

Citywide Parking Strategy Workshop Special DSC Meeting

February 12, 2024 @ 2pm



Introductions



Agenda

1. Introduction
2. Project Roadmap
3. Engagement Update
 - Phase 1
 - Phase 2
4. Refine Parking Zone Criteria and Guidelines
6. Draft Policies
 - **Land Development**
 - **Curbside Management and On-Street Parking Plan**
 - **BREAK** - Parking Paradigm Shift - Video
 - Parking **Technology** Plan
 - **Connected and Autonomous Vehicles** Parking Plan
 - **Electric Vehicle** Parking Plan
 - **Micromobility** Parking Plan
 - **Trails and Major Parks** Parking Management Plan
 - **BREAK**
7. Final Remarks



Project Roadmap



Project Objectives and Process



Phase 1

Assess **existing conditions** and issues



Phase 2

Develop a **Vision, Guiding principles and Policy Framework**



Phase 3

Develop City-wide and Area-Specific **Parking Approaches for key topic areas that have been endorsed by City Council**

Recommend an **implementation and monitoring** strategy



We Are Here!

Phase 4

Prepare a draft and final report for **Council endorsement**



Engagement Update



Engagement Update



What We Heard

The following is a summary of feedback received on what the City should be considering in their Parking Strategy. This is a summary of feedback from businesses, community members, and staff across all consultation methods.



The Strategy should reflect existing parking conditions and accommodate changes in transportation trends.



More connectivity between parking lots, local destinations and public transportation.



More public parking in growing residential neighbourhoods to facilitate safe and easy access to housing and local institutions.



Active transportation infrastructure is required to safely access and use bicycles, scooters etc.

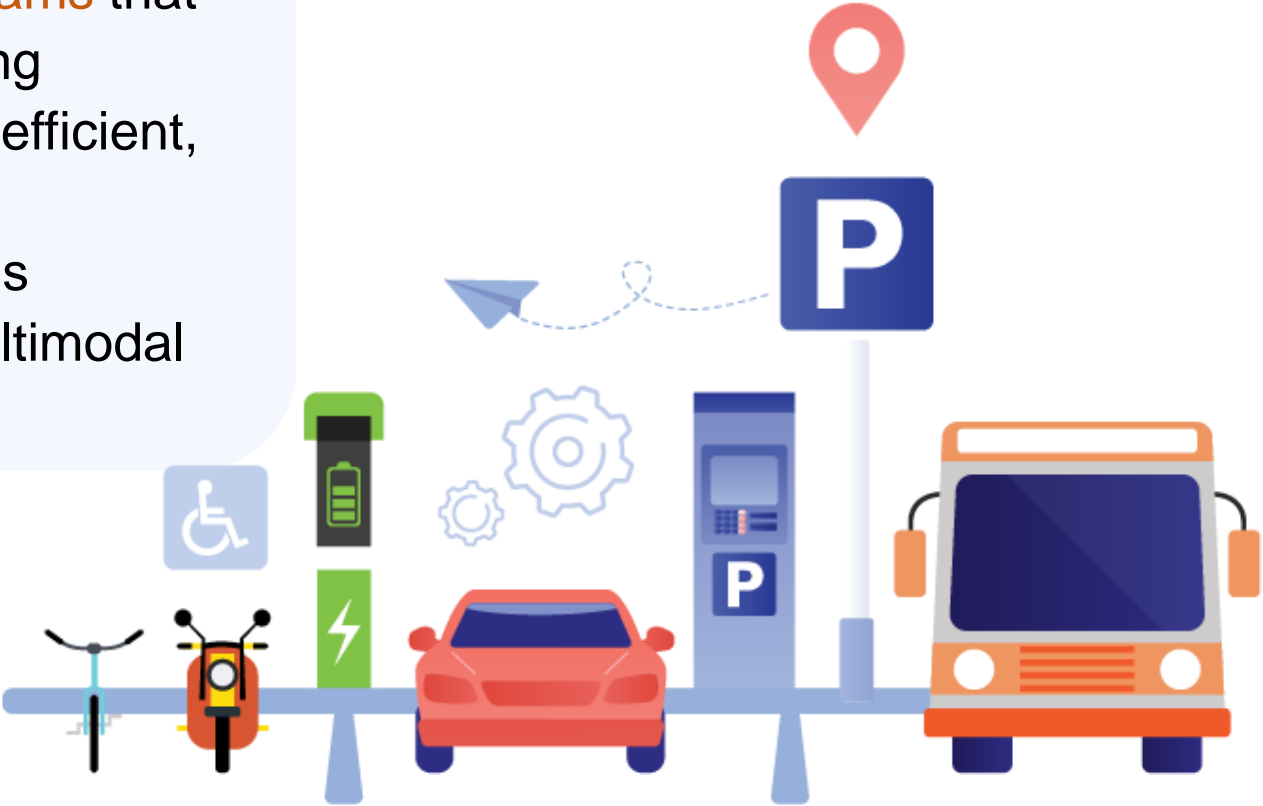
Council Resolution:

- Refine Parking Zone Criteria and Guidelines



Revised Draft Parking Vision

Markham’s vision for parking is to create adaptive area-specific policies, standards **and programs** that align with the City’s commitment to providing residents, visitors, and businesses with an efficient, safe, equitable, reliable, and convenient transportation system and support the City’s transformation into a more sustainable, multimodal and livable city.



