends

Shared Economy

- The use of shared transportation modes is increasing

  - Rideshare

  - Carshare

  - Micromobility

  - Others?

Connected Automated Vehicles (CAVs)

- Impacts of CAVs on parking supply may include:

  - Reduced parking demand

  - Increased parking capacity

  - Additional curb space for pick-ups and drop-offs

Image Source: National Association of Countries

Municipal Parking Strategies

- Partnerships with local developers to supply public parking in new developments

- Shared private parking facilities for land uses with opposite peak periods

- Shared parking facilities for truck parking

Key Lessons

- Future parking demand is uncertain given emerging trends

- Flexibility should be included in parking strategies to increase resilience to future changes

Modern Strategies for Parking Management

Parking Management for Smart Growth

1. **Parking Prices** that reflect market demand

2. **Parking Revenues** that benefit the neighbourhoods from which they are collected

3. **Parking Minimums** elimination

4. **Partnerships & Shared Facilities**

5. **Parking Enforcement** identified as key to successful strategy

1. Parking Prices

- Parking prices can be used to achieve targeted utilization levels

- **Pricing Strategies:**

  - Location based pricing

  - Time based pricing

  - Performance based pricing

Image Source: Streets Alive Yarra
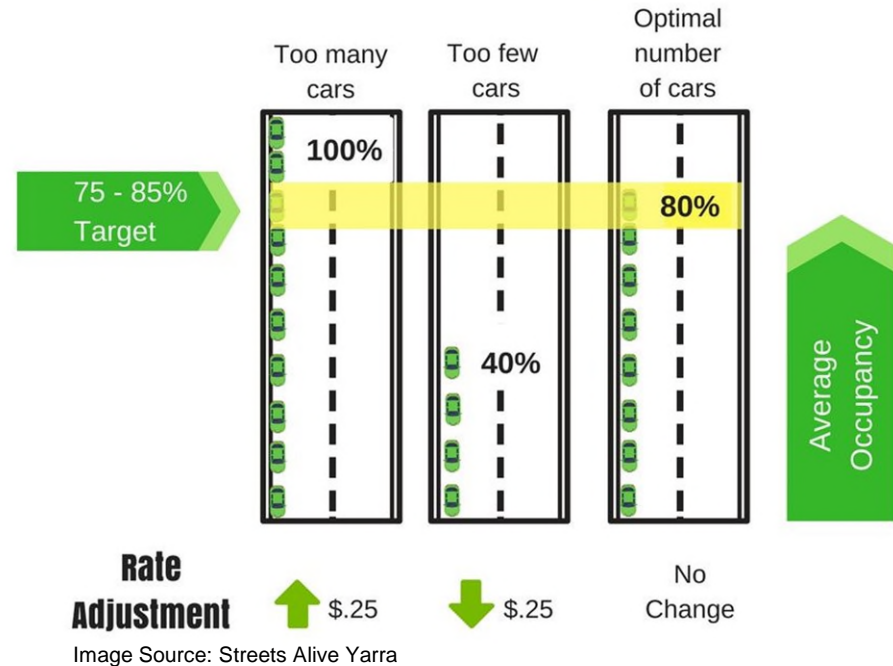
2. Parking Revenues

- Parking Benefits Districts:

  - Geographic areas where parking revenues are reinvested into the district

- Uses of Revenue

  - Active transportation infrastructure

  - Street enhancements (i.e. lighting, benches)

  - Street repairs

Image Source: Paul Argueta

3. Parking Minimums

- Minimum parking requirements often result in developers oversupplying parking

- Removal of parking minimums can be implemented on city-wide or area-specific basis

- Being adopted in some parts of Brampton
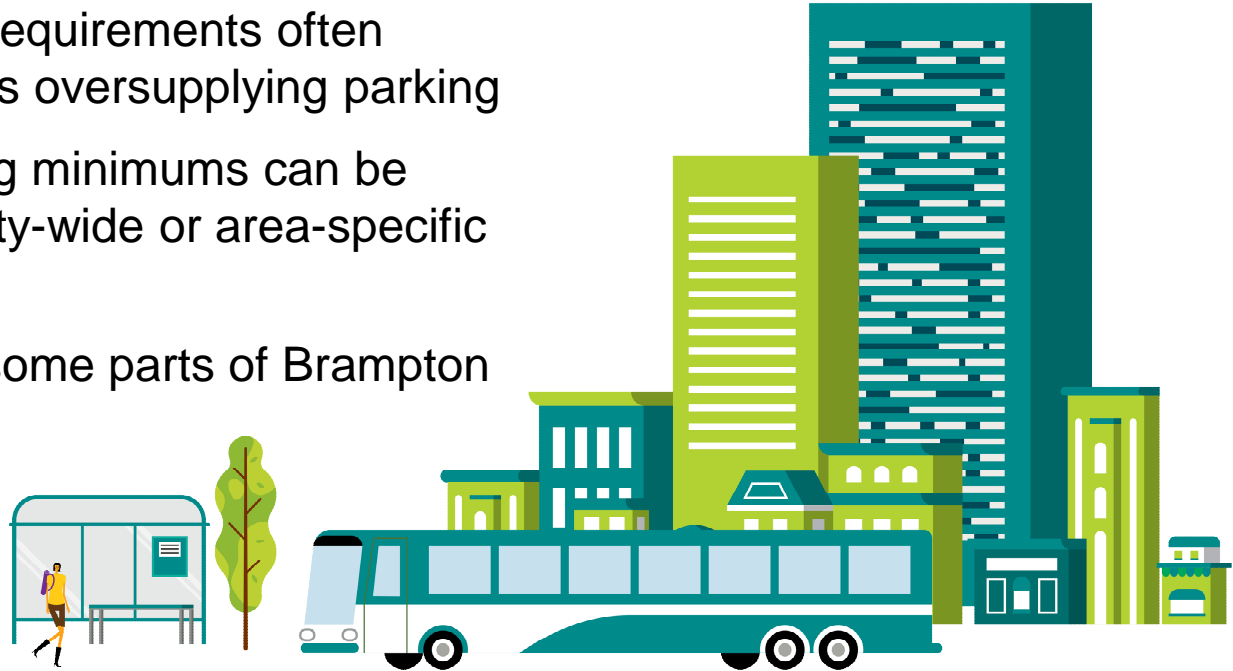
4. Partnerships & Shared Facilities

- Shared parking spaces can lead to higher parking utilization

- Public parking facilities allow municipalities to adjust rates to achieve desired utilization levels

- Mutually-beneficial partnerships with local developers
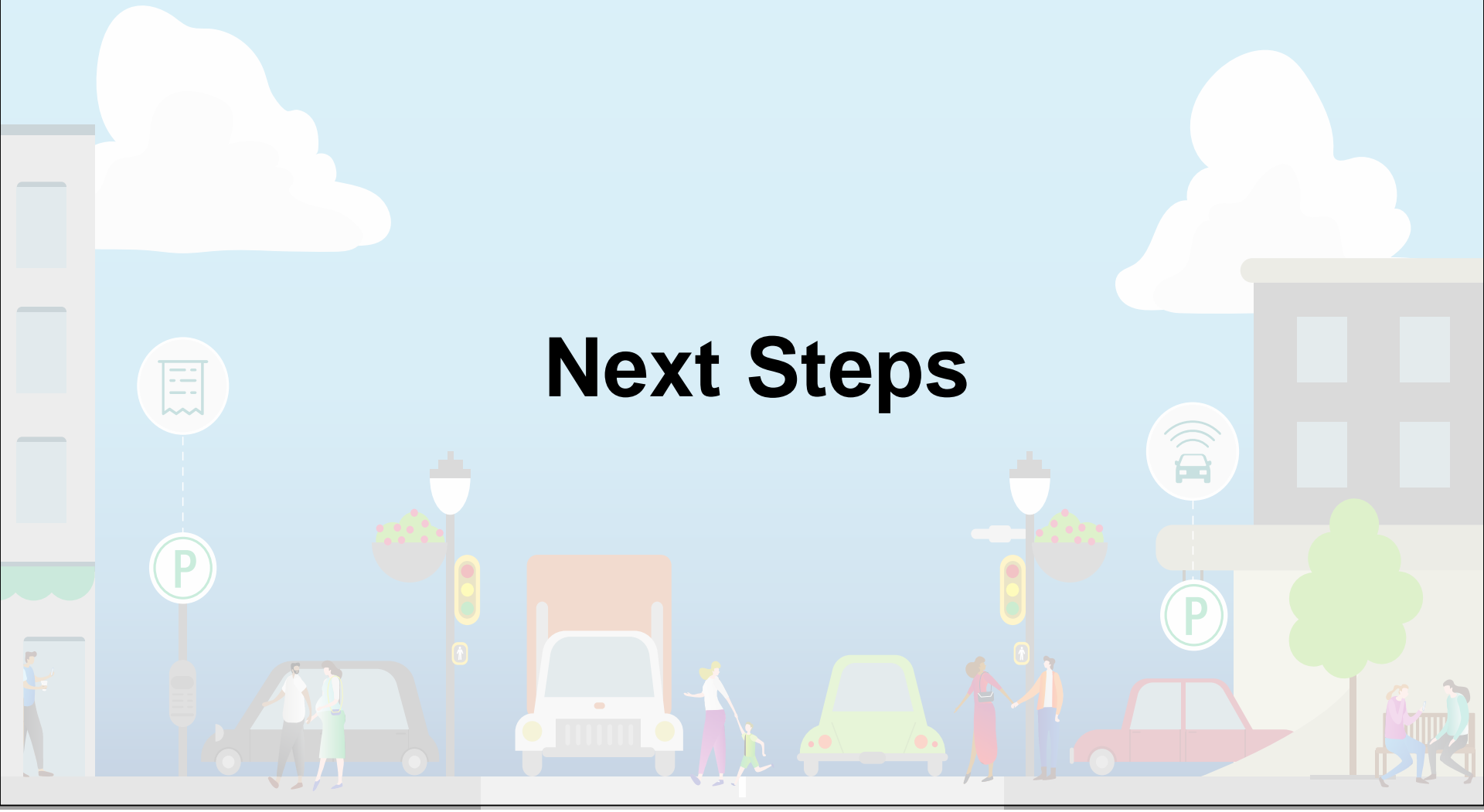
5. Parking Enforcement

- Enforcement is an important piece of effective parking management

- Parking fines should cover the cost of parking enforcement

- **Key Principles:**

    - Consistency

    - Fairness

    - Desired rate of compliance

Image Source: City of Brampton

Next Steps

Next steps

- Complete work on Task 2 Data Collection & Consolidation and Task 3 Best Practices Review

- Kick-off engagement & consultation tasks

- Phase 1 to be complete Q1 2022

Initial Aspirations

Section 37
## Density Bonusing and Community Benefits Charge

Principles of Use in Brampton

CITY PLANNING AND DESIGN
PLANNING, BUILDING AND ECONOMIC DEVELOPMENT DEPARTMENT
CITY OF BRAMPTON

COUNCIL WORKSHOP JUNE 28, 2021

Overview

1. Direction from Housing Brampton
2. Community Infrastructure Cost-sharing Tools
3. Section 37 Density Bonusing
4. Brampton's Approach
5. Section 37 Community Benefit Charges
6. Next Steps
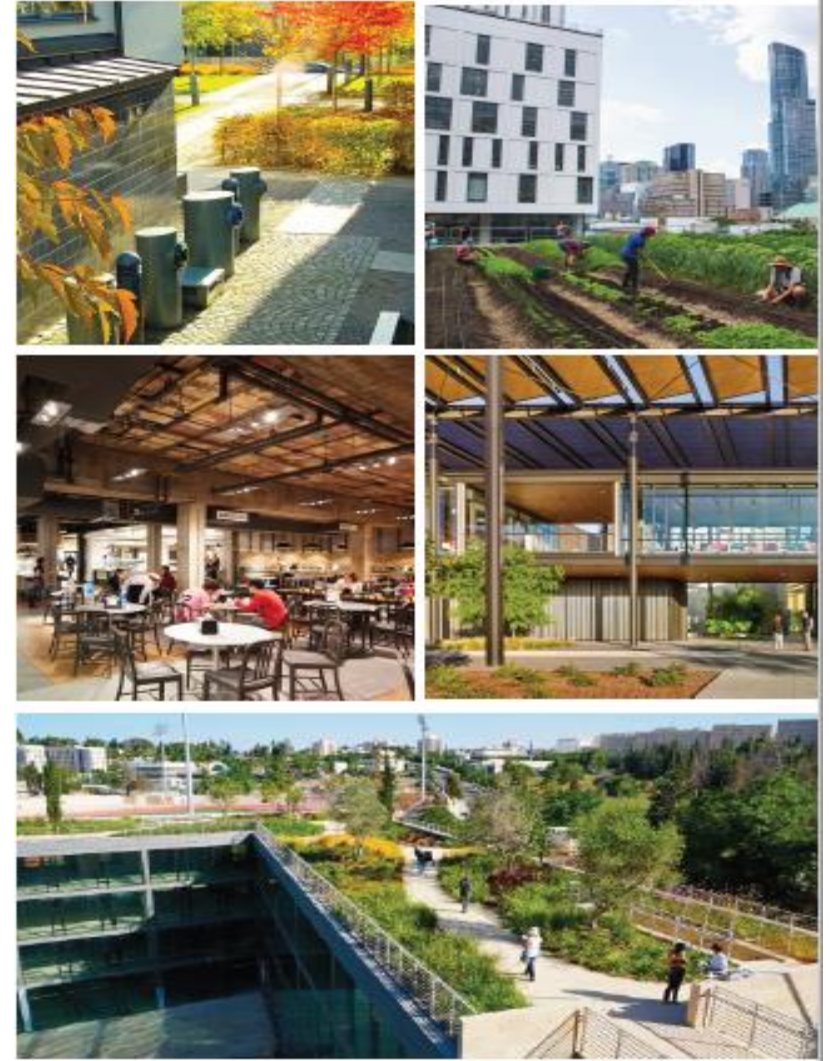
Housing Brampton

City of Brampton Housing Strategy
and Action Plan

Endorsed by City Council May 19, 2021

Recommendation PDC064-2021 – Clause 5:

"That staff advance the timely implementation of regulatory tools identified in Housing Brampton, such as inclusionary zoning, density bonusing and/or a Community Benefits Charge By-law, to facilitate affordable housing in appropriate development applications."

Community Infrastructure Cost Sharing Tools

Development Charges – Provides for city-wide infrastructure/essential services following the principle that "growth pays for growth".

Parkland Contributions – Provides for city-wide and local parkland dedications through land conveyance or cash in lieu.

Section 37 – A way to obtain local community benefits from applicable development applications.
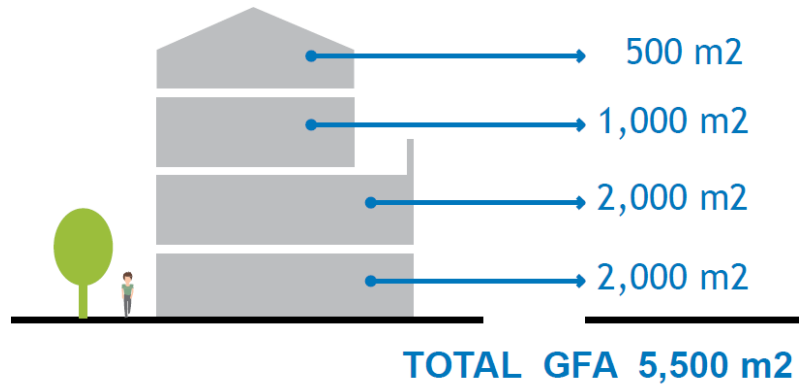
FUNDING COMMUNITY BENEFITS AND INFRASTRUCTURE

DEVELOPMENT PROJECT

DEVELOPMENT CHARGES

PARKLAND CONTRIBUTIONS

SECTION 37 BENEFITS

CITY-WIDE

LOCAL COMMUNITY

City of Toronto
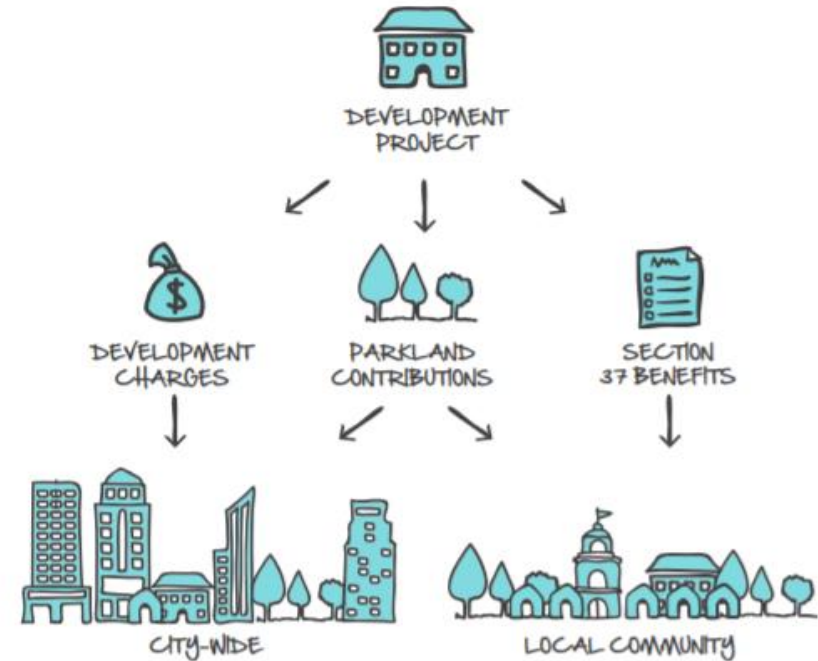
Density   Measured in units/net hectare <u>or</u> FSI

GROSS FLOOR AREA (GFA):

» The total amount of space within a building.

