

COMMITTEE OF THE WHOLE (WS) – MAY 31, 2023

COMMUNICATIONS

Distributed May 26, 2023

Item No.

C1. Presentation material.

3

Distributed May 30, 2023

C2. Presentation material.

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C3. Presentation material.

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Communication : C 1
Committee of the Whole (Working Session)
May 31, 2023
Agenda Item # 3

City-Wide Sports Facilities Assessment Study

Interim Update – Soccer Facilities

Committee of the Whole (Working Session)

May 31, 2023



Agenda

- 1. Study Background and Community Engagement**
- 2. Active Together Master Plan**
- 3. Soccer CSO Engagement**
- 4. Methodology and Data Analysis**
- 5. Investment and Partnerships**
- 6. Recommendations**



1 - Study Background and Community Engagement



Partners and Stakeholders

Internal

Recreation Services

Parks, Forestry and Horticulture Operations

Infrastructure Planning & Corporate Asset Management

Development Finance

External

City Residents

Clubs, Associations, CSOs

School Boards



Business Drivers of the City-Wide Sports Facilities Assessment Study

- There are **upcoming deficiencies** (soccer, baseball, etc.) noted in the ATMP.
- Need to assess **opportunities and challenges** of meeting the level of service and provision targets recommended for sports facilities.
- **Identifying gaps** in standard level of service of existing sports facilities.
- Need updated information and data to assess **growth related capital funding and timing**, in particular projects partially and fully reliant on non-growth reserve funding.
- Need informed and efficient **decision-making** regarding recreation facilities, parks planning and wider infrastructure planning.
- Require a consistent and efficient approach regarding the assessment of planning applications **and shared-use/co-location/partnership opportunities**.
- Need **evidence-based decision-making matrices/toolbox** to provide efficient and consistent decision-making that addresses local and city-wide sports facilities provisions needs as identified in the ATMP.



Challenges and Opportunities

Challenges are anticipated in accommodating new soccer fields due to:

- **Land deficiencies and acquisition costs**
- Impact of **new legislation** (Bill 23)
- **Parkland constraints** in infill development and intensification areas
- Impact of **projected population to 2031 and 2051**
- **Reduced development charge** collections

Current reality:

- Limited ability to secure parkland of sufficient **size and suitability**
- **Less CIL funds** to acquire land for recreation purposes
- **Fewer** senior-sized soccer fields and baseball diamonds in new developments

As a result of the above, **community partnership opportunities** and alternative funding opportunities are becoming increasingly important to consider.

The City has been approached by external parties for potential partnerships.



Study Scope

In Scope

- Sports Fields (soccer, baseball)
- Sports Courts (volleyball, basketball, ball hockey)
- Comprehensive GIS mapping and attribute data
- Population Growth Forecasts
- Facility permitting data and forecasting
- Multiple City-Wide Sports Facilities Scenarios
- Potential Future Land Needs
- Consultation with Key Internal and External Stakeholders/User Groups (Sports User Groups and School Boards)

Out of Scope

- Indoor community centres
- Detailed facility fits
- Facility usage observation*
- Playgrounds and splash pads
- Development of sports programming/activation
- Outdoor recreational skating
- Stand alone open house event
- Skateboard and other action wheeled sports
- Off-leash dog parks*
- Tennis and Racquet Sports/Pickleball*