Draft Parking Principles

**Adapt to Local
Mobility Contexts**






**Support Sustainability,
Climate-resilience and
Net Zero Emissions by
2050**

**Integrate
Development and City
Building Objectives**



**Improve Efficiency of
Parking Infrastructure
and Operations**


Parking Zone Criteria and Guidelines

		Zone 1	Zone 2	Zone 3	Zone 4
Transit¹ 	15 minutes access to two Regional ³ Transit Services	✓			
	Frequent ² Rapid Transit or Frequent Bus Service	✓	✓	✓	
Urban Structure 	Major Transit Station Area (MTSA)	✓	✓		
	Secondary Plan Area containing an Intensification Area or Key Development Area (KDA)	✓	✓		
Land Use & Density 	Mixed Uses to support live, work, play	✓	✓	✓	
	Medium to High Density, e.g. Multi-unit Residential, Multi-storey Office	✓	✓	✓	

¹Operational, in delivery, development, or planned ²Frequent- 10-15 minutes service ³Regional-service across more than one municipality

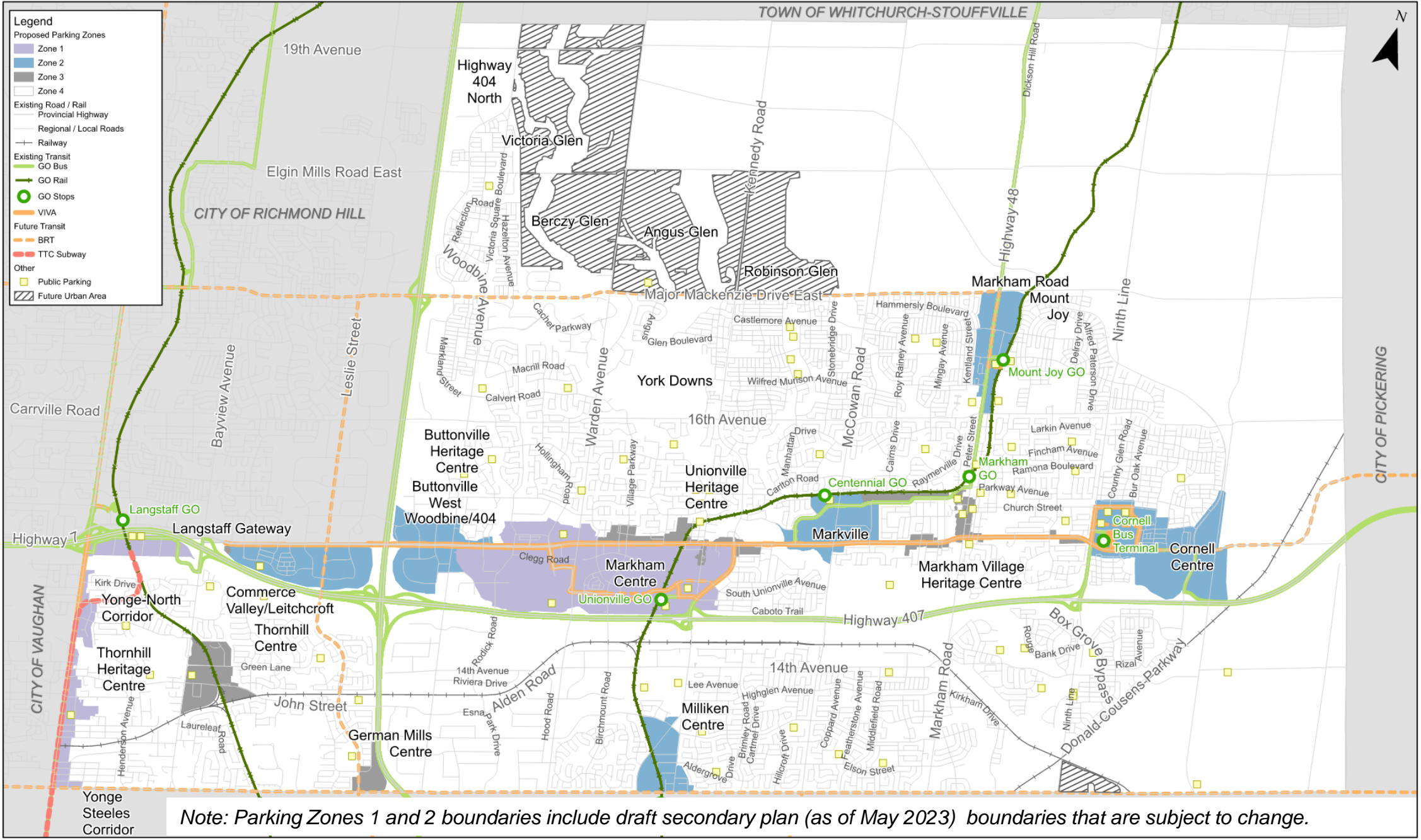


Parking Zone Criteria and Guidelines

		Zone 1	Zone 2	Zone 3	Zone 4
Public Parking 	Availability of Public Parking, Shared Parking , On-street Parking	High	→		Low
Active Transportation Infrastructure 	Walkability	High	→		Low
	Bicycle Parking and Cycling Facilities	High	→		Low
	Shared Mobility Services	✓	✓	✓	
Parking Management Measures 	Require Unbundled Parking	✓	✓	✓	
	Require Pick-up and Drop-off Zones	✓	✓	✓	
	Encourage Paid Parking	✓	✓		