500 m2

1,000 m2

2,000 m2

2,000 m2

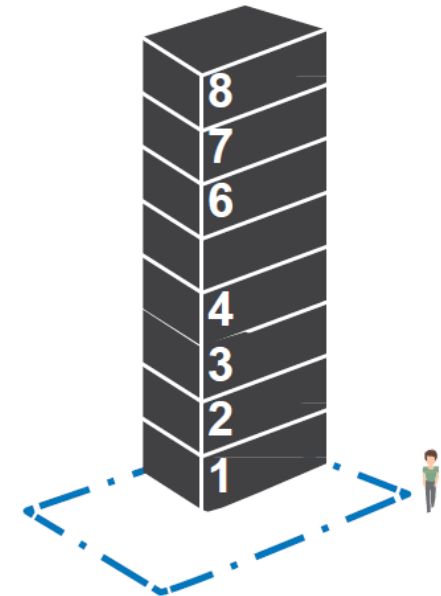**TOTAL GFA 5,500 m2**

FLOOR SPACE INDEX (FSI):

» The ratio of a building's gross floor area relative to the size of the property that it occupies.

property
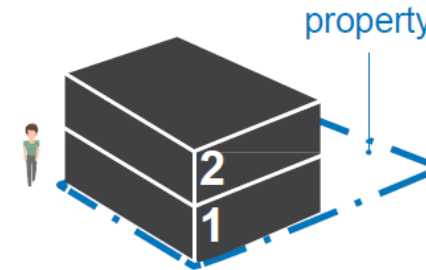
FSI = 1
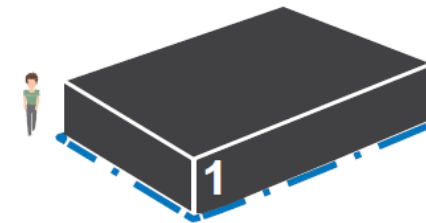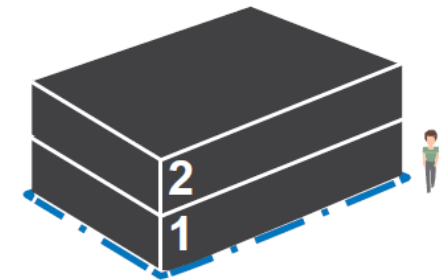(100%)

**FSI = 2**
(200%)

FSI = 1
(100%)

FSI = 2
(200%)

Density Bonusing (Bonus Zoning)

❑ A tool to exchange increase in zoned height and/or density of development in return for "facilities, services or matters"

❑ The owner/developer and the community share in the increased value of the development

❑ Land Uplift Value calculated to determine contribution

❑ Section 37 Agreement registered on title

City of Toronto
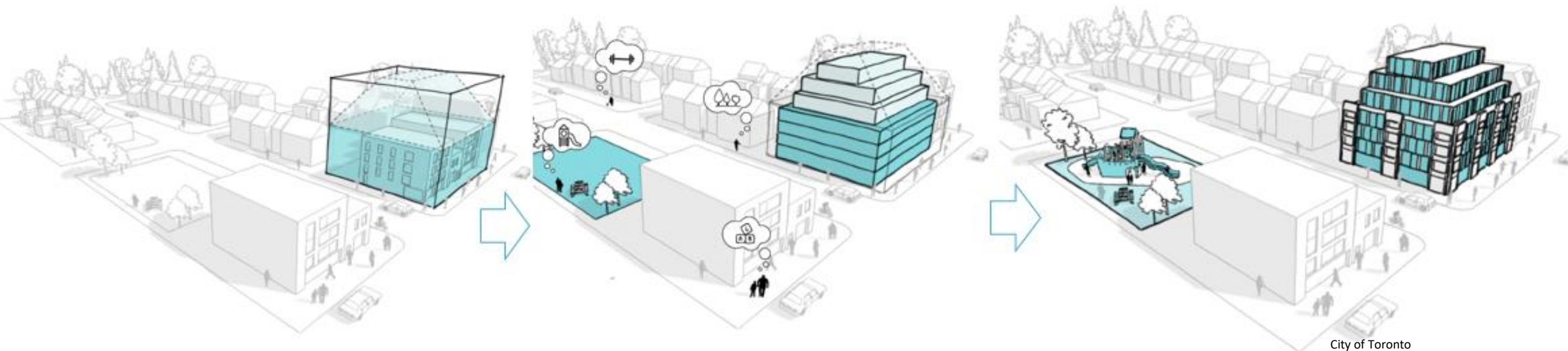
Benefit Options
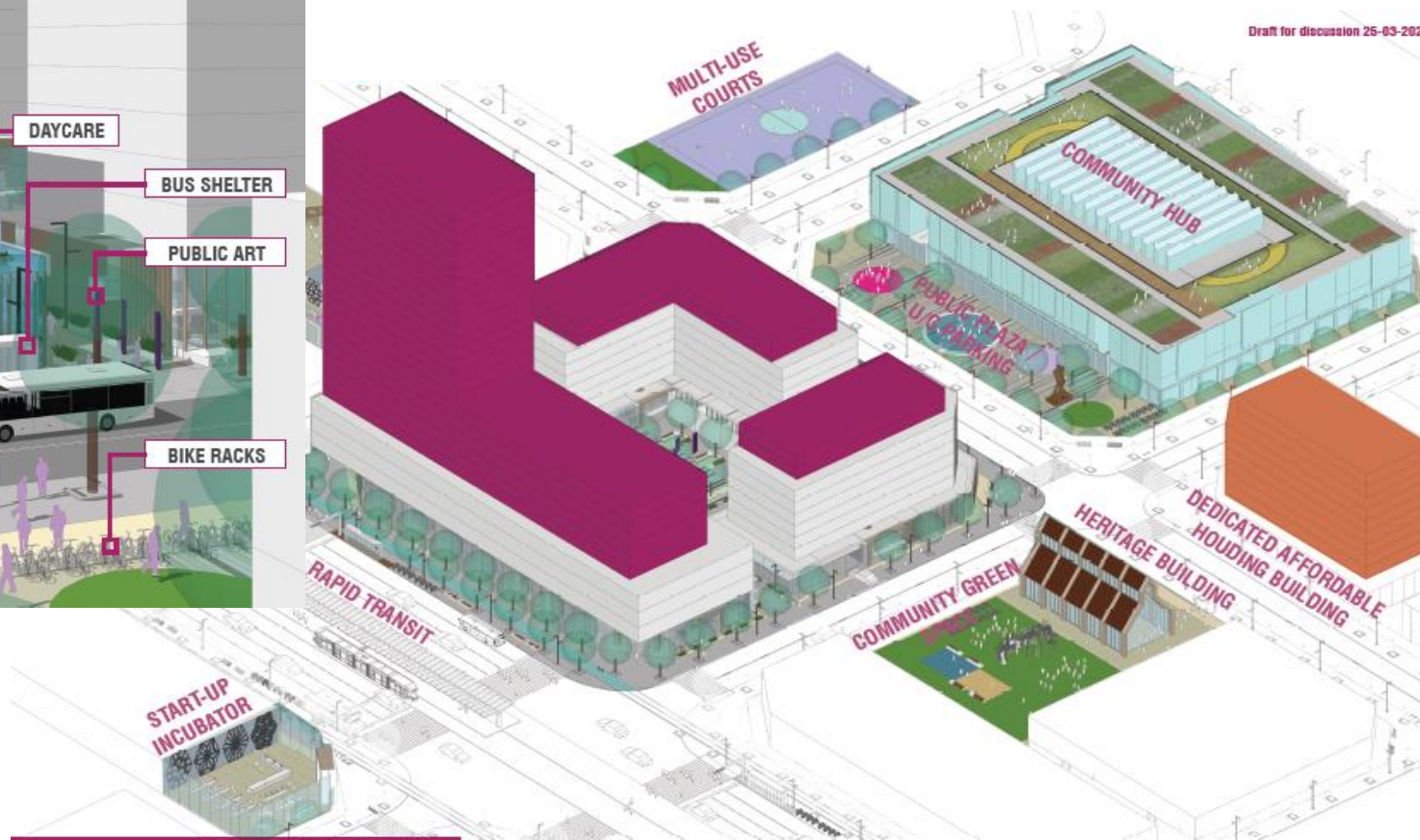
Brampton Official Plan

Policy on Density Bonusing

❑ Reflects provisions of Section 37 of the Planning Act prior to the CBC

❑ The City may develop bonusing policies on a City wide, area specific or site specific basis.

❑ Height and density increases shall not result in inappropriate neighbourhood scale or intensity or exceed capacity of community and physical services.

❑ Any facilities, services or matters obtained through density bonusing provisions shall be logically applied to areas impacted to realize community benefits because of density bonusing.
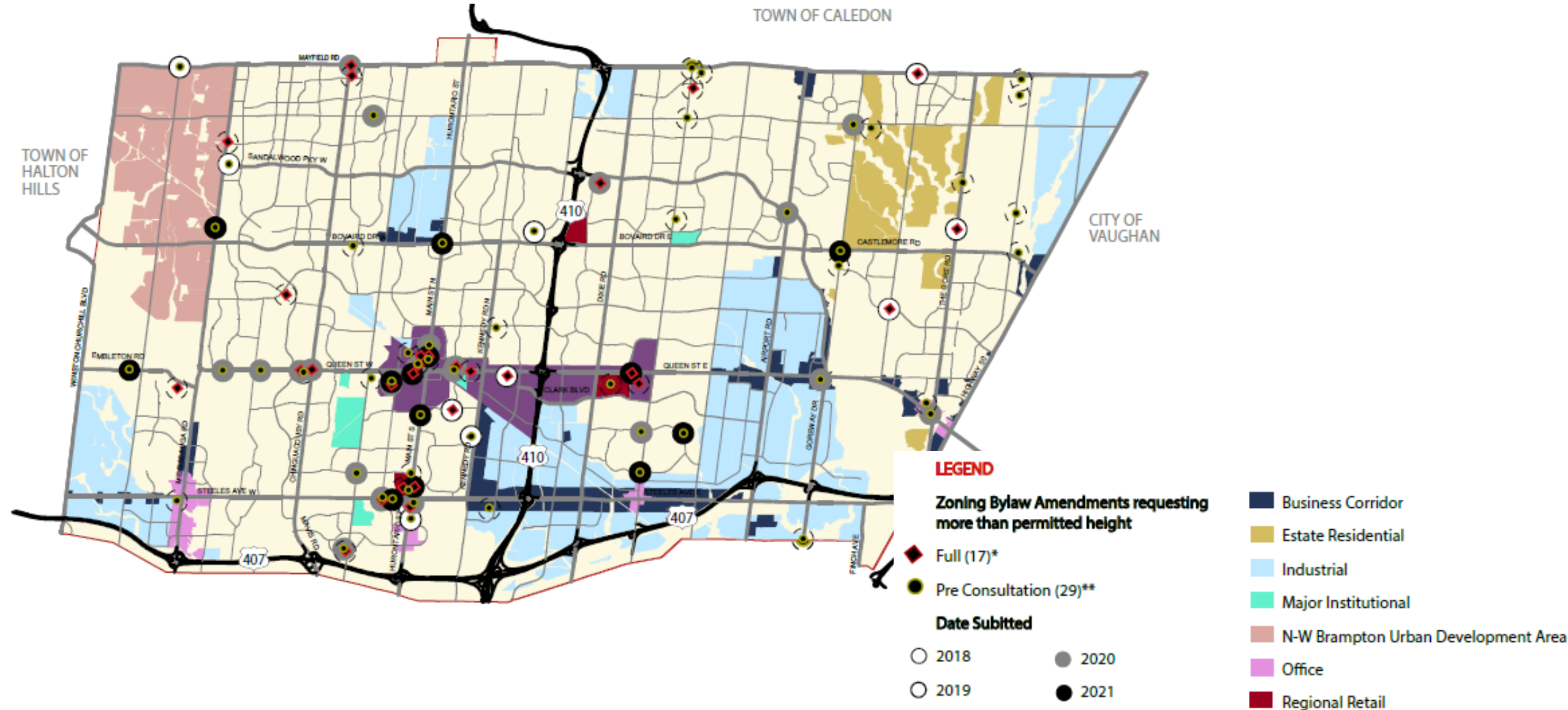
Height Permissions

Secondary Plan
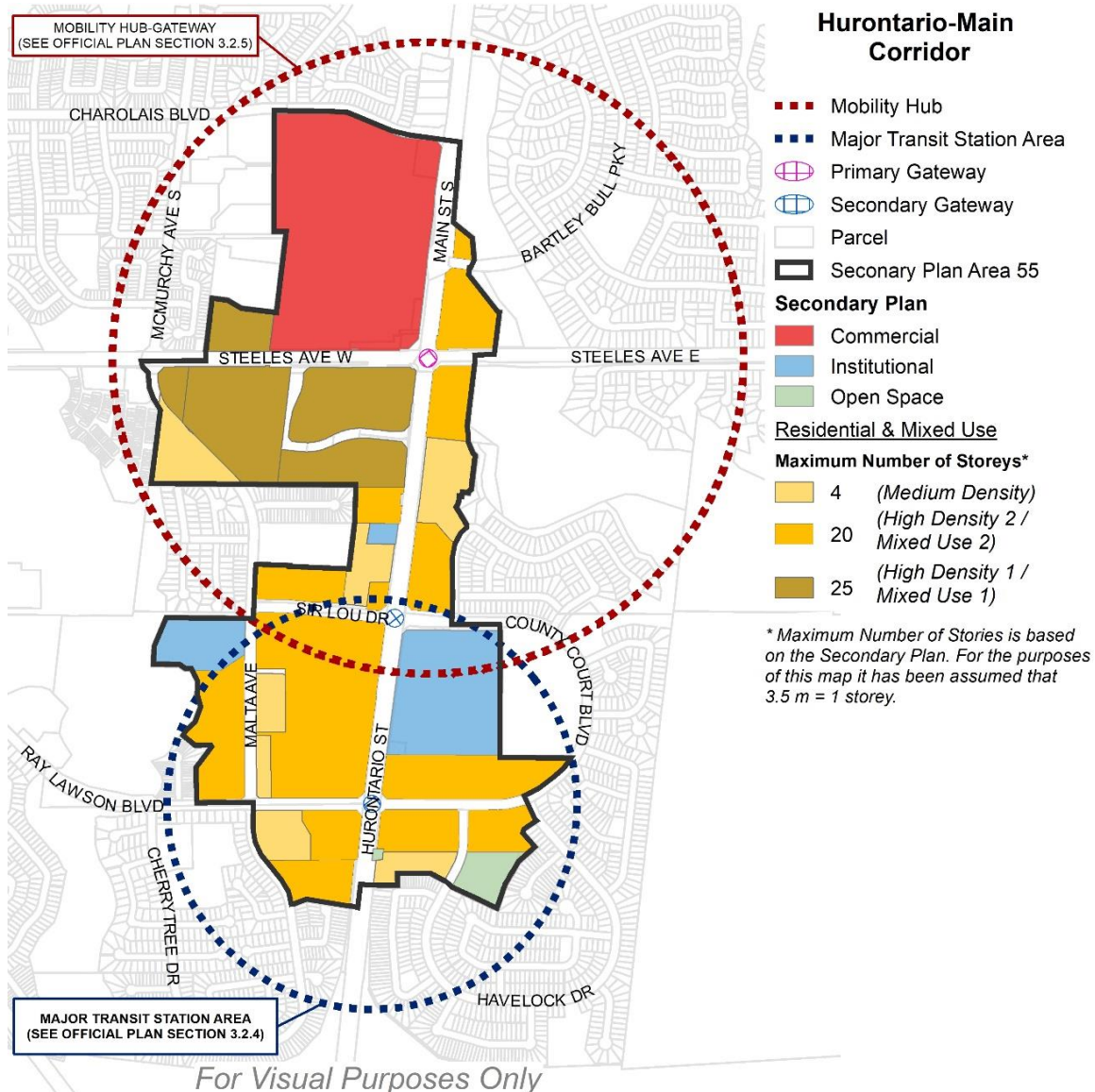
Zoning By-law
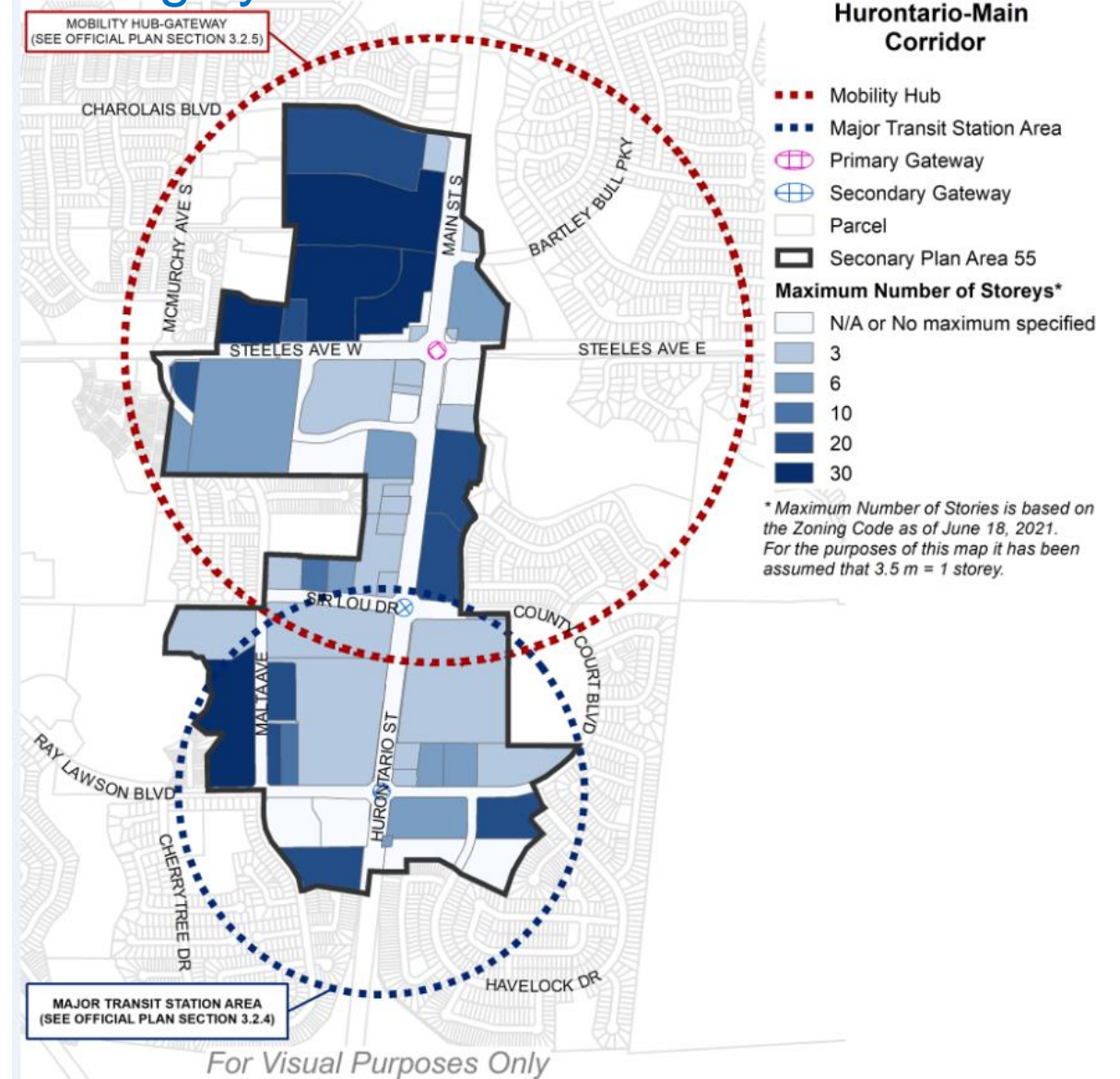
Preliminary Review of Requests for Height Increases