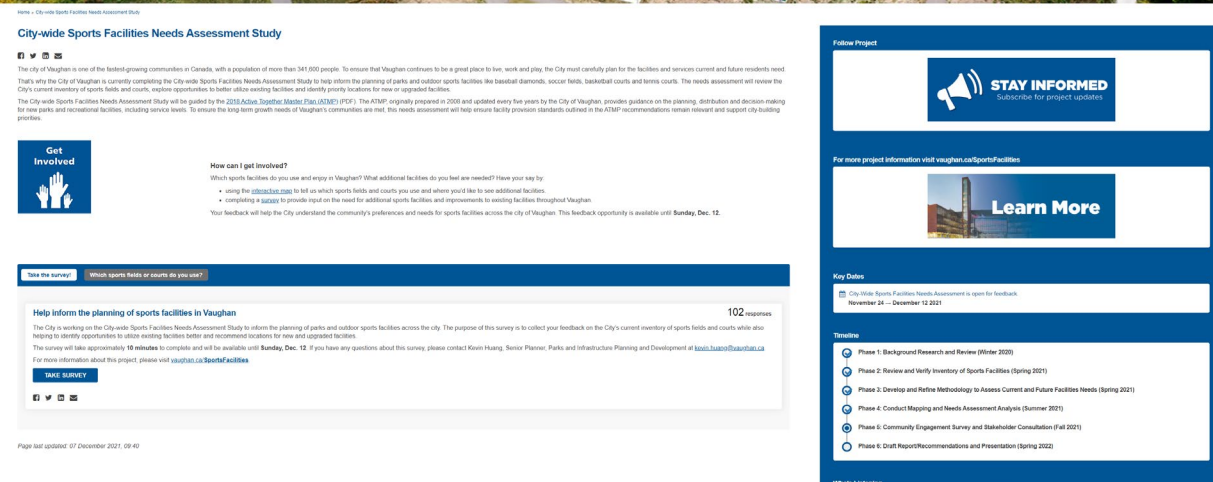
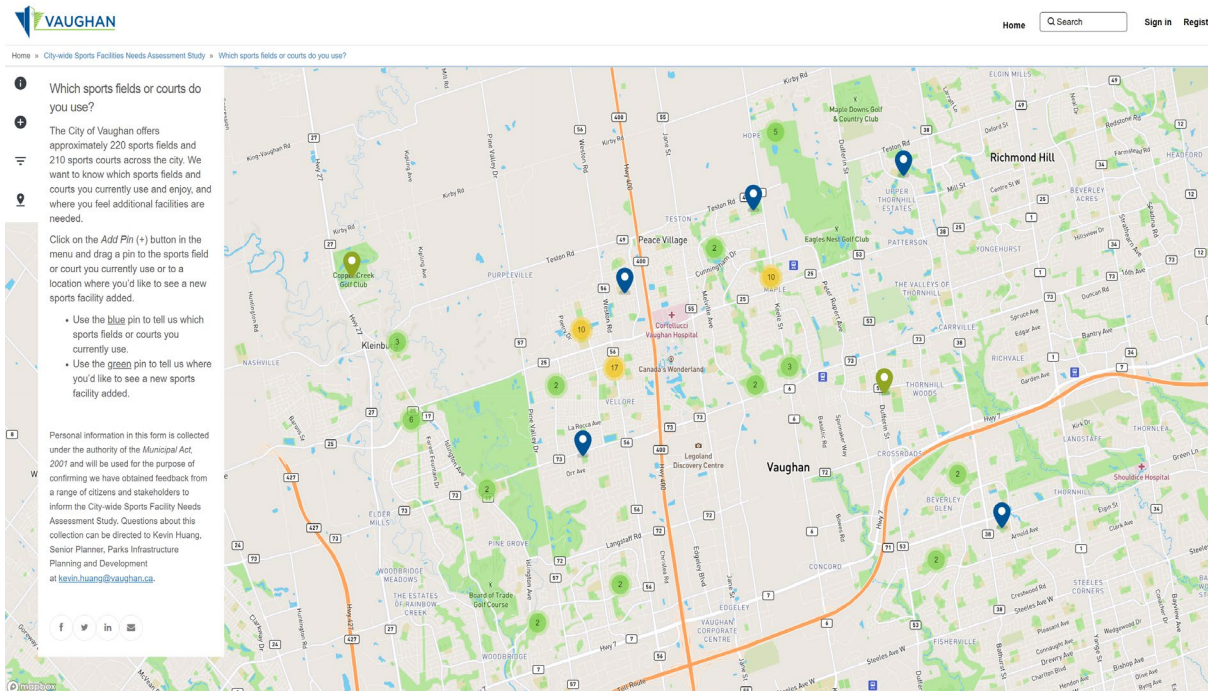
**separate study*

Public survey on Sports Facilities

Have Your Say website developed:

- Includes 15 question survey.
- Mapping tool to identify facilities used by participant.

Outreach touchpoints: PSA, website, digital signs, community centre TV screens, City social media, targeted social media campaign, council package, email blast to CSOs, clubs and associations



What the City has heard: Public survey on Sports Facilities

Number of Survey Responses: **122**

86% of respondents use **outdoor** sports fields or courts in Vaughan.

The most popular outdoor sports include **tennis, soccer, hockey and skating, basketball, softball/baseball**, followed by others.

There is a desire to increase supply of all these outdoor facilities.