Markham Citywide Parking Study - Draft Proposed Parking Zones



Note: Parking Zones 1 and 2 boundaries include draft secondary plan (as of May 2023) boundaries that are subject to change.

Do these policies and measures reflect the Vision for Markham?

Is there anything else related to this topic that you would like to discuss/change?

INSTRUCTIONS:

1. You will have a few minutes to reflect on the materials and questions presented.
2. Please respond to **each question** using the Post-it notes provided. Please use the associated post-it note colour.
3. Please ensure one idea per post-it.
4. Select top ideas to share out loud in the session.
5. We will collect all ideas for review during the break.
6. We will group each note by theme on the boards provided to summarize all feedback.



Draft Policies



Draft Policy Areas

Land Development (Policy Area 1, 2, 3):

- 1 Develop Parking Standards to complement the City's Parking Zones
- 2 Develop a citywide Transportation Demand Management Program
- 3 Transition from unpaid to paid public parking in Zones 1 and 2

Curbside Management (Policy Area 4) and On-street Parking Plan (Policy Area 5):

- 4 Develop a citywide Curbside Management guidelines
- 5 Expand the citywide on-street parking system

Parking Technology (Policy Area 6), CAV (Policy Area 7) and EV Parking Plan (8):

- 6 Leverage technology to support various curbside, parking and delivery functions
- 7 Develop parking considerations for connected and automated vehicles (CAV) for street parking and off-street parking
- 8 Develop a dedicated City-wide Electric Vehicle (EV) Strategy and align an EV Parking Plan to support the shift to zero-emissions vehicles.

Micromobility (Policy Area 9) and Trails and Major Parks Parking Management Plan (Policy Area 10):

- 9 Develop citywide micromobility parking plan
- 10 Develop appropriate parking supply and improve multimodal access at high-priority trailheads and major parks.



Land Development Parking Plan



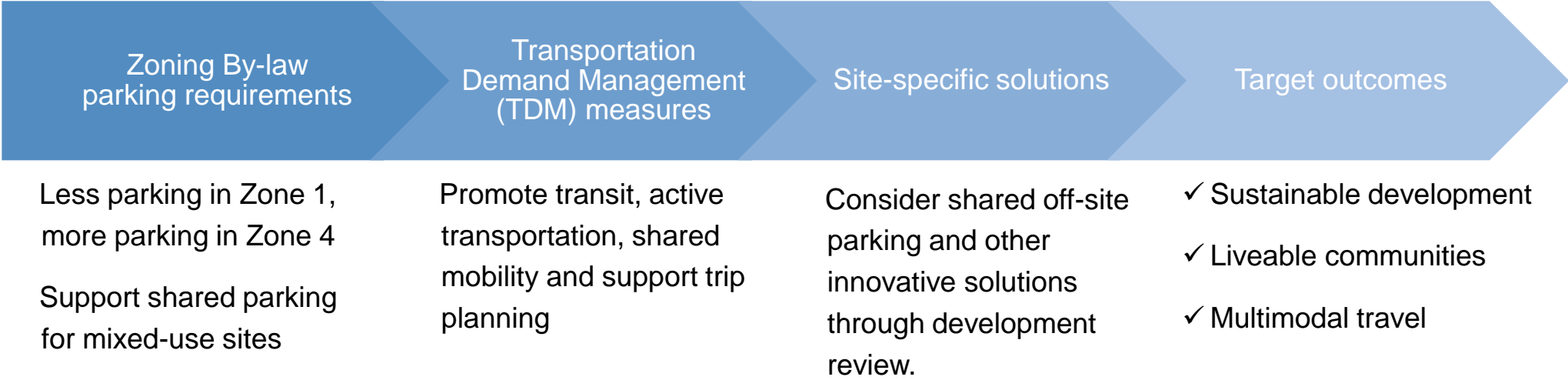
Land Development Parking Plan

Policy Area	Policy
<p>1 Develop Parking Standards to complement the City’s Parking Zones</p>	<ul style="list-style-type: none"> • Right-size parking by varying parking standards by Parking Zone and update regularly as Markham transitions over time • Encourage shared parking for the efficient use of land and infrastructure • Support affordable housing through reduced parking requirements
<p>2 Develop a citywide Transportation Demand Management Program</p>	<ul style="list-style-type: none"> • Enhance citywide TDM Guidelines and Measures • Introduce earned parking reductions through enhanced TDM provision
<p>3 Transition from unpaid to paid public parking in Zones 1 and 2</p>	<ul style="list-style-type: none"> • Consider public parking supply opportunities, including partnership • Consider municipal on-street and off-street parking facilities