Uptown Brampton Built Form

"As of Right" Heights
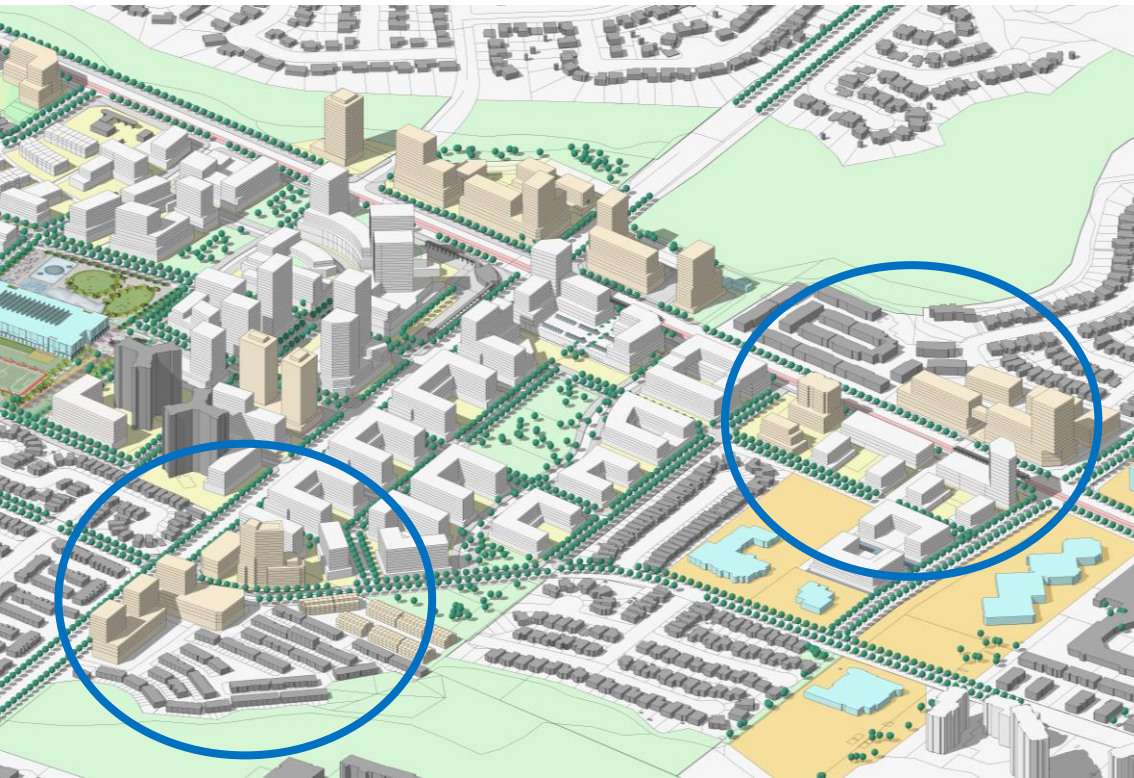
Requested Heights
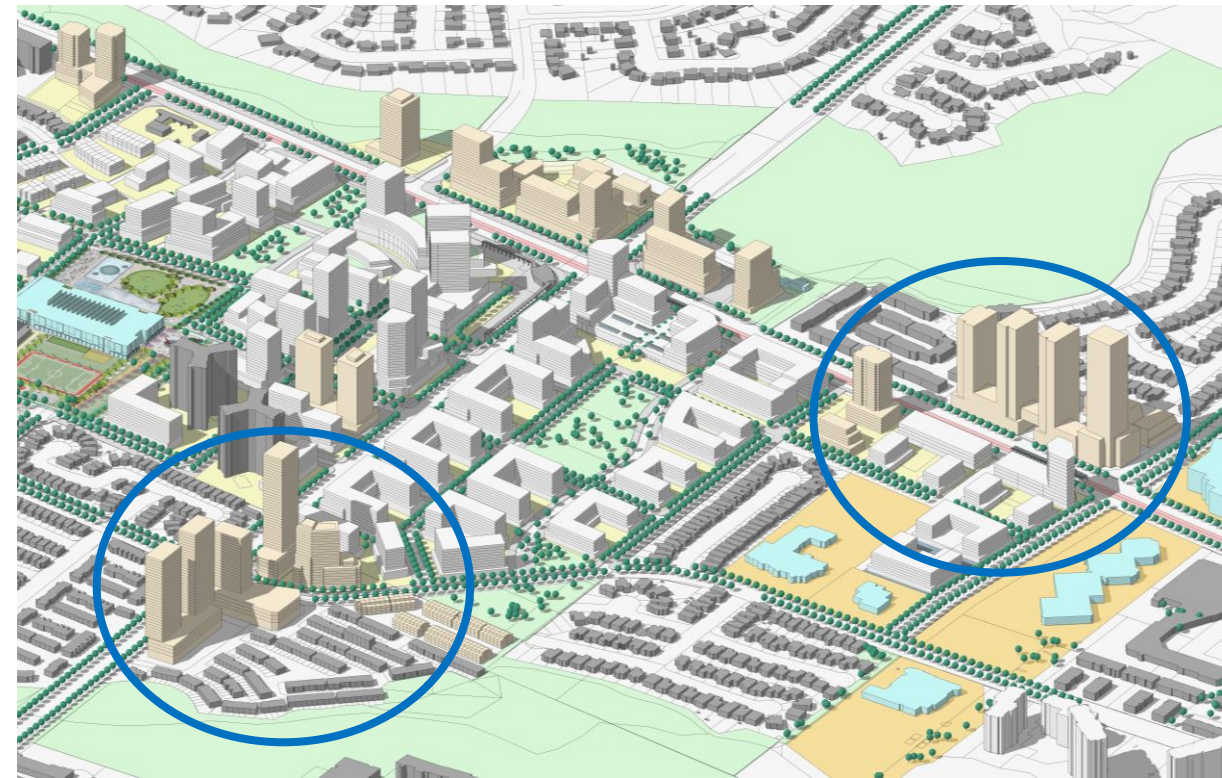
Benchmarking- Toronto

❑ The development must represent good planning

❑ Affordable housing treated as a priority community benefit

❑ Toronto uses cash-in-lieu for affordable housing in 2 ways:

    ❑ Transfer to Eva's Initiatives for Homeless Youth for affordable housing improvements

    ❑ Contribution to Capital Revolving Fund for Affordable Housing

Quarry Lands, Toronto
Diamondcorp, Kilmer Brownfield, Habitat for Humanity

Value of Community Benefit Secured

- 57 affordable ownership units to Habitat for Humanity

- $500,000 toward above-base park improvements
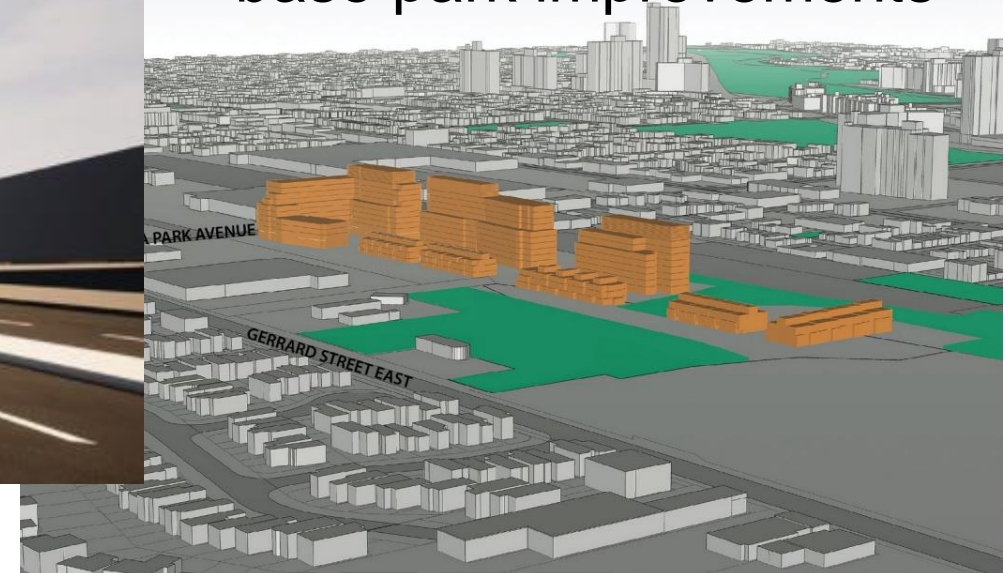
Benchmarking- Oakville

❑ Application should be justified as good planning

❑ A real estate review to examine the valuation of the bonus & the value of the public benefits exchanged

❑ A holding by-law placed if S.37 benefits are not finalized

❑ Cash-in-lieu to be paid prior to the issuance of a building permit

15.400.2 Zone Provisions		
The following regulations apply:		
a)	Maximum number of *storeys* (upon execution of a Section 37 agreement)	8
b)	Maximum *height* (upon execution of a Section 37 agreement)	30.0 m

Benchmarking- Burlington

❑ Application should be justified as good planning

❑ Special regard for intensification areas

❑ S.37 Agreement is executed prior to the approval of the OPA or ZBA

❑ Increased value of the land is be determined through an appraisal

❑ Ward Councillor is consulted by staff prior to any negotiations

Adi Development, Burlington
374 Martha Street– Mixed-Use Building

Value of Community Benefit Secured

- $550,000 for waterfront park

- $300,000 to Region of Halton for affordable housing in Burlington

- $100,000 towards public art reserve fund

- Provision of one publicly accessible car share vehicle located on Martha Street within the public ROW to contribute to the City's car-share network

Benchmarking- Vaughan

- Primary focus on the Intensification Areas of Vaughan

- S.37 Agreement is executed prior to the enactment of the zoning by-law amendment

- Applications for certain non-profit or public facilities may be exempted

- Any affordable housing has to be maintained as affordable for 20 years

- S.37 Agreements do not in any way entitle reductions in Development Charges

VMC Residences III, Vaughan
Millway Avenue and Portage Parkway – High Density Residential

Value of Community Benefit Secured

- $1 million for pedestrian bridge
- $3.5 million for on-site public art budget

BAIF Development, Vaughan
Beverley Glen Boulevard- High Density Residential

Value of Community Benefit Secured

- $50,000 YRT/Viva transit passes to condo purchasers

- $350,000 public art installation

- $350,000 community services/facilities installation

Benchmarking- Mississauga

❑ All rezoning applications for increases in height and/or density in the City

❑ Applications that are under appeal at LPAT

❑ S.37 Agreements negotiated on a case-by-case basis

❑ City strives to achieve a value in the range of 20% to 40% of the land lift value

❑ City retains an independent real estate appraiser

❑ Cash-in-lieu to occur prior to Council approval of the Zoning By-law

Brightwater, Port Credit, Mississauga

Value of Community Benefit Secured

- Strata conveyance to Region for 150 subsidised units

- 150 purpose-built market rental units

- $250,000 for pedestrian and cycling bridge

- $50,000 for traffic calming

- Development of YMCA facility on site or $3M cash contribution to City

Brampton Density Bonusing Principles

1. **The development must represent good planning**
    - ❑ Matters required to support a development are not considered to be eligible S.37 community benefits, and should be provided by the developer anyways

    - ❑ An owner/developer should not obtain inappropriately high density or height increases by offering community benefits and the City should not approve development simply to get community benefits

Brampton Density Bonusing Principles

2. **There should be a reasonable planning relationship between the secured community benefits and the contributing development**

   ❑ Location priority - In-kind contribution: On-site or in the vicinity of the site
   Cash contribution: may be used for City-wide capital projects

   ❑ Benefit Priority - In-kind: Affordable and rental housing units
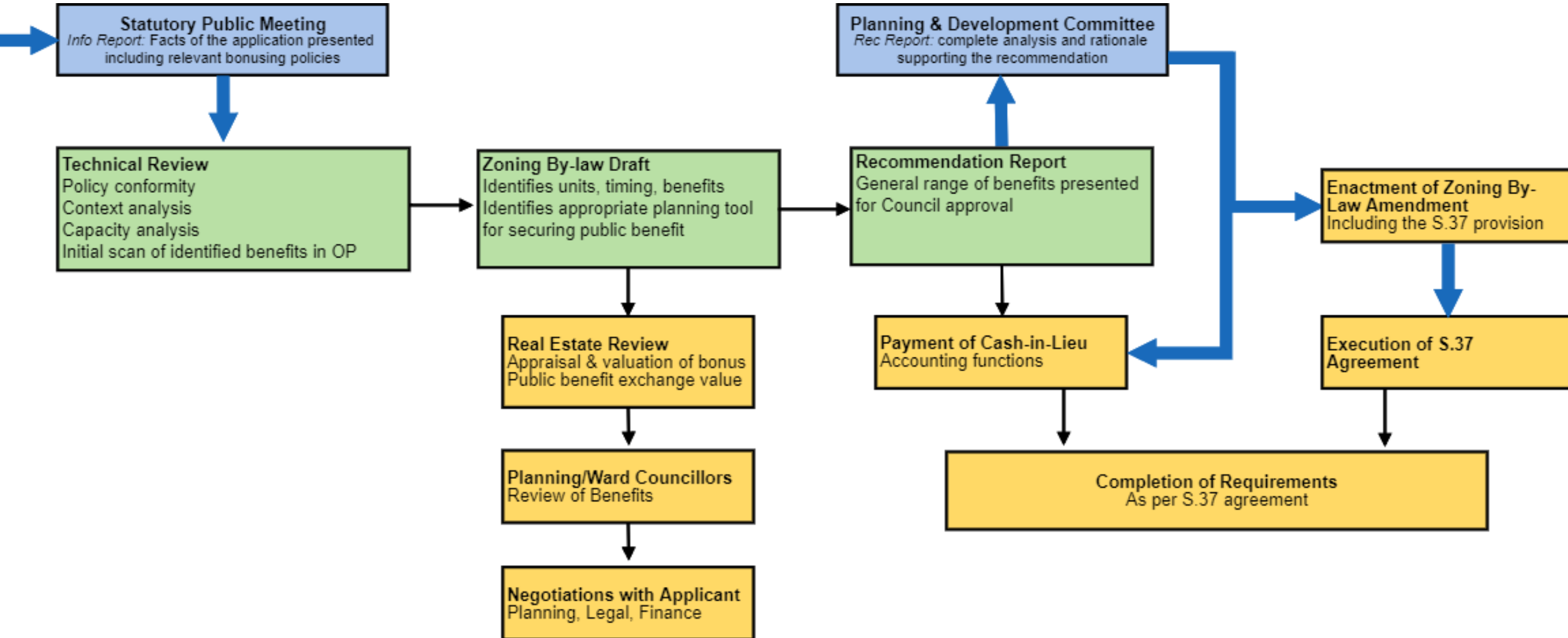   Cash: Housing Catalyst Capital Project

Brampton Density Bonusing Process Parameters

❑ Will be required for all zoning applications proposing density and/or height increases

❑ Applications for certain non-profit or public facilities may be exempted

❑ S.37 Agreements will be negotiated on a case-by-case basis

❑ General contribution range will be 20-60% of uplift value

❑ The Ward Councillors will always be consulted by City Planning staff prior to any negotiation of S.37 community benefits with applicant
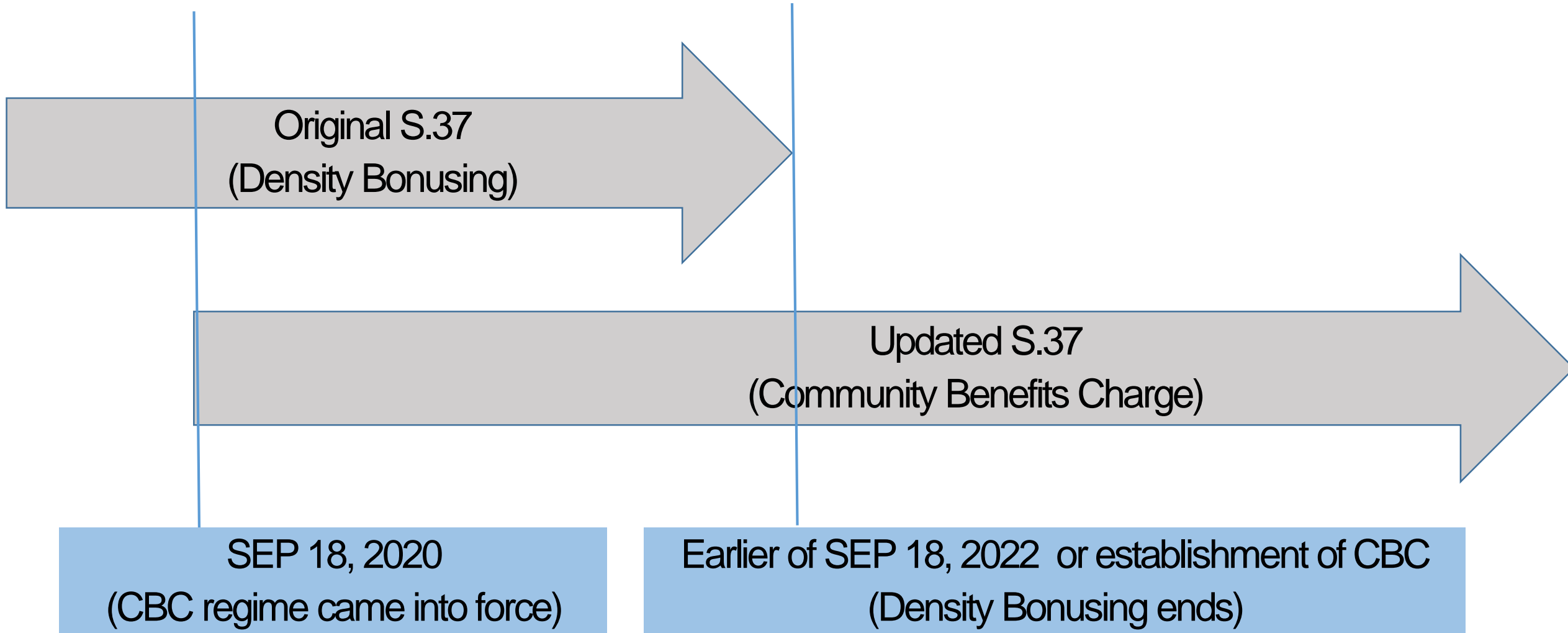
Brampton Density Bonusing Process Parameters

❑ Applicants will bear the cost of appraisals.