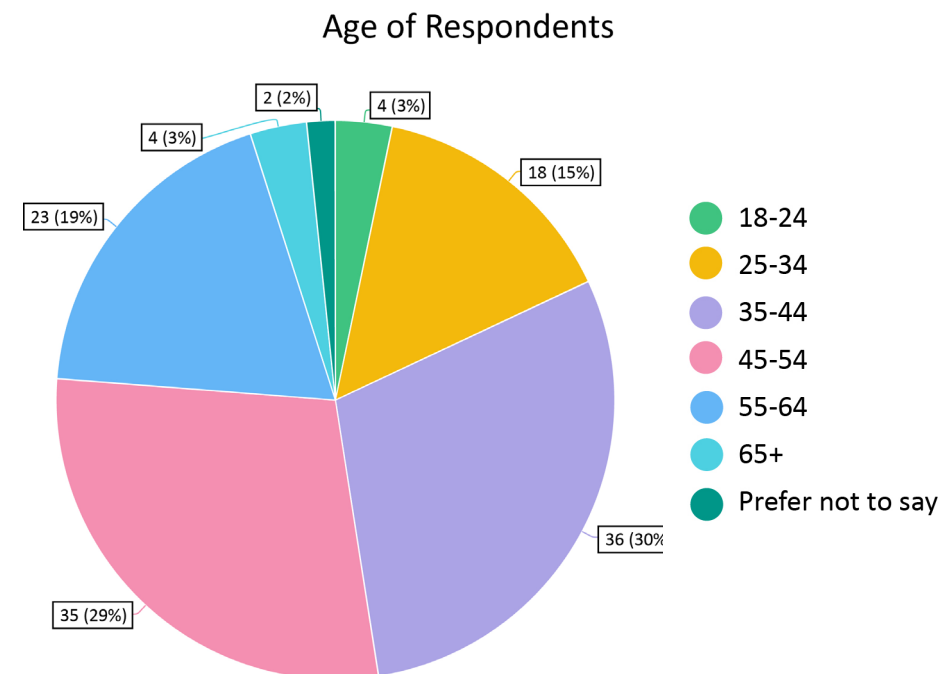
40% of respondents participate in **soccer**.

Over **half** of respondents expressed they are not able to participate in outdoor sports often as desired. The primary reasons are attributed to:

- **lack of facilities (61),**
- lack of sports programs (e.g. clubs, leagues) (23),
- program not offered (18),
- lack of transportation (6) or time (5),
- too expensive (3)
- unaware of sports opportunities (2).

Casual play is slightly preferred over organized play/programming.

Respondents are **more satisfied with outdoor facilities for children and youth** than they are for young adults, adults and older adults.



Respondents are supportive of:

- More indoor fields or courts to use over the **winter season** and **winterizing existing outdoor facilities**.
- Provision of **new** sports court and sports field, and some updates and improvements (e.g., lighting, fencing, surfacing, etc.).
- More sports courts and sports fields **closer to home**.