Land Development Parking Plan

Policy	Detail
<p>1 Develop Parking Standards to complement the City's Parking Zones</p>	<ul style="list-style-type: none"> • Right-size parking by varying parking standards by Parking Zone and update regularly as Markham transitions over time • Encourage shared parking for the efficient use of land and infrastructure • Support affordable housing through reduced parking requirements



Land Development Parking Plan

Policy

Detail

2 Develop a citywide Transportation Demand Management Program

- Enhance citywide TDM Guidelines and Measures
- Introduce earned parking reductions through enhanced TDM provisions

Sample TDM Guideline	Primary Intent	Applicable Land Use					Applicable Parking Zone			
		Transit Oriented/ Mixed Use	Commercial/ Employment	Industrial	Urban Residential	Suburban Residential	1	2	3	4
Shared Mobility: Bike & Car Share	Increase the modal options for the community	✓	✓		✓		✓	✓	✓	

- Evaluate TDM effectiveness through post-occupancy travel surveys
- Review and update TDM guidelines regularly
- Streamline development approvals: Zoning By-law to permit parking reductions through providing enhanced TDM measures



Land Development Parking Plan

Policy

Detail

3 Transition from unpaid to paid public parking in Zones 1 and 2

- Consider public parking supply opportunities, including partnerships
- Consider municipal on-street and off-street parking facilities



Credit: PreciseParklink



Discussion – Land Development

Do these policies and measures reflect the Vision for Markham?

Is there anything else related to this topic that you would like to discuss/change?

Key Considerations

Encourage and support non-auto travel and reduce traffic congestion

Lower on-site parking supply and increase the opportunity for paid public parking and shared on and off-site parking are intended to minimize the oversupply of parking spaces and make more efficient use of land.

Support local business and employment zones by increasing the opportunities for off-site parking (and on-street permits) and supporting and encouraging multimodal facilities and infrastructure to reduce parking demand



Curbside Management and On-street Parking Plan



Curbside Management



Productive curbsides are a prerequisite to achieving our vision for our local places. They can free up space for shade, seating, wider footpaths, transit, new mobility options, walking and cycling. All together enabling better access for people of all ages and abilities.

Credit: WSP- Future Ready Curbside



Curbside Management - Functions

Movement

- Transit lanes
- Travel lanes
- Bike lanes
- Pedestrian walkways



Access for People

- Passenger pick-up and drop-off
- Transit stops

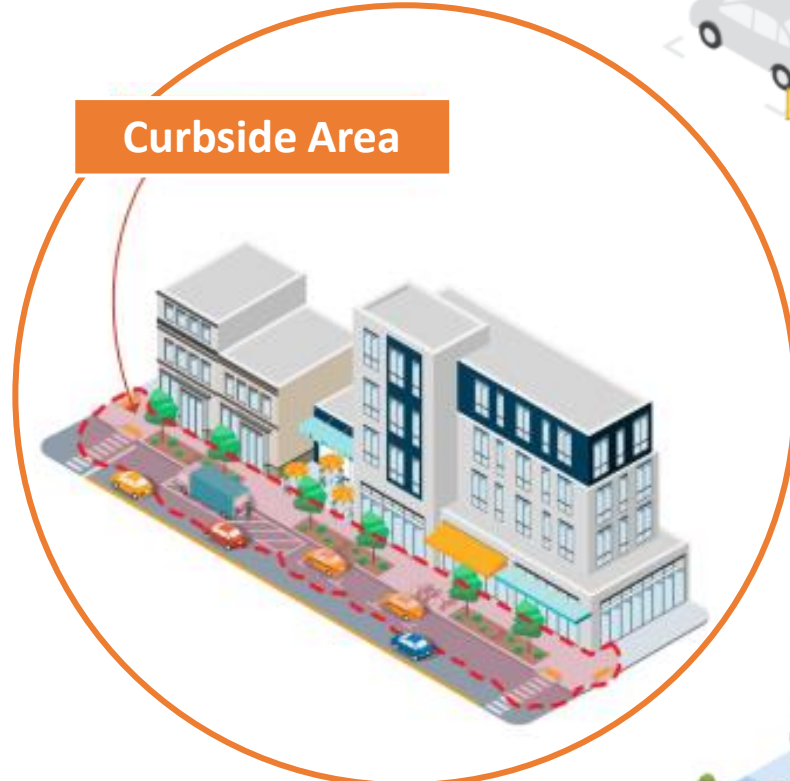


Access for Goods

- Short term delivery



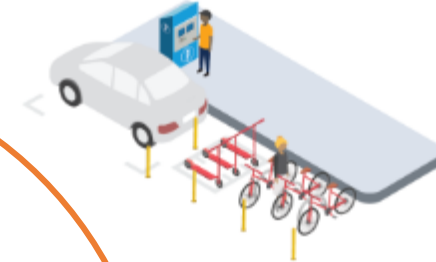
Curbside Area



Credit: City of Bellevue, WA

Parking

- Vehicle
- Bike & Micromobility
- Micromobility hub



Greening/Activation

- Recreational and relaxation space
- Green areas
- Programmable space
- Retail space
- Sidewalk cafes