❑ The Zoning By-law will include a provision that a S.37 Agreement will be registered on title; unless cash contributions paid prior to ZBA approval.

❑ Timing of the payment of benefits will be tied into the S.37 Agreement.

❑ Cash benefits will be held in a S.37 Reserve Fund and moved to special accounts already established by City Council and intended to be used for capital facilities in the broader community (e.g. Housing Catalyst Capital Fund).

Process Chart

Statutory Public Meeting
Info Report: Facts of the application presented including relevant bonusing policies

Technical Review
Policy conformity
Context analysis
Capacity analysis
Initial scan of identified benefits in OP

Zoning By-law Draft
Identifies units, timing, benefits
Identifies appropriate planning tool for securing public benefit

Recommendation Report
General range of benefits presented for Council approval

Planning & Development Committee
Rec Report: complete analysis and rationale supporting the recommendation

Enactment of Zoning By-Law Amendment
Including the S.37 provision

Real Estate Review
Appraisal & valuation of bonus
Public benefit exchange value

Payment of Cash-in-Lieu
Accounting functions

Execution of S.37 Agreement

Planning/Ward Councillors
Review of Benefits

Negotiations with Applicant
Planning, Legal, Finance

Completion of Requirements
As per S.37 agreement

Community Benefits Charge (CBC)

Legislative Basics

❑ Imposed by by-law (no term limit)
❑ Only local municipalities can charge
❑ Can only be levied against higher density development
❑ 5 or more storeys, &
❑ 10 or more residential units
❑ Requires a "strategy"
❑ Legislation does not prescribe CBC rate structure

CBC may be imposed on

developments or redevelopments that require:

- ZBA
- minor variance
- conveyance of land
- plan of subdivision
- a consent
- the approval of a description under section 9 of the Condominium Act, 1998
- the issuance of a building permit

Regulation sets cap at 4% of land value the day before a building permit is issued

Use of CBC Fund

Can recover any "growth related" capital cost
- ❑ No prescribed list of eligible services
- ❑ Initial considerations:
    - ❑ Affordable housing
    - ❑ Parking (no longer DC eligible)
    - ❑ Parkland development
    - ❑ Active Transportation
    - ❑ Eligible DC services (no overlap with DCs)
    - ❑ Parkland acquisition (no overlap with S.42)
    - ❑ Public Art
    - ❑ Other services

Next Steps

1. Brampton will pursue Density Bonusing until Sep 18, 2022

2. Brampton will initiate a CBC Strategy and Implementation Framework in Q3, 2021

Thank you!

BRAMPTON

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Planning, Building and Economic Development Department

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City Contributors

Legal Services

Finance

Realty Services

Development Services

Parks Planning

City Planning and Design

HERITAGE HEIGHTS SECONDARY PLAN

Project Update

Council Workshop – July 28, 2021

BRAMPTON

AGENDA

- Heritage Heights – Refresh

- Update on Technical Studies
  - Subwatershed Study (Natural Heritage System Planning)
  - Infrastructure Servicing Study
  - Community Energy Plan
  - Preclude and Hinder Study
  - Transportation Study
  - Planning Policy

- Next Steps

Presenters

Bob Bjerke
City of Brampton
Director,
Community
Planning &
Design
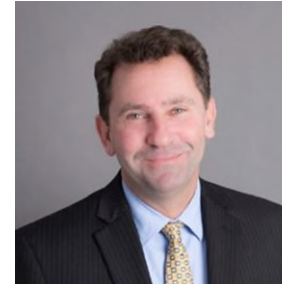
Andrew McNeill
City of Brampton
Manager, Official
Plan and Growth
Management

Anand Balram
City of Brampton
Senior Policy
Planner, Official
Plan and Growth
Management

EVOLUTION OF THE PLAN

HERITAGE HEIGHTS

Be a walkable neighbourhood promoting
HEALTH & WELLBEING
Be a place for business and culture to
THRIVE
Be environmentally friendly supporting
CLIMATE MITIGATION

A COMMUNITY WHERE YOU CAN:

- Live, learn, work, play & shop
- walk to school
- live without a car
- start a business
- Hop on the GO or the ZUM
- pick an apple

HERITAGE HEIGHTS CONCEPT PLAN

catalyzes mixed-use development / maximizes land values / stimulates job creation

HERITAGE HEIGHTS CONCEPT PLAN

catalyzes mixed-use development / maximizes land values / stimulates job creation

MAKING SMART INFRASTRUCTURE INVESTMENTS

BOULEVARD

- Robust connected street network
- Multiple routing options
- Multi-modal
- Maximizes short trip making
- Flexible
- Framework for a complete community

HIGHWAY

- Barrier effect
- Sparse network
- Bigger, faster roads
- Car-oriented
- Encourages longer haul car trips
- Adds to congestion
- Harder to change

BOULEVARD VS HIGHWAY

ENGAGING / DIVERSE / GREATER TRIPS

VAST / STERILE / HIGH SPEEDS

Heritage Heights, Brampton

Highway 410 & Steeles, Brampton

Champs Elysees, Paris

Highway 410 & Orenda, Brampton

AV. 9 DE JULIO BUENOS AIRES, ARGENTINA

AV. 9 DE JULIO BUENOS AIRES, ARGENTINA
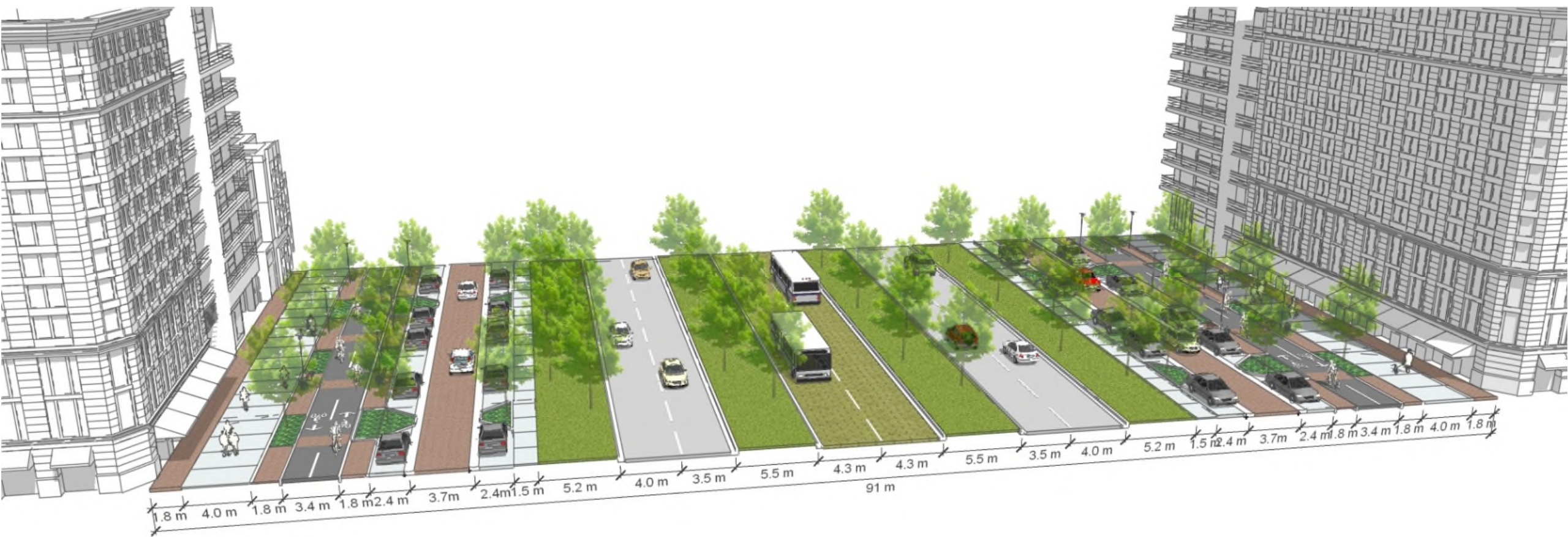
HERITAGE BOULEVARD – NARROWER OPTION

Provincial Highway 26 – Opened 2012

Transitions 90km – 70km – 50km

90km Speed – Contextually Appropriate

Node — Node — Node
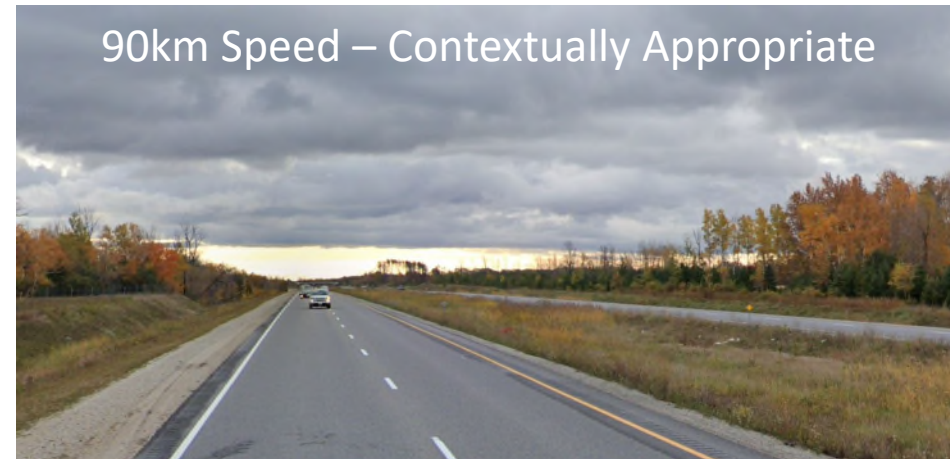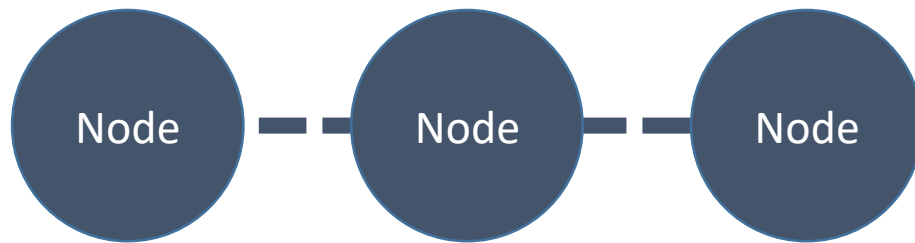
HIGHWAY BETWEEN - NOT THROUGH URBAN PLACES

UPDATE ON SUPPORTING TECHNICAL STUDIES

SUBWATERSHED | COMMUNITY ENERGY | INFRASTRUCTURE SERVICING
TRANSPORTATION | SHALE – PRECLUDE & HINDER | POLICY

SUBWATERSHED STUDY (SWS)
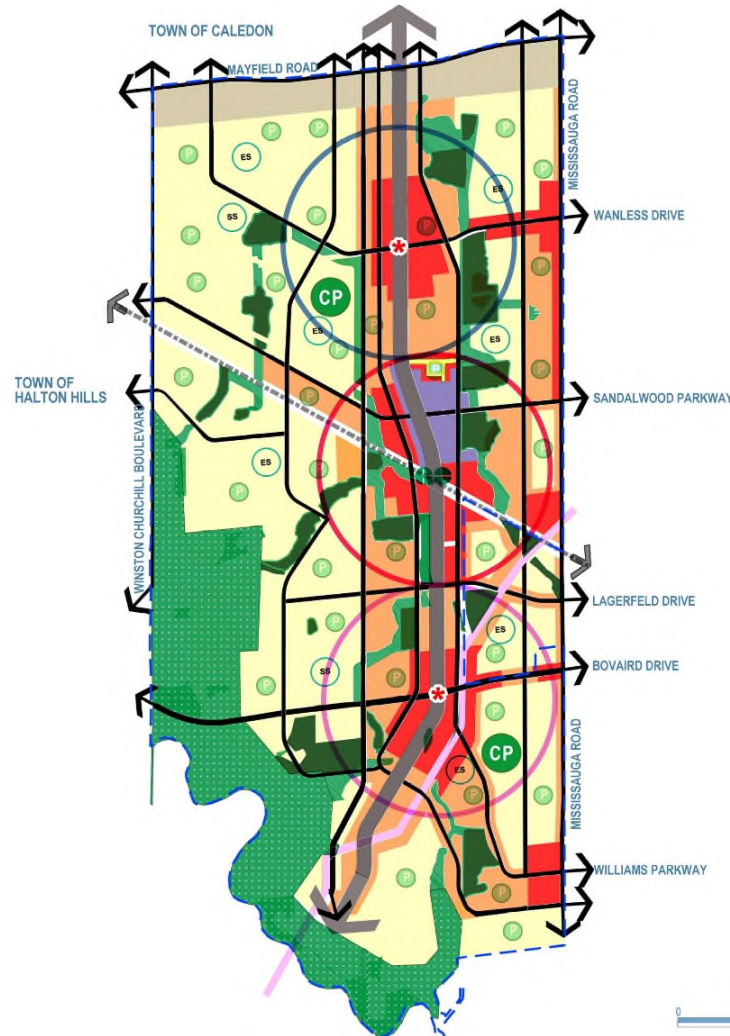
- Simplification of the land use plan to ease the technical review

- Maintains the intent of the Council Endorsed Plan

- Key Framework Streets

- Environmental layer has been formulated based on the best available information at the time – may be subject to minor changes

- Land use concept updated to reflect **fluvial and terrestrial systems**

- Efforts to reduce impacts on the existing natural heritage system

- Support the next step of technical analysis of Phase 2 of the Subwatershed Study: Impact Assessment Phase
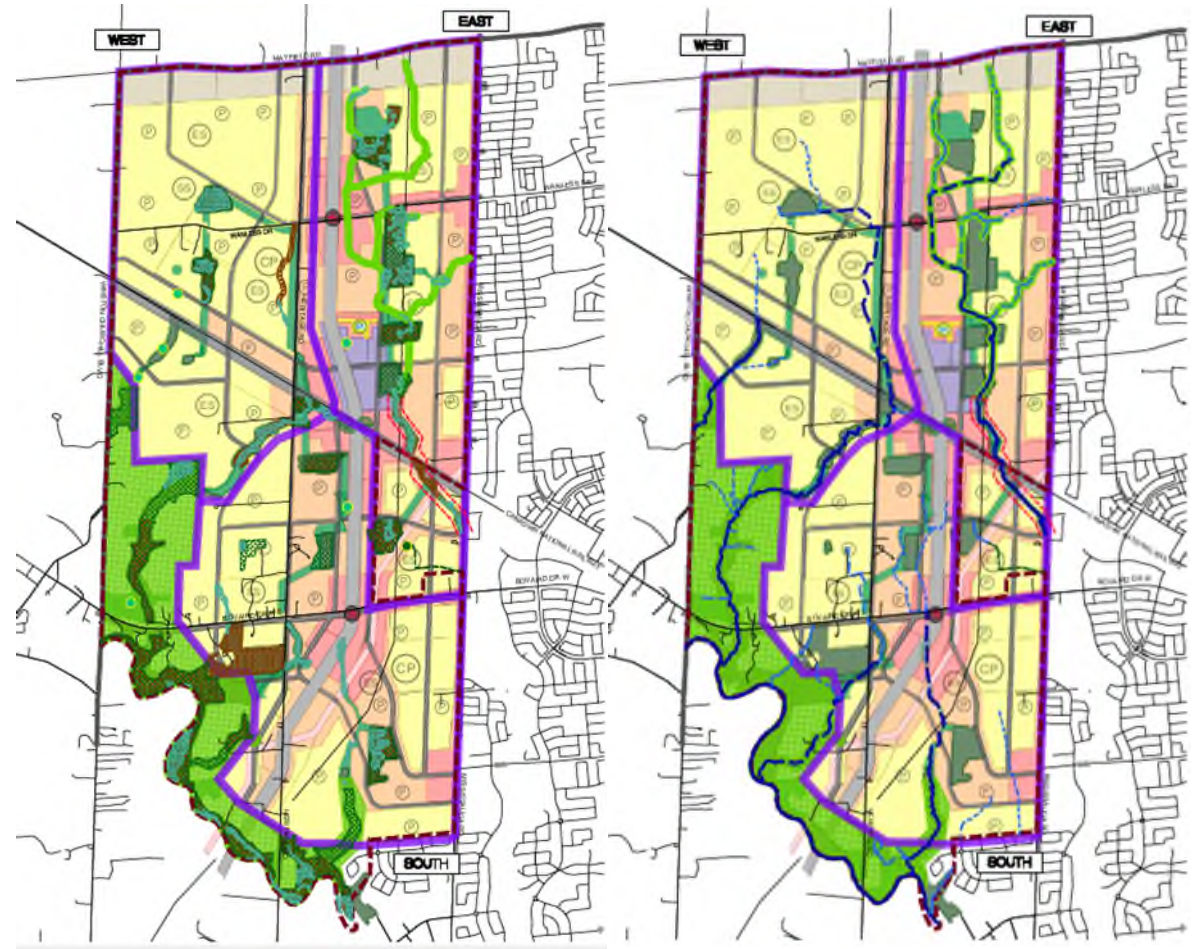
TERRESTRIAL OVERLAY   AQUATIC OVERLAY

COMMUNITY ENERGY STUDY

- Recommendation of the City Wide Community Energy and Emission's Plan

- Will explore the feasibility of alternative energy solutions in the area to establish a net zero community

- Energy Districts to be established and reinforced through Policy.