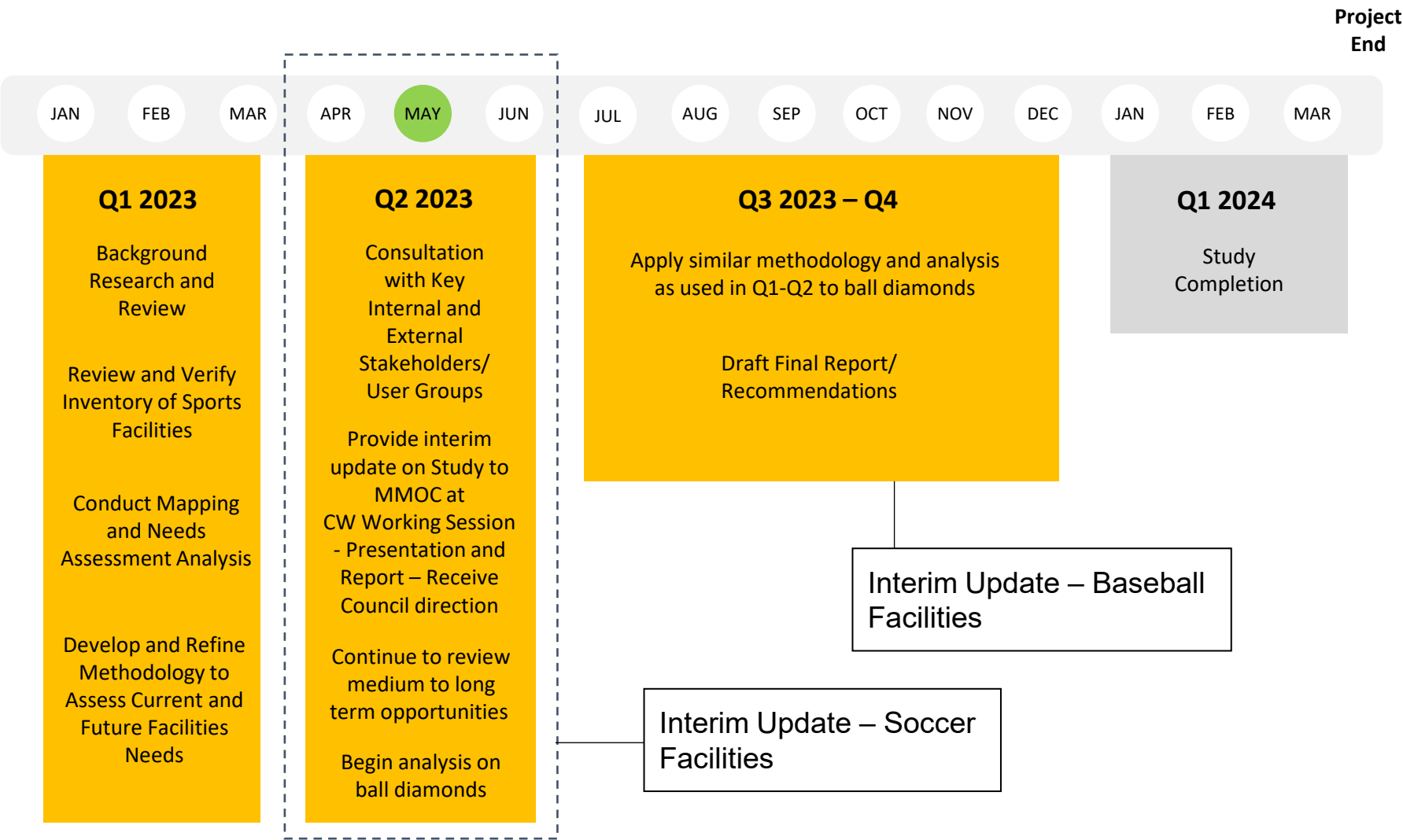
What the City has heard: Public survey

Respondents to the survey appear to be well distributed throughout the City



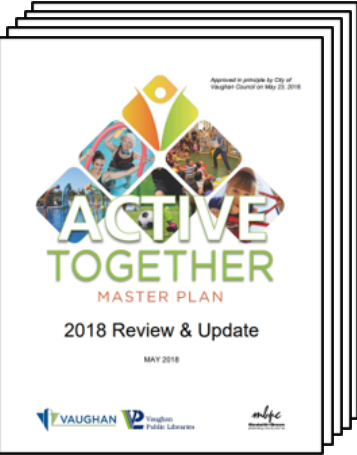
Sports Facilities Study Timeline

Project Milestones and Progress



2 - Active Together Master Plan

Provision Standards Recreational Facilities - Soccer



Key Facility Provision Recommendations

33. Develop 12 additional soccer fields by 2031 (these are unlit equivalent fields, where every lit field is equal to 1.5 unlit fields and every artificial turf field is equal to 2.0 unlit fields). Future field development will require a range of sizes and should be clustered together to form multi-field complexes where possible. In addition to the fields proposed for North Maple Regional Park, three senior lit fields are recommended for District Parks in Blocks 18 and 59 in the short-term and one in Block 41 in the medium-term. Two (2) 9v9 fields are recommended for Neighbourhood Parks (e.g., Blocks 1, 27 and/or 41). At its discretion, the City may choose to provide more fields than are recommended based on geographic distribution and demand for casual use (e.g., mini fields). [short to medium terms e.g. 2018 to 2027]

Targeted Provision Rate



1 Soccer Field
per 80 Registrants

Table 9: Forecasted Demand for Outdoor Soccer Fields, 2016 - 2031

Soccer Field Demand	2016	2021	2026	2031
Estimated Youth Participants*	10,165	11,044**	11,882	12,609
Soccer Field Provision Target	1 per 80 registered youth participants			
Required Soccer Fields (unlit equivalents)	127	138	149	158
Existing Soccer Fields (unlit equivalents)	146			
Surplus (Deficit)	19		(3)	(12)
Recommended Implementation	--	8.5	3.5	0

*This participant number includes football and rugby clubs as they will require use of soccer fields until such time as sufficient multi-use fields are provided.

** Actual number of participants