Curbside Management- Policy

Policy

Detail

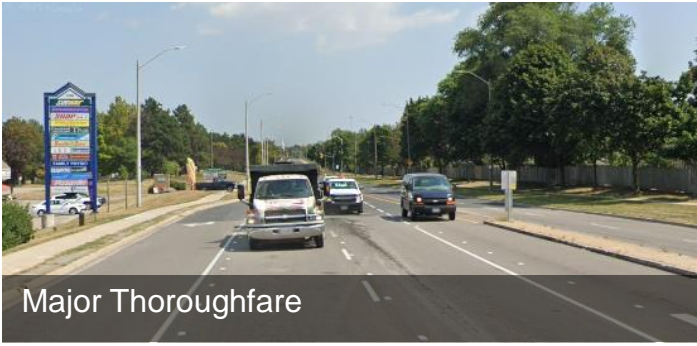
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Develop citywide Curbside Management guidelines

- Prioritize the use of curbside based on roadway functions



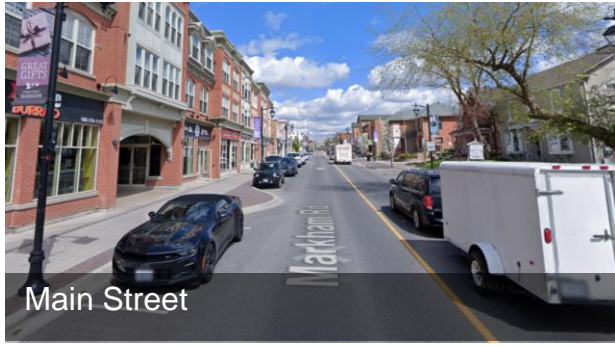
Transit Priority Zone



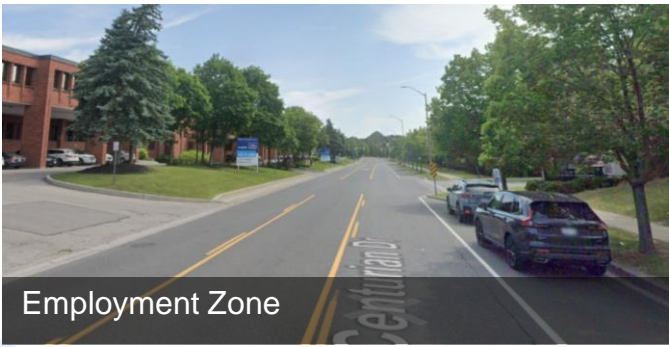
Major Thoroughfare



Urban & Mixed-use Corridor



Main Street



Employment Zone



Suburban Residential Zone



A Complete Streets approach can provide multiple curbside functions

Credit: Alta



Curbside Management & On-street Parking Plan

Policy	Detail
<p>4 Develop citywide Curbside Management guidelines</p>	<ul style="list-style-type: none">• Prioritize the use of curbside based on roadway functions
<p>5 Expand the citywide on-street parking system</p>	<ul style="list-style-type: none">• Update the residential overnight parking permit program• Consider on-street delivery zones or permit program• Consider supplemental on-street parking in employment areas where appropriate• Prioritize short-term on-street parking (over daily parking) in Zones 1 and 2• Establish paid on-street parking



On-street Parking Plan

Policy	Detail
<p>5 Expand the citywide on-street parking system</p>	<ul style="list-style-type: none"> • Update the residential overnight parking permit program • Consider on-street delivery zones or permit program • Consider supplemental on-street parking in employment areas where appropriate • Prioritize short-term on-street parking (over daily parking) in Zones 1 and 2 • Establish paid on-street parking



Residential parking permit

- Eligibility criteria to prioritize a household’s first vehicle (secondary units)
- Price higher than a transit pass
- Impacts to operations and enforcement



Paid on-street parking

- Strategic parking pricing
- Public education campaign to introduce paid parking



Discussion - Curbside Management & On-street Parking Plan

Do these policies and measures reflect the Vision for Markham?

Is there anything else related to this topic that you would like to discuss/change?

Key Considerations

Expand on-street parking system to include residential permits (increasing supply in areas where on-site supply is not possible)

Support local business with short-term, delivery zone, and supplemental parking in employment areas

Establish an objective for paid parking: should pricing be set as a deterrent, or should it be considered as a revenue generator?