- Working with Alectra, Enbridge, and the IESO through this process
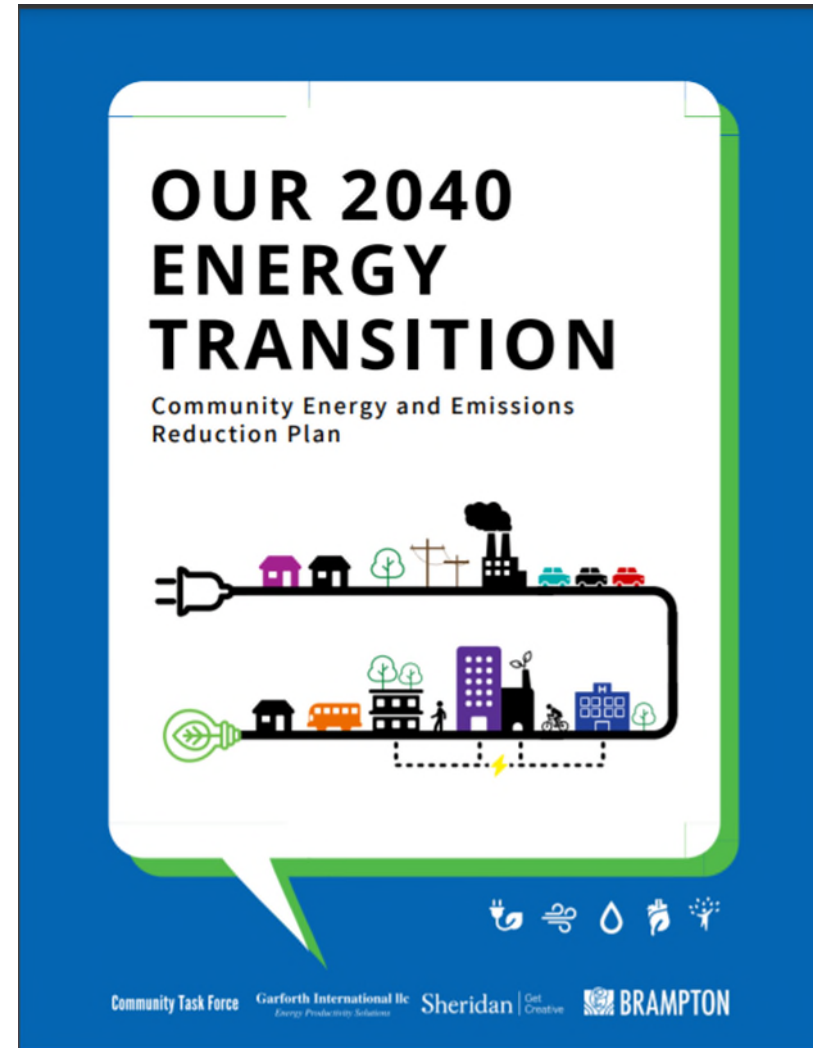
INFRASTRUCTURE SERVICING STUDY

- Develop alternative sanitary sewer and water servicing strategies and systems for the subject lands

- Recommend the most efficient and cost-effective servicing option

- Determine preliminary storm water requirements, including drainage boundaries and the identification of storm water management facilities and their potential location (including innovative SWM solutions)

- Identify servicing staging and sequencing strategies

SHALE - PRECLUDE AND HINDER STUDY

- Examine any potential impacts of the Secondary Plan on the aggregate resource and its potential extraction

- Identify any potential mitigation techniques
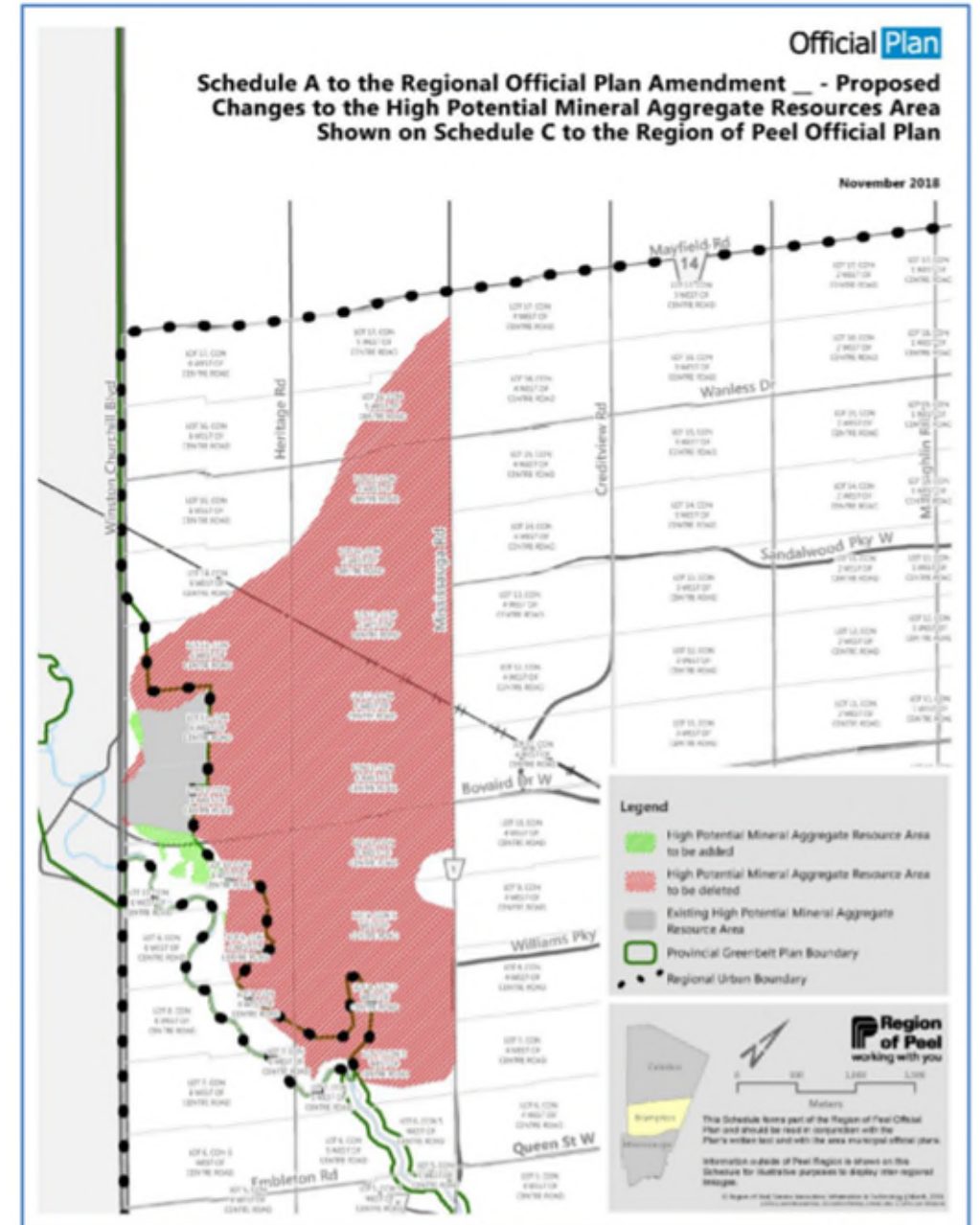
TRANSPORTATION STUDY

- Provide guidance on street and block structure

- Complete streets – 2-lane community to maximize safety

- Reduce VKT to lower emissions

- Contribute to and not detract from places

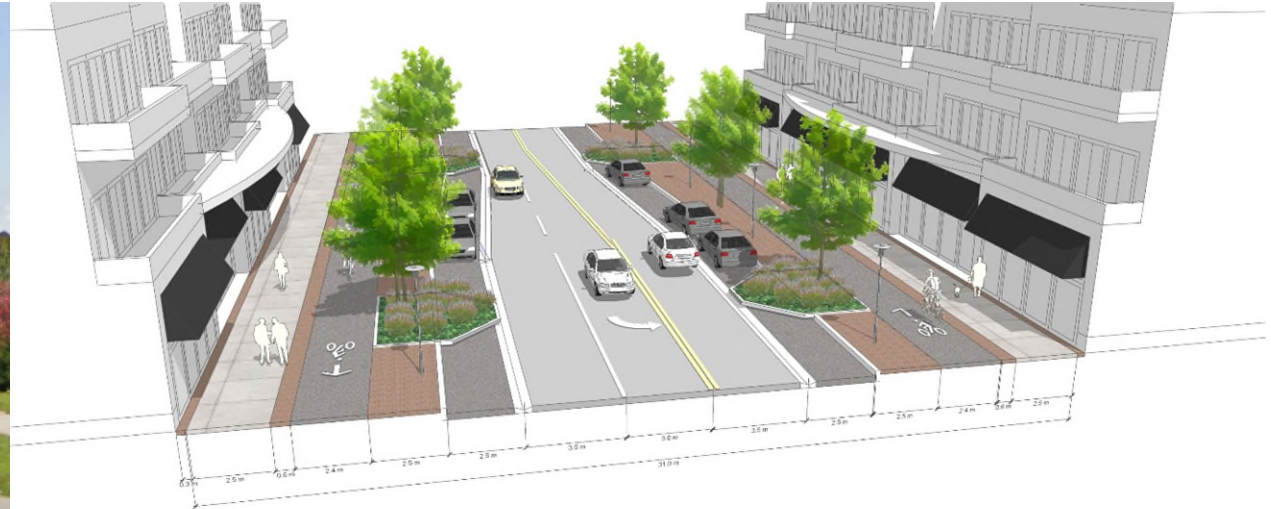- Provide guidance to Transit Routing

- Undertake modelling

HERITAGE HEIGHTS STREET STANDARDS

Conventional Road Design

Traditional Street Design

- Limited access
- Throughputs – long haul by car
- Maximize speed/Minimize delay
- Level of service

- Maximize access – facilitate social/economic exchange
- Short trips – on foot, bike, transit, car
- Slower, safer, easier to cross
- Decrease auto-dependency, minimize km's travelled

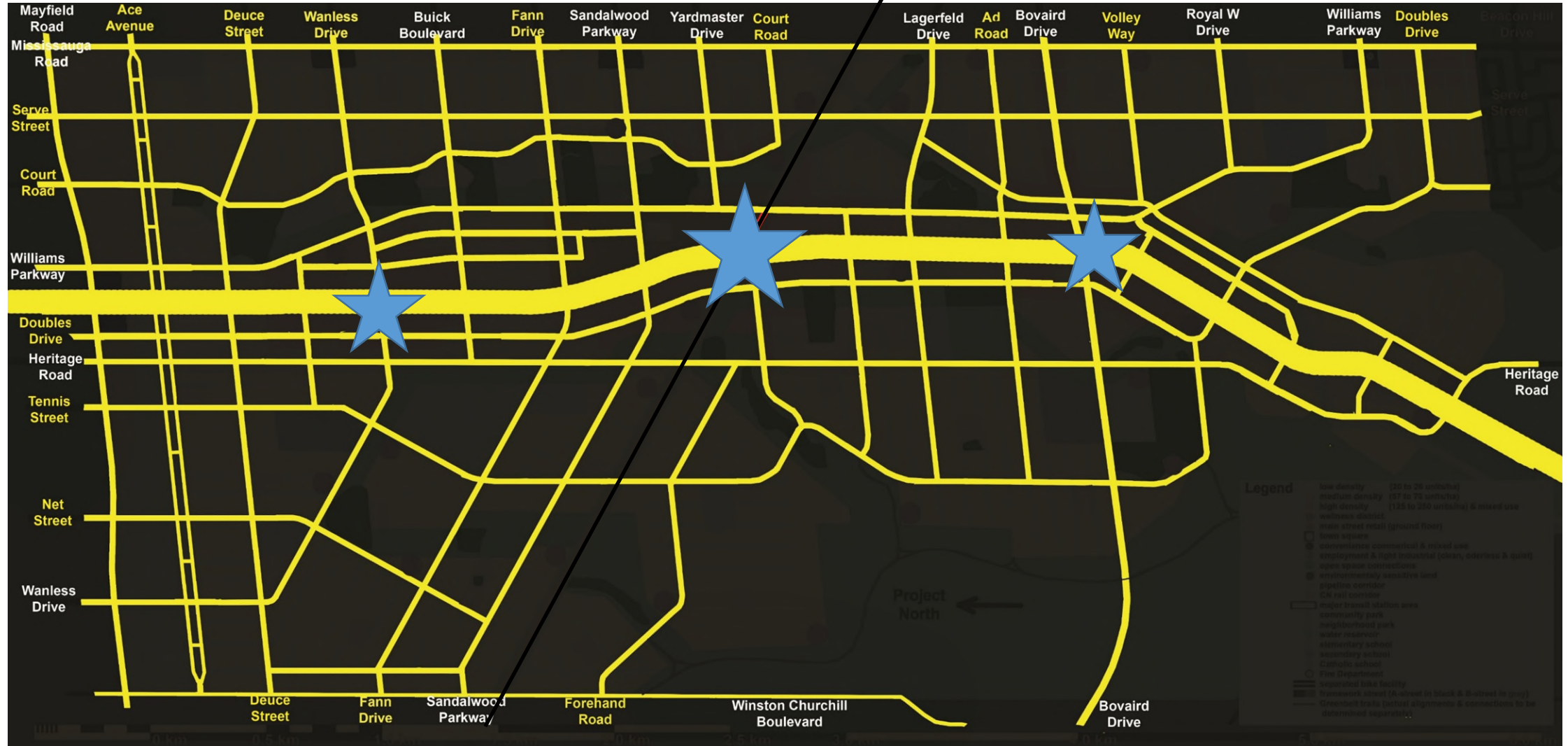# REGIONAL ENVIRONMENTAL ASSESSMENTS

Bovaird Drive Existing/Proposed (EA)

- 4-6 lanes proposed
- 90 km/h design speed, 70km/h posted speed
- Limited access – intended to feed the GTA West highway
- Not pedestrian or cyclist friendly
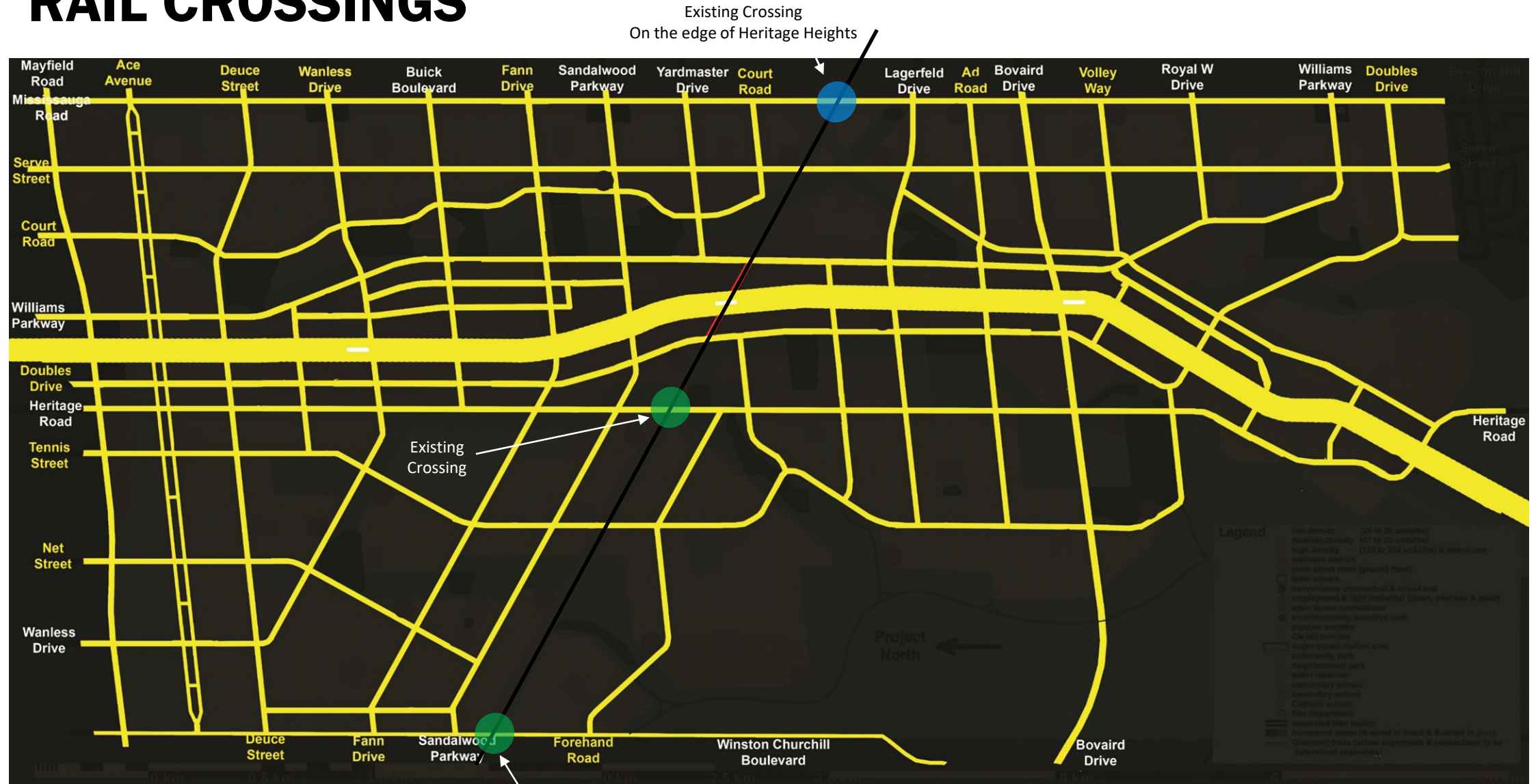- Hostile to people and business

Bovaird Drive Proposed (Secondary Plan)

- 4 lane (east of Heritage Rd.) 2-lanes west
- Complete street
- 50km/h design and posted speed
- Separated and protected cycling facilities
- Pedestrian and business friendly
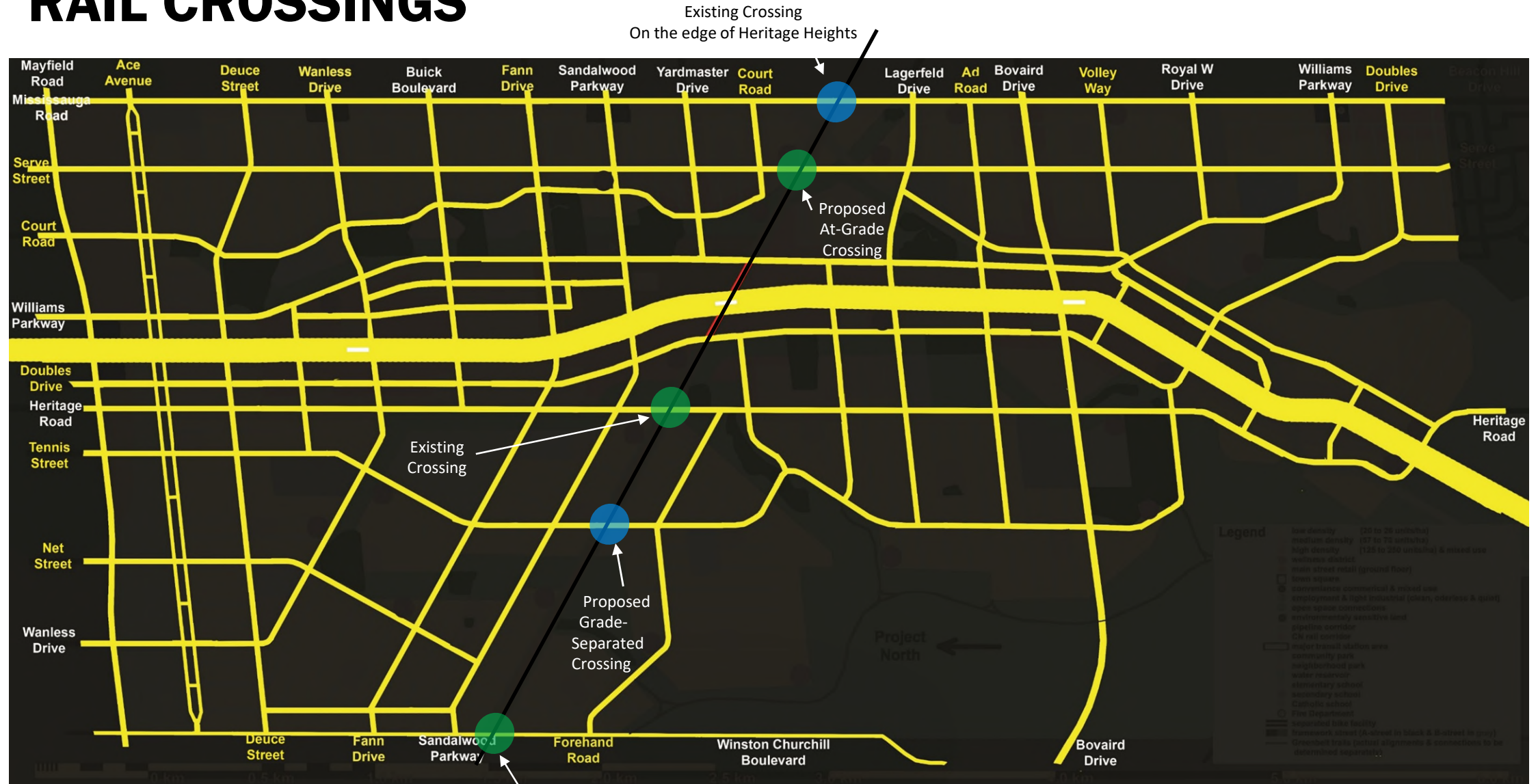- Contributes to great place-making
- Adds value to Brampton

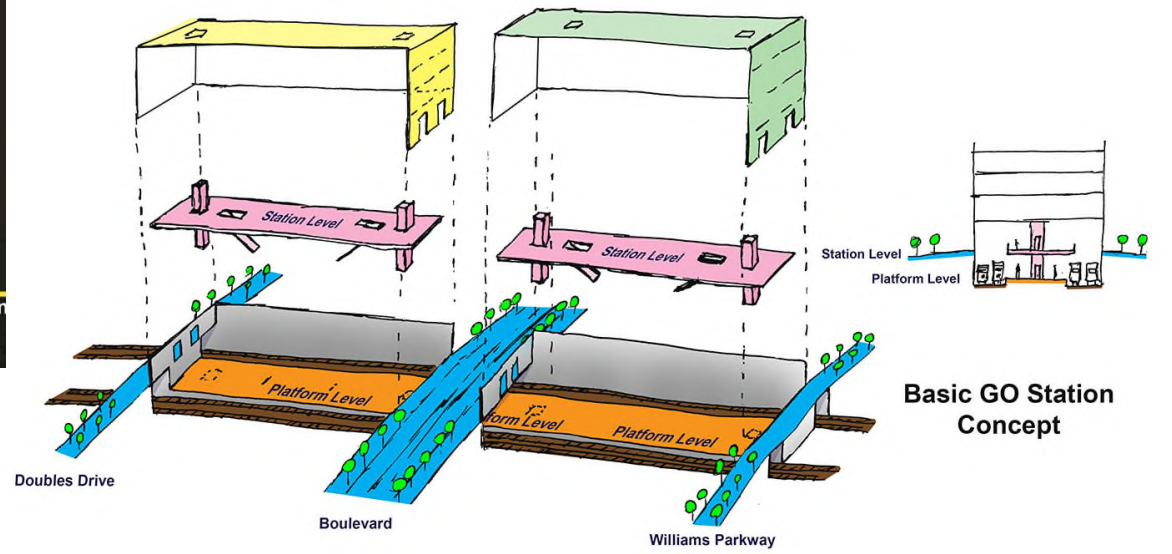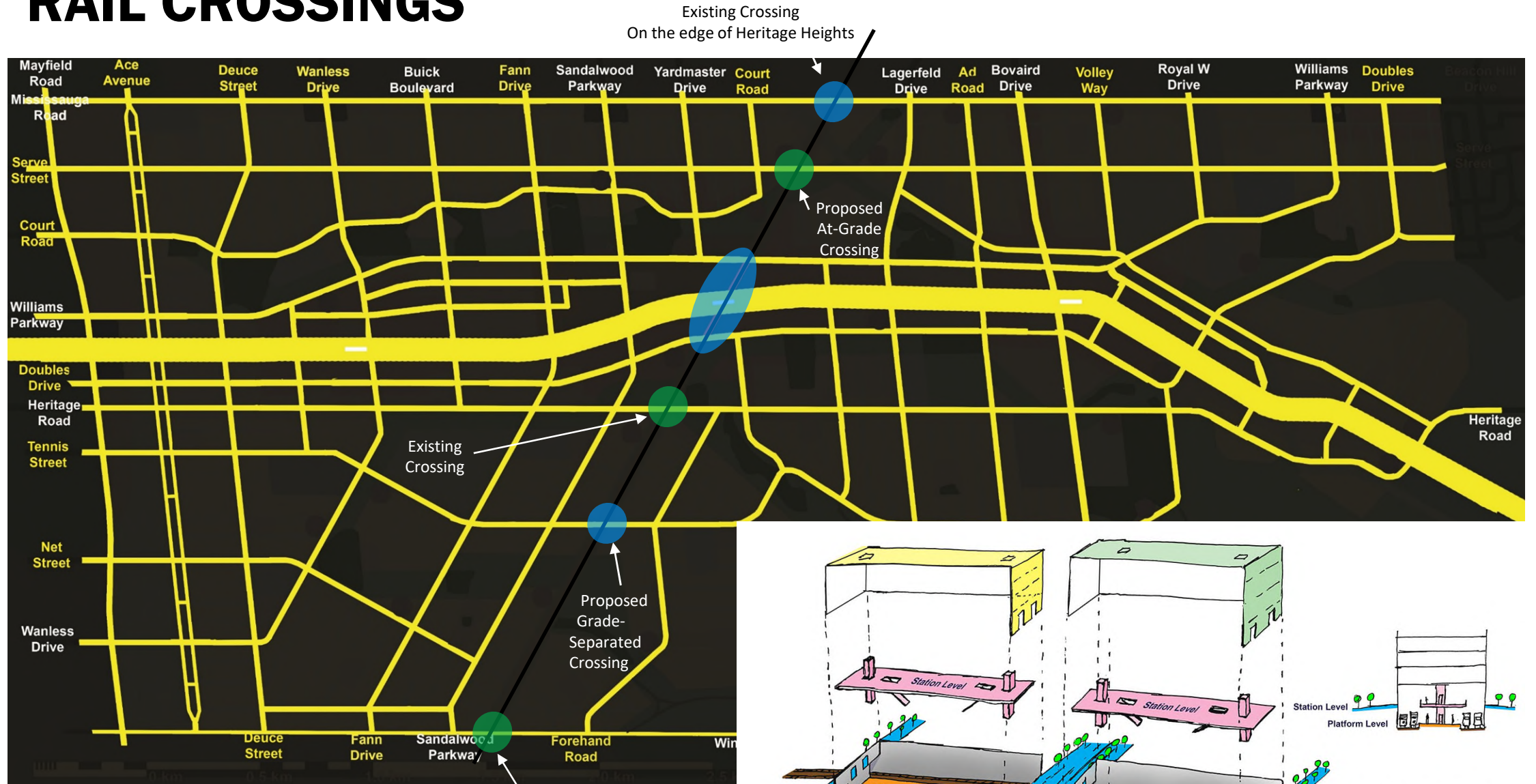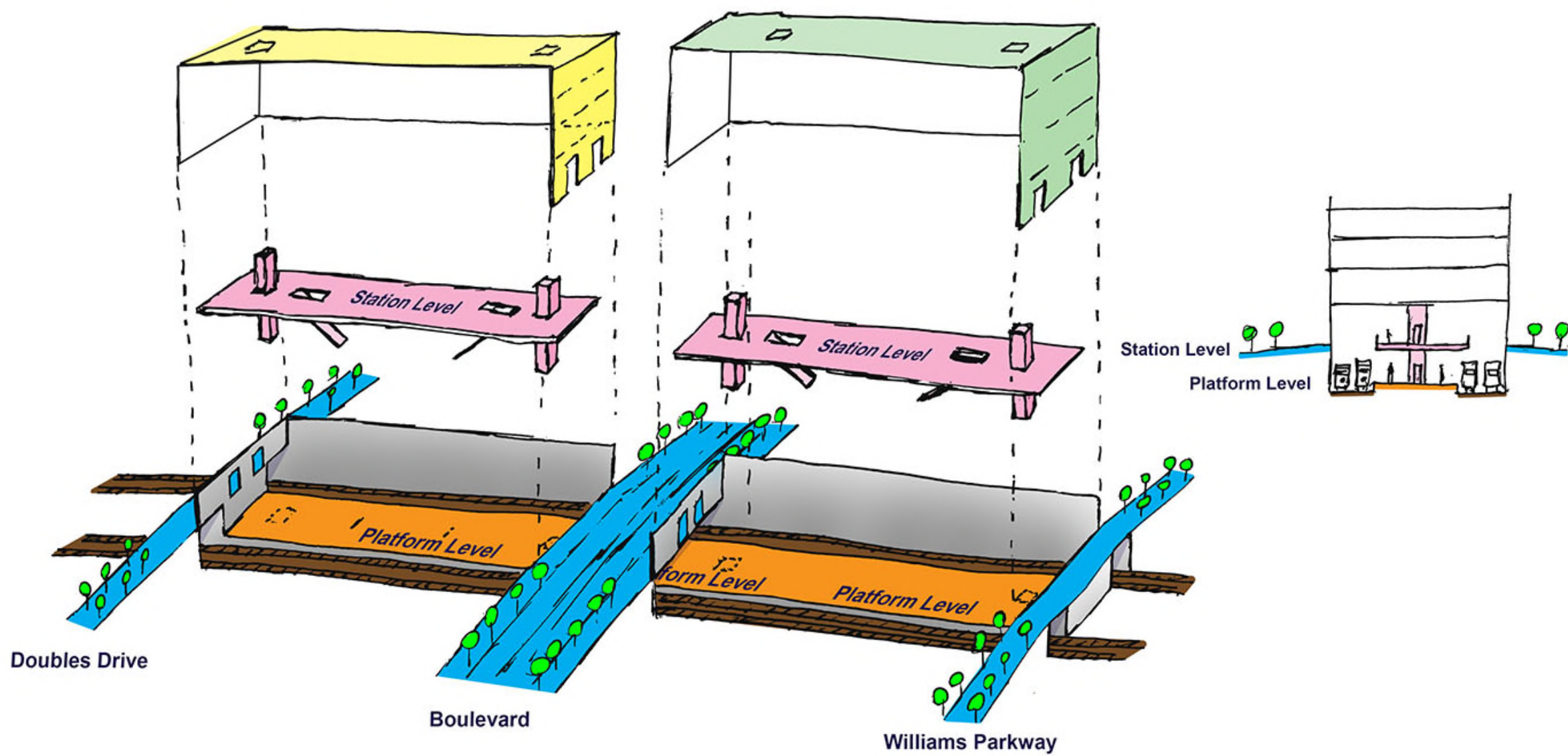# TRANSIT AND RAIL CONSIDERATIONS – MTSA's

RAIL CROSSINGS

Existing Crossing
On the edge of Heritage Heights

Existing Crossing

Existing Crossing
On the edge of Heritage Heights

RAIL CROSSINGS

Existing Crossing
On the edge of Heritage Heights

Proposed
At-Grade
Crossing

Existing
Crossing

Proposed
Grade-
Separated
Crossing

Existing Crossing
On the edge of Heritage Heights

RAIL CROSSINGS

Existing Crossing
On the edge of Heritage Heights

Proposed
At-Grade
Crossing

Existing
Crossing

Proposed
Grade-
Separated
Crossing

Existing Crossing
On the edge of Heritage Heights

Basic GO Station
Concept

Station Level

Station Level

Station Level

Platform Level

Platform Level

Platform Level

Platform Level

Doubles Drive

Boulevard

Williams Parkway

TRANSPORTATION STUDY – NEXT STEPS

- Staff are working collaboratively with Brampton Transit to understand facility and routing considerations for the plan

- A transportation model is being prepared to evaluate the technical feasibility of the plan

- Staff are continuing to assert Brampton's Urban Boulevard Position to both the Region of Peel and MTO

- Staff are working with CN Rail to explore rail crossings

POLICY FRAMEWORK

- Draft Policy is under development and will be refined as more information becomes available

- Policy will be consistent with corporate documents such as the Age Friendly Master Plan, Community Energy and Emissions Reduction Master Plan, Culture Master Plan, Housing Strategy, etc.