Impact of on-street parking on operations and emergency response



BREAK - 15 minutes



Parking Technology Plan



Parking Technology Plan

Policy

Detail

6 Leverage an integrated technology platform to support various curbside, parking and delivery functions while minimizing deployed infrastructure

- Define Smart Parking that is flexible and future proofed to :
 - Enable demand based pricing and incentives
 - Support flexible curbside use
 - Provide enforcement including integration with existing Violation ticketing system
 - Encourage Smart Loading solutions
 - Support dynamic pickup/drop off assignment/reservation
 - Explore shared public/private parking
 - Explore pilot opportunities through the Ontario Vehicle Innovation Network (OVIN) Demonstration Zone



Markham Cityw



CAV Parking Plan



CAV Parking Plan

Policy

7 Develop parking considerations for connected and automated vehicles (CAV) for street parking and off-street parking

Detail

- Using current best practices (US MUTCD Dec 2023, GTHA CAV Readiness Plan 2020), identify levels of preparedness
 - L1 – AV only zone (automated parking systems, reduced space)
 - L2 – CAV Infrastructure preparedness (Roadside Units (RSU), painting, signing etc)
 - L3 – Do Nothing
- Consider parking technologies that can work with automated vehicles (ie License Plate Recognition)
- Consider EV charging needs as automated vehicles will likely be electric
- Identify considerations for follow-up study through TMP

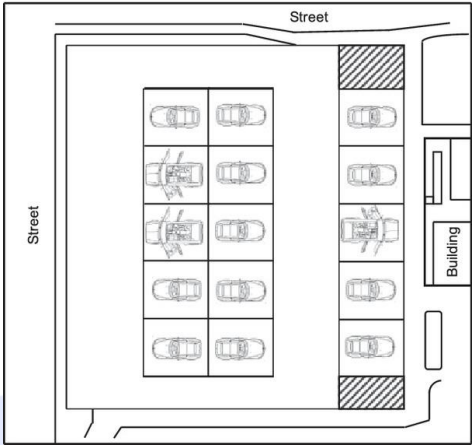
In-Vehicle Traveller Information (ITI)

— **Description:** Provides motorists with relevant travel information, such as weather alerts, speed restrictions, road conditions, vehicle restrictions, incidents or road closures.

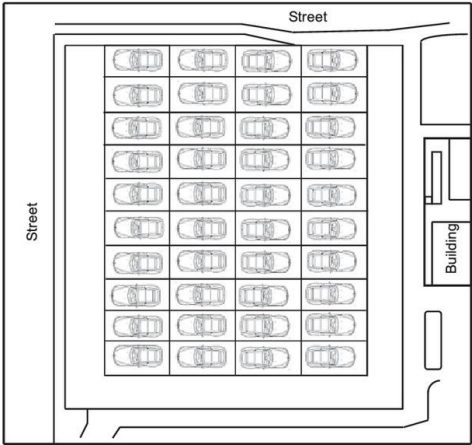


Relevant Technologies: V2I and V2X communications, RSUs and OBUs
Category: Safety, Efficiency, and Informational
Deployment Readiness: Available and Ready

Conventional car-parks



Autonomous vehicle car-parks



EV Parking Plan



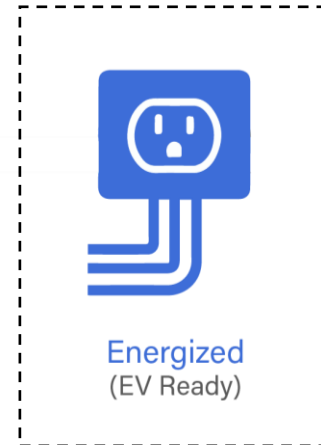
EV Parking Considerations

Policy	Detail
<p>8A Develop a dedicated City-wide EV charging strategy and align parking requirements to support the transition toward zero-emissions mobility</p>	<ul style="list-style-type: none"> • Identify priority areas for public charging infrastructure • Consider setting EV-ready parking requirements for new developments <ul style="list-style-type: none"> ○ Proportions of EV-ready parking designs in new buildings aligning with federally mandated ZEV Sales Targets (100% by 2035)

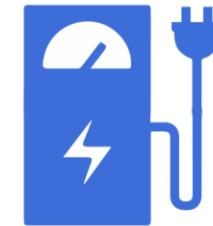
EV Ready: The parking space must have a termination point in an electrical wiring installation to power a level 2 charger



Partial
(EV Capable)




Energized
(EV Ready)



Installed



EV Parking Considerations

Policy	Detail
 Develop a short-term EV parking strategy to support the shift to zero-emissions vehicles	<ul style="list-style-type: none">• Encourage developers to include “EV-ready” parking stalls in new buildings based through reduced parking minimums, other incentives or policy levers• Develop an on-street electric vehicle (EV) parking policy<ul style="list-style-type: none">• Set consistent charging rates across City to ensure vehicle turnover• Reduce payment confusion• Develop signage for EV parking areas• Consider accessible EV parking design• Pursue incentives, payment and revenue generation to cover the costs of infrastructure• Consider equity when expanding public chargers within City-owned parking areas• Develop programs for developers and landowners to educate them about the benefits of providing EV-ready parking



Discussion – EV Parking Plan

Do these policies and measures reflect the Vision for Markham?

Is there anything else related to this topic that you would like to discuss/change?

Key Considerations

Develop a community EV charging strategy for the City

Implement an on-street EV parking policy

Explore payment at EV charging stations and other revenue generation opportunities to fund public charging infrastructure

Consider setting EV-ready parking requirements for new developments and non-residential land-uses



Parking Technology and CAV

Do these policies and measures reflect the Vision for Markham?

Is there anything else related to this topic that you would like to discuss/change?

Key Considerations

Parking Technology	CAV Parking Plan
Leverage technology to support various curbside, parking and delivery functions.	Identify levels of preparedness
Pursue grants, funding, and partnerships with stakeholders through pilot programs and other opportunities to achieve the City's parking strategy.	Consider parking technologies that can work with automated vehicles
	Identify considerations for follow-up studies



Micromobility Parking Plan



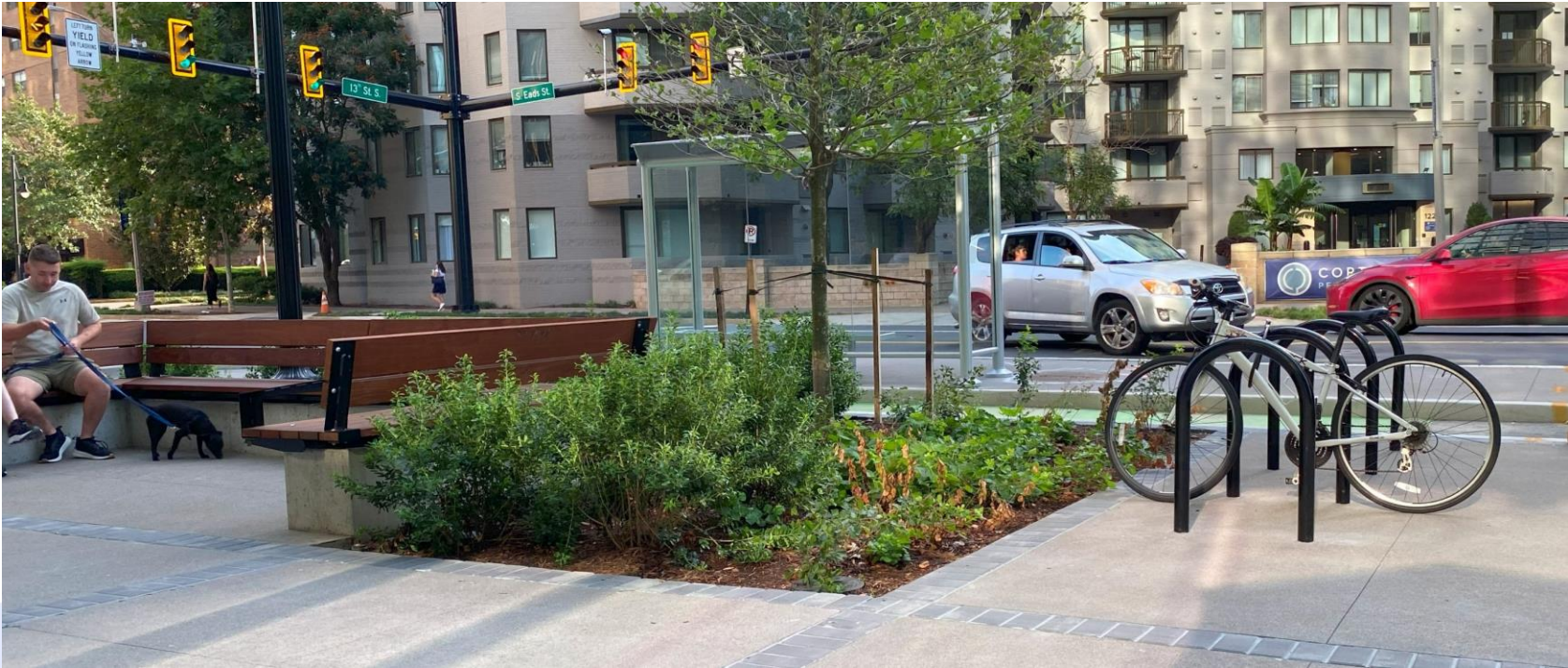
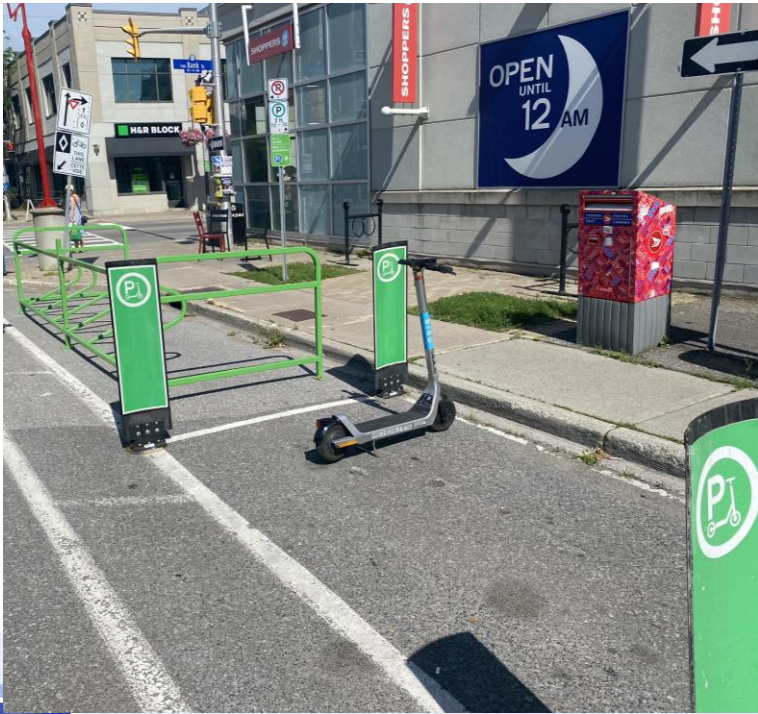
Micromobility Parking Plan