- Development of Zoning, Urban Design and Open Space Guidelines

NEXT STEPS

- A report to Planning and Development Committee in July to seek permission to conduct a statutory public meeting in September

- Recommendations pertaining to the ICBL to follow

Referred Matters List
CI Project update

Council Workshop
June 28, 2021

Deepi Singh
Business Improvement & Innovation

RML Revisions - Internal

- Revise the reporting structure of RML:

  -aging tracker, progress, risks, department/division

- Select ToCP alignment at Council level

- Legislative Services to manage monthly reporting

- Implement a quarterly status review meeting with Council

- Track resolved matters and review analytics Quarterly

- Decrease default Target Completion Date (TCD) from 3 month → 1 month

RML Revisions - External

RML ID	Origin Meeting			Report to	Report Name (working title only)	Original Deadline/ Target	Revised Target Date	Revision Number	Contact
	Date	Resolution / Recommendation	Council / Committee						
City Council
M 134/2019	2020/12/11	C441-2019	CL	CL	Healthcare in Brampton - Confirmation of the City's Local Share Commitment	2020/03/11	2021/07/07	17	B. Lucas
M 23/2020	2020/03/11	C181-2020	CL	CW	Youth Internships and Mentoring Programs / Veterans Program	Q2 2020	2021/07/07	7	S. Aujla x42155
M 70/2020	2020/10/28	C409-2020	CL	CL	Integrated frame and cover maintenance system - potential cost savings through adopting this new technology	2021/03/03	Q2 2021	2	R. Forward x42052 J. Schmidt-Shoukri
M 13/2021	2021/03/03	C059-2021	CL	CL	Development and deployment of recruitment plans for employment opportunities for Brampton residents	2021/04/07	2021/07/07	6	S. Aujla x42155
M 16 /2021	2021/03/24	C086-2021	CL	CL	Provide recommendations that update the Council Code of Conduct to strengthen its alignment with HR policy and complaint processes, in consultation with the Integrity Commissioner	2021/06/02	2021/07/07	2	S. Aujla x42155 P. Fay x42172
M 17 /2021	2021/03/24	C086-2021	CL	CL	Provide recommendations to strengthen and clarify the process for complaints made to HR against members of council, including but not limited to specific reference to the IC in HR policy, and examples/processes used by other municipalities	2021/06/02	2021/07/07	2	S. Aujla x42155
M 18 /2021	2021/03/24	C086-2021	CL	CL	Council workshop with the Integrity Commissioner, to include a review of recommendations of the previous workshop and meetings of Council, and to inform and be informed by the ongoing provincial consultation on integrity commissioner roles and Council codes of conduct	2021/06/02	2021/07/07	2	P. Fay x42172
M 25/2021	2021/03/31	CW162-2021	CW	GC	Options with respect to the processes for Council Member expense approvals and posting timings	Q2 2021	Q3 2021	1	M. Medeiros x42520
M 37/2021	2021/05/04	AU011-2021	AU	AU	Process for review, investigation and reporting of complaints submitted to the Corporate Fraud Prevention Hotline	Q3 2021			R. Gervais x43836
M 38/2021	2021/05/04	AU014-2021	AU	AU	Development of a draft stand-alone Whistleblower policy	Q3 2021			R. Gervais x43836
M 41/2021	2021/06/02	C181-2021	CL	CL	Possible options, budget and next steps to re-establish a City-managed downtown office to support the Integrated Downtown Plan implementation and all its various components	2021/09/15			R. Forward x42052
M 43/2021	2021/06/16	tbc	CL	CL	2018 - 2020 Public Sector Salary Disclosure - revisions to address the original request for information (list of staff on the disclosure list, respective salary increases over the past three years, and the number of direct reports for each)	2021/07/07			M. Davidson x43985 S. Aujla x42155
M 44/2021	2021/06/16	tbc	CL	CL	Process and timeline for the hire of a Director of Internal Audit, with consideration of alignment with the Municipal Act, the Internal Audit Charter (2019), and Legal and Human Resource advice on the inclusion of Audit Committee Citizen Members within the hiring process, and reference to previous Director of Internal Audit hiring processes employed, and consideration for the establishment of a sub-committee.	2021/09/15			D. Barrick S. Akhtar
M 45/2021	2021/06/16	tbc	CL	CL	That staff be requested to investigate and present or report to the July 7, 2021 meeting of Council on possible interim solutions for the 2021 season to address phragmites in Professor's Lake	2021/07/07			E. Fagan x42913
M 46/2021	2021/06/16	tbc	CL	CL	That the Legal Services be requested to report back to Council on appropriate Communication protocols in light of the Judicial decision.	2021/09/15			S. Akhtar
M 47/2021	2021/06/16	tbc	CL	CL	That the Legal Services be requested to report back to Council on considerations with respect to potential liabilities for the City and proactive steps to protect the City and/or Members of Council.	2021/09/15			S. Akhtar
M 48/2021	2021/06/16	tbc	CL	CL	That an equity audit of the corporation be completed by the 4th quarter of 2021, and reported to Council at its completion; and that upon completion of the equity audit, HR in collaboration with the Equity Office, report to Council on the identified gaps and areas of concern in the audit's findings, and subsequent strategies to address these concerns, including an outline of accountability measures for senior leaders in every operating division of the Corporation where a concern has been identified.	Q4 2021			M. Davidson x43985 S. Aujla x42155 B. Lucas
M 49/2021	2021/06/16	tbc	CL	CL	Ways to incorporate BlackNorth Initiatives	2021/09/15			B. Lucas
M 50/2021	2021/06/16	tbc	CL	CL	Global City Alliance Program and potential opportunities it may provide	2021/09/15			R. Forward x42052 C. Barnett
Committee of Council
M 9/2019	2019/01/16	CW028-2019	CW	CW	Update on protecting the City's trademark, logo and wordmark	2019/04/03	Q3 2021	17	J. Tamming x42889

- Revise the reporting structure of RML:
  - replace contact with department/division
- Audit ToCP alignment at Council level
- Publish resolved/completed matters in archives
- Consolidate the date field and revisions

Next Steps

- Publishing of the internal RML list (interim solution)

- Publishing of the external RML list

- Load RML into eScribe to consolidate communications

- Automate notifications for aging items

Municipal Cybersecurity Workshop

Developed for: City of Brampton

June 28, 2021

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Agenda

1:00-1:05pm: Opening remarks
Denise McClure, Senior Manager, Economic Development, City of Brampton
Charles Finlay, Executive Director, Rogers Cybersecure Catalyst

1:05-3:00pm: Municipal Cybersecurity Workshop
Randy Purse, CD, PhD, CTDP, Senior Cybersecurity Advisor, Rogers Cybersecure Catalyst

1:05-1:10pm: Introduction and objectives
1:10pm-2:50pm: Cyber risk, Cyber threats and Cybersecurity best practices

1:10pm-1:40pm   1:45pm-2:15pm   2:20pm-2:50pm

2:50-3:00pm: Conclusion

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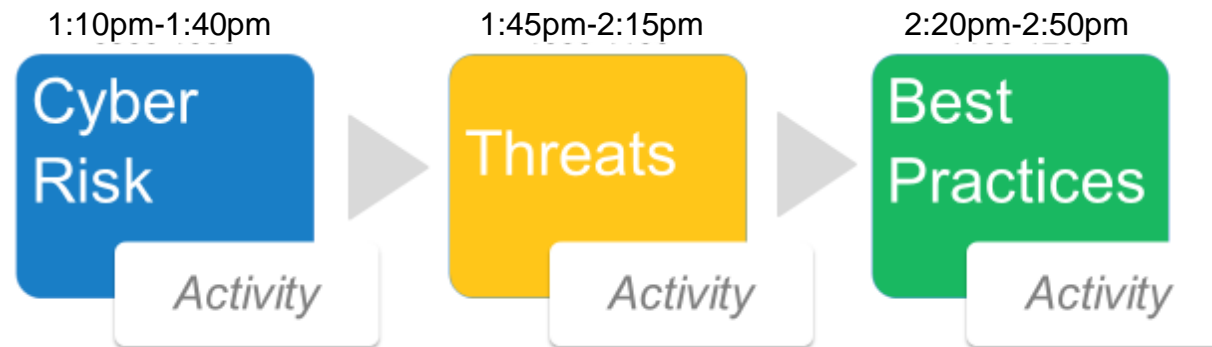
Why?

Think 'Digital'

Municipal challenges

- *Dynamic threat context*
- *Rapidly evolving technology*
- *Convergence of physical and cyber*
- *Large complex threat surface*
- *Constrained by funding for resources and qualified staff*
- *Legacy systems*
- *Limited sharing and collaboration*
- *Etc….*

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Objectives

- Appreciate the **cyber threats and risks** posed to municipal operations, critical infrastructure, and the community
- Identify common preventative actions and municipal cyber security **best practices**; and
- **Define role** in leading municipal cyber security including during cyber security incidents.
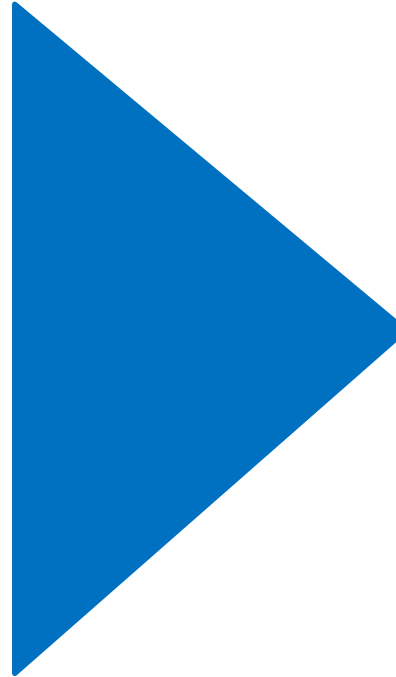
Outcomes

- **Improving municipal cyber readiness and resilience**
- **Protection of your community**

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Getting the most out of this – 3 key points

1. Actively participate
2. Engage in respectful discourse
3. Ask questions

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Cyber Risk

Defining cybersecurity

Risk management

Translating cyber risk into municipal risk

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Cybersecurity – <u>A</u> Definition

"Cyber security is the **protection** of digital information and the infrastructure on which it resides."

(National Cyber Security Strategy, 2018)

People

Process

Technology

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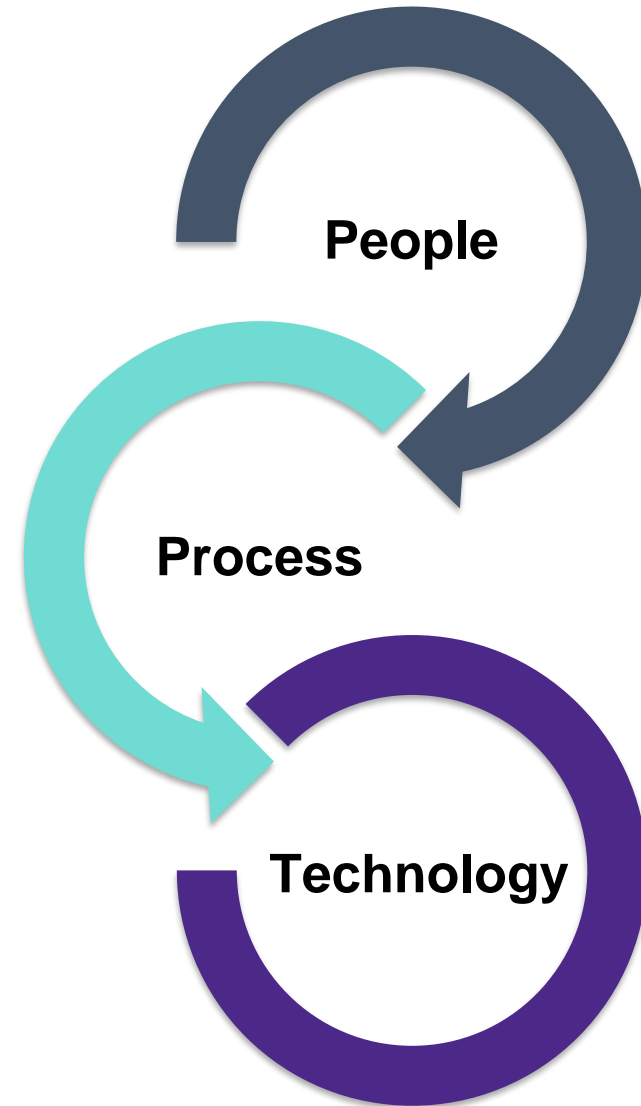
Goal of Cybersecurity

Security

(within organizational /municipal constraints)
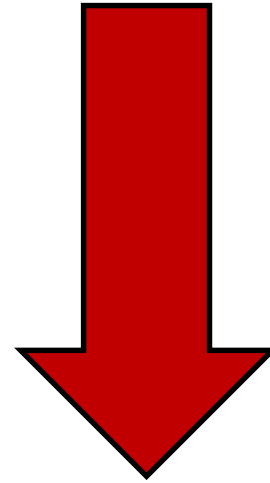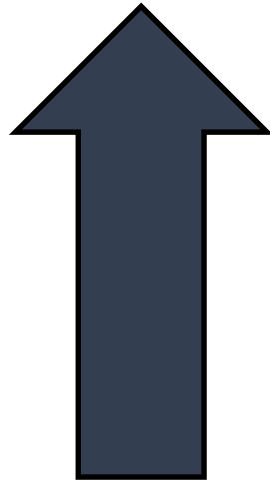
Risk

(to an acceptable level)

What are we trying to protect?

Information and information systems throughout their lifecycle.

Digital Dependencies
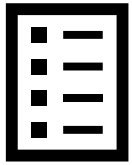
Polling, voting

Networking & social media

Global reach

Financial Mgt Transactions
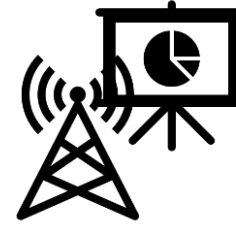
Communications
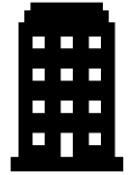
Facilities Controls

Records Mgt & Storage
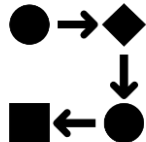
Process / System Controls

Health & Safety

Tools & Performance Support
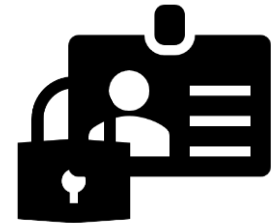
Security

Logistics

Learning Mgt
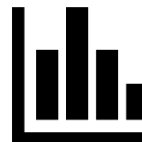
Analytics

HR Mgt

Research & Development

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Risk* Management

*uncertainty

A strategic (ongoing) process that identifies, assesses and takes steps to control risks.

Avoid	Accept
Transfer	Reduce (mitigate)
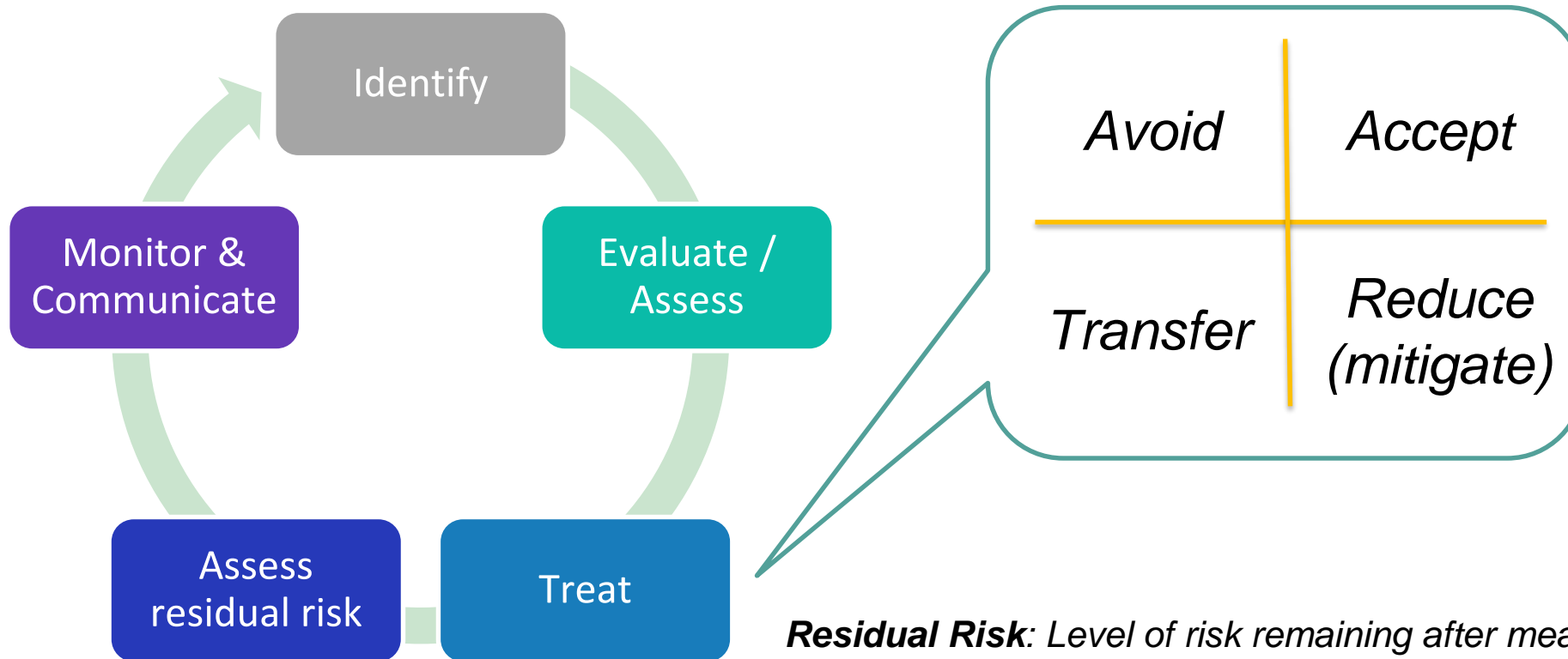
Residual Risk: *Level of risk remaining after measures have been applied*
Risk Appetite: *Amount of risk desired to pursue objectives*
Risk Tolerance: *Readiness to bear risk after risk treatment*

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Activity: Translating cyber risk

What may be at risk (services, products) and what are some potential risks to the municipality (the organization) and the community?

1. Public transportation - Brampton Transit
2. Government - City Hall
3. Public safety - Emergency services
4. Food distribution / local economy - Local national distributer

Legal

Political

Strategic

Financial

Human

Operational

Reputational

Questions?

Questions to consider:

- What municipal services are critical or important to the organization and your community?

- What are the potential cyber risks to those services?

- What suppliers support municipal services or the needs of your community?

- What processes are there in place for identifying and prioritizing municipal risks a the organizational and at the municipal level?

- Is the potential for cyber risk integrated into emergency management scenarios?

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Break

Threats

Types of threats

Deliberate cyber threat actors

Insider threats

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Threat Types

Natural Hazards

Deliberate

Opportunity
Motivation
Capability

Passive
Active

Accidental
(including failure)

Incidental or indirect
Opportunistic
Compound

Deliberate threats

CYBER THREAT ACTOR

		MOTIVATION
✓ NATION-STATES	⚑	GEOPOLITICAL
✓ CYBERCRIMINALS	◎	PROFIT
✓ HACKTIVISTS	🐞	IDEOLOGICAL
TERRORIST GROUPS	💣	IDEOLOGICAL VIOLENCE
THRILL-SEEKERS	🎢	SATISFACTION
✓ INSIDER THREATS	🪪	DISCONTENT

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Source: Canadian Centre for Cyber Security (2018), *An Introduction to the Cyber Threat Environment* https://www.cyber.gc.ca/en/guidance/introduction-cyber-threat-environment

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Threat Actor Tools & Techniques

Spoofing/Pharming
Social Engineering
- **Phishing/vishing**
- Identity Theft
- Doxing

Theft/Tampering
Elevation of Privilege
DoS/DDoS
- Jamming
- Botnets

SQL Injection
SPAM
Malware
- **Trojans**
- **Worms/Viruses**
- **Rootkits**
- **Spyware**
- **Ransomware**

Backdoors
Eavesdropping
Close Access

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Insiders - a special note:

Why are insiders particularly problematic?

- They are already 'inside' and therefore skirt perimeter security

- They have 'inside' knowledge – critical information and assets, priorities, etc.

What are some preventative measures?

- Screening

- Awareness

- "Zero trust" systems – monitoring, logging, access control, privilege management, etc.