Policy

- 9 Develop a citywide parking policy for micromobility uses

Detail

- Should the City adopt electric travel devices as transportation options, the following measures should be considered:
 - E-scooter and e-bike policy including parking policies, with priority in Zones 1 and 2



Micromobility Parking Plan

Policy

- 9 Develop a citywide parking policy for micromobility uses

Detail

- Should the City adopt electric travel devices as transportation options, the following measures should be considered:
 - E-scooter and e-bike policy including parking policies, with priority in Zones 1 and 2
 - Develop bike and micromobility parking program including consideration for Micromobility Hubs, with priority in Zones 1 and 2



Micromobility Parking Plan

Policy

- 9 Develop a citywide parking policy for micromobility uses

Detail

- Incorporate bicycle and micromobility parking in developments
 - Set minimum bicycle and micromobility parking requirements in the Zoning by-law, with higher requirements in Zones 1 and 2
 - Require electric bike and micromobility charging infrastructure
 - Conduct a public education campaign to promote the provision and use of bicycle and micromobility parking in existing developments



Credit: CC BY



Credit: Getty Images



Credit: Bicycling Magazine



Trails and Major Parks Parking Management Plan



Trails and Major Parks Parking Management Plan

Policy

10 Develop appropriate parking supply and improve multimodal access at high-priority trailheads and major parks.

Detail

- Determine high-priority trails
- Introduce travel planning and parking management measures
- Enhance on-street parking signage and enforcement in high-priority areas

Free Gatineau Park Shuttle on summer weekends

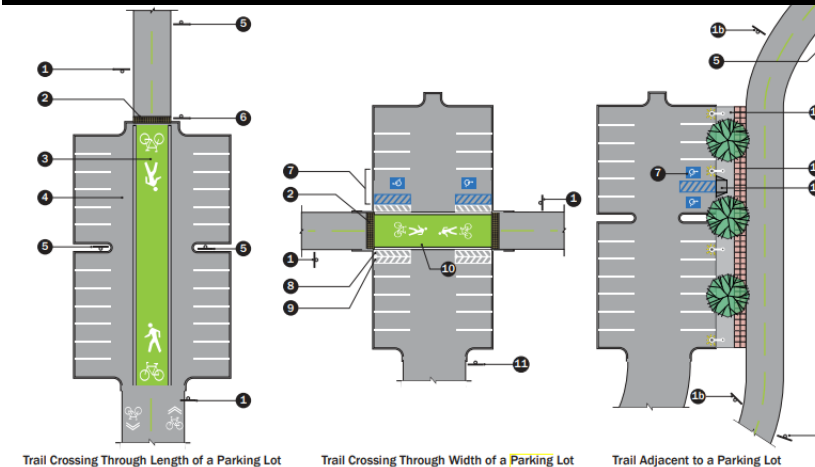


Credit: National Capital Commission (NCC)

Pilot trail parking travel planning and management measures

- Parking availability information and reservation
- Coordination with YRT to improve access to trails
- Passenger pick-up and drop-off
- Shared parking with civic uses
- Centralized parking hubs
- Carpooling
- Wayfinding and trip planning tools to expand first and last kilometre choices

Multi-use Trail Design Guidelines



Credit: City of Toronto



Discussion - Micromobility and Trails and Major Parks Parking Plan

Do these policies and measures reflect the Vision for Markham?

Is there anything else related to this topic that you would like to discuss/change?

Key Considerations

Micromobility Parking Plan

Incorporate bicycle and micromobility parking in developments

Require electric bike and micromobility charging infrastructure

Conduct public education campaign to promote the provision and use of bicycle and micromobility parking in existing developments

Trails and Major Parks Parking Management Plan

Determine high-priority trail and recreational facilities

Introduce travel planning and parking management measures

Enhance on-street parking signage and enforcement in high-priority areas



BREAK- 15minutes



Final Remarks



NEXT STEPS

Phase 3:

- Parking Strategies
- Governance and Finance
- Report to Council – Q2 2024
- Public Engagement – Public Open House, Website Communications, External Focus Groups

Phase 4:

- Draft Final report and implementation plan
- Final report to Council – Q3 2024



Thank you