Malicious

Neglectful

Accidental

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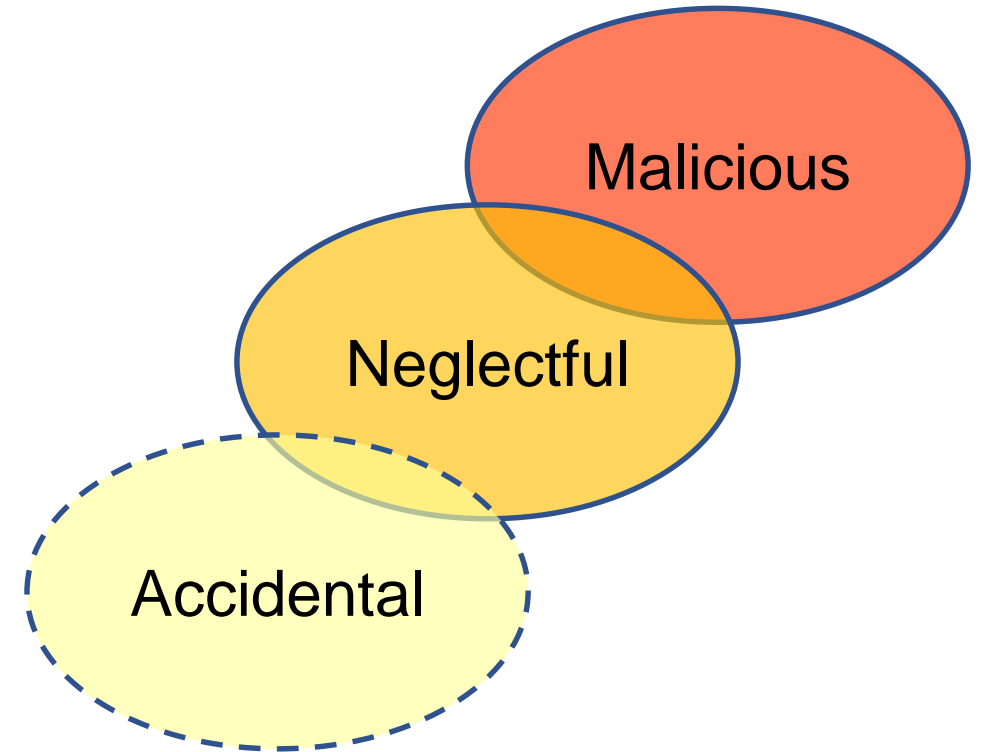
Activity: Choose our own adventure

- *What does the threat mean?*
- *What are some of the specific threat-based risks now?*

Brampton Transit

City Hall

Emergency services

Local national distributer

Hacked server

Exploited software vulnerability

Ransomware attack

Denial of service
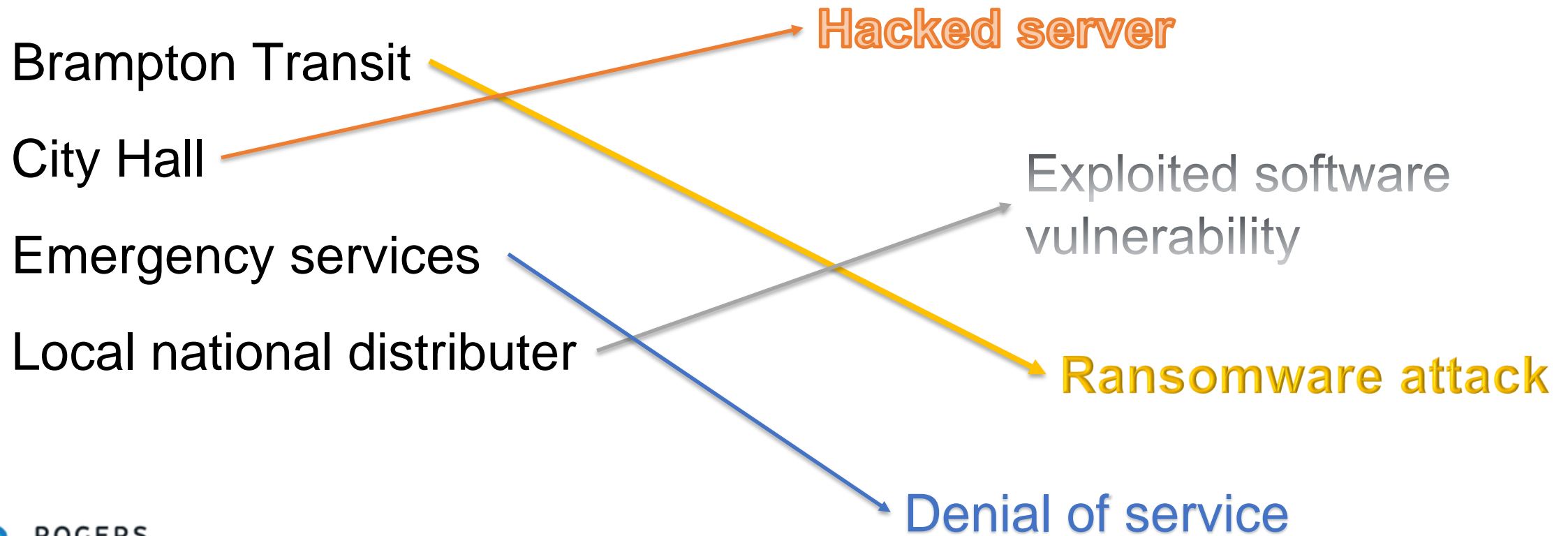
Questions?

Questions to consider:

- What are the primary threats to systems / networks of importance to <u>the city</u> (as an organization) and <u>your community</u>?

- How do these threats increase the risk?

- What means are there to deny opportunity, reduce motivation or limit threat actor capability?

- Are our suppliers and community aware of the threats and potential opportunities to better protect themselves?

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Break

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Best Practices

Municipal cyber security best practices

What to expect from your IT / cybersecurity team

Reducing cyber risk and increasing resilience

The municipal leaders' role

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Best Practices for any Organization

1. Understand what you need to protect (systems, devices, data) and how it should be protected.

2. Use what's already available - activate security products and leverage security services.

3. Ensure your employees are aware of the threats and their responsibilities in protecting your business.

4. Ensure that your operating systems and devices are up-to-date and patched.

5. Use strong passwords/passphrases – use multi-factor authentication for sensitive content. Employ a password manager.

6. Have a plan to respond to a cyber attack.

7. Ensure you have adequate access controls.

8. Ensure that you regularly 'back up' your critical information & information systems – separate and secure.

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Incident Response Best Practices

- Establish formal **roles and responsibilities** - *across the organization*
    - Not just technical response
    - Include crisis management roles
- Develop and communicate the **plan** – *make sure it's accessible*
- Inform and **train** personnel - *based on their role*
- **Test** the plan & procedures – *for all roles*
- **Review & exercise** the plan – *whole of organization*

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Situating Municipal 'Best' Practices:

- Scope of responsibility and size of municipality

- Current threat landscape

- Technical maturity & dependence on connected systems and devices

- Owned v. out-sourced services and systems

- Organizational characteristics (size, functions, scope of responsibilities, etc.)

- Legal and compliance requirements

- Constraints and limitations

- Support network

Municipal Cyber Best Practices

- **Threat and risk assessment**
  - Criticality, sensitivity, value of assets
  - Compliance ~ security
  - Consult experts
    - Legal counsel
    - Privacy officials

- **Planning and governance**
  - Policy & plans
  - Roles & responsibilities (including 3rd party suppliers)
  - Training & awareness

- **Communications**
  - Internal
  - External
  - Prepared holding and update statements

- **Incident Response**
  - Have a plan
  - Publish procedures (Playbook)
  - Exercise the plan
  - Integrate improvements

- **Working with law enforcement**
  - Public safety first
  - Protection of assets during an investigation
  - Preservation of evidence

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Municipal Cyber Best Practices
In Focus

- **Threat and risk assessment**
  - **Criticality, sensitivity, value of assets**
  - Compliance ~ security
  - Consult experts
    - Legal counsel
    - Privacy officials

- **Planning and governance**
  - Policy & plans
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Source: TECHNATION Municipal Cybersecurity Best Practices guidelines, https://technationcanada.ca/wp-content/uploads/2021/04/Municipal-Best-Practices-2021-EN.pdf

Mobilization Across the Municipality

How can best practices be mobilized to the broader municipality, partners, suppliers and the public?


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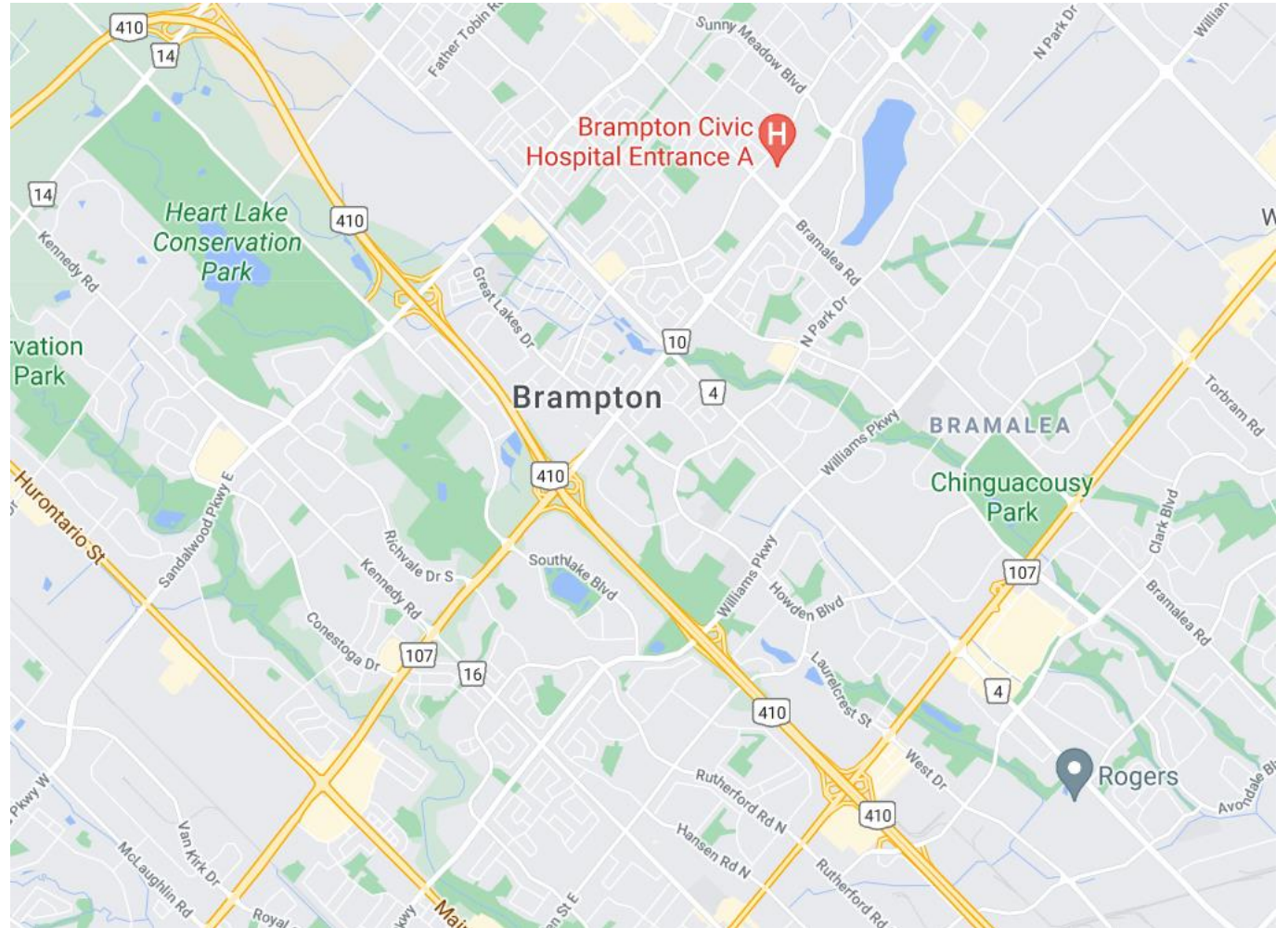
Collaborative planning

'Cybersecurity is a team sport!' – effective governance and allocation of responsibilities helps. What should you expect from your security and IT team?

Role	General responsibility & scope of input
Senior Leaders	Oversight, strategy, governance, risk management, business direction
Security advisors & practitioners	Threats, analysis, security program implementation & management
Business/program managers	Business requirements, impacts and implementation
IT asset owners & IT management	Technological solutions, IT management, emerging tech
Users representatives/Users	User concerns, application and implementation

Your Role as a Municipal Leader…

Security

(within organizational /municipal constraints)

Risk

(to an acceptable level)
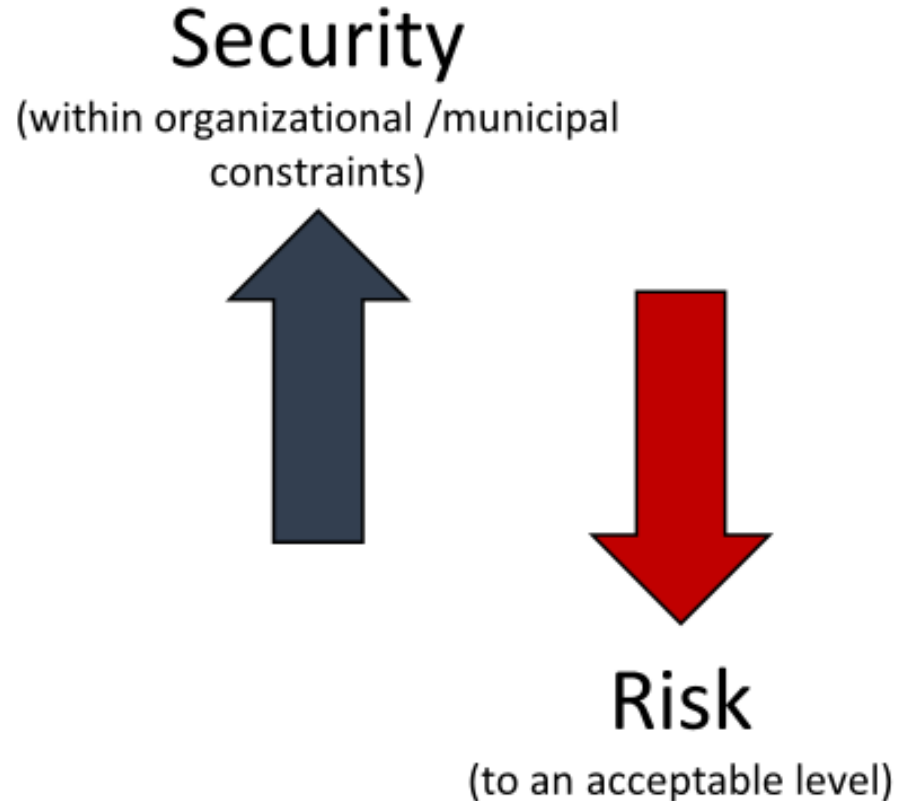
- Are you integrated into municipal cyber risk management discussions and cyber security investment strategy?

- What opportunities might there be to promote cyber security best practices (within the organization or community)?

- How are cyber security and emergency management processes integrated?

- If a cyber incident impacts your office or constituency, what role would you play?

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Activity: Stopping the pain with some best practices

Brampton Transit **Ransomware attack**

City Hall **Privacy beach**

Emergency services Denial of service

Local national distributer Exploited software vulnerability

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Questions?

Questions to consider:

- What are we doing to prevent cyber attacks?

- What plans and processes are in place?

- Who are the experts in our organization that can help?

- What is my role in supporting cyber security activities?

- What is my role during a cyber security incident?

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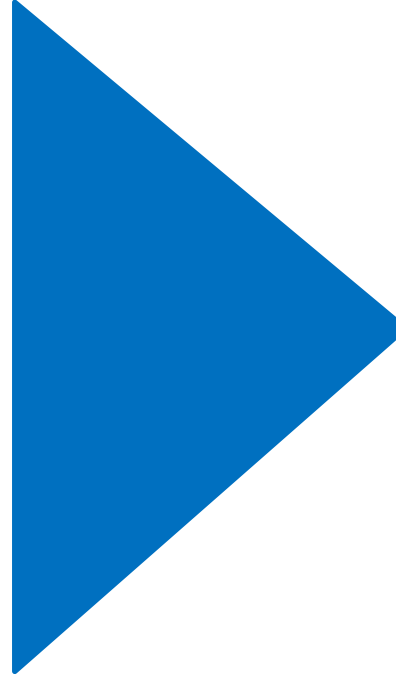catalyst

Conclusion

Workshop Flow

Introduction

Conclusion

Objectives

Outcomes

- Appreciate the **cyber threats and risks** posed to municipal operations, critical infrastructure, and the community

- Identify common preventative actions and municipal cyber security **best practices**; and

- **Define role** in leading municipal cyber security including during cyber security incidents.

- **Improving municipal cyber readiness and resilience**

- **Protection of your community**

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References & Resources

- Canadian Centre for Cyber Security (2018), [An Introduction to the Cyber Threat Environment](#)

- Canadian Centre for Cyber Security (2019), Develop an incident response plan https://www.cyber.gc.ca/en/develop-incident-response-plan

- Canadian Centre for Cyber Security (2018), Cyber Hygiene Infographic, https://cyber.gc.ca/en/guidance/cyber-hygiene

- Canadian Centre for Cyber Security (2019), [Top 10 IT Security Actions](#)

- Government of Ontario (2017), Enterprise Risk Management Directive https://www.ontario.ca/page/enterprise-risk-management-directive

- Government of Ontario (2021), GO ITS 25, General Security Requirements https://www.ontario.ca/page/go-its-250-general-security-requirements

- Information and Privacy Commissioner of Ontario (2019), [Privacy Breaches – Guidelines for Public Sector Organizations](#)

- National Institute of Standards and Technology (2012), Special Publication 800-61 Revision 2 *Computer Security Incident Handling Guide*

- Rogers Cybersecure Catalyst (2021), Simply Secure, https://simply-secure.ca/

- TECHNATION Municipal Cyber Security Best Practices https://technationcanada.ca/wp-content/uploads/2021/04/Municipal-Best-Practices-2021-EN.pdf

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Thank you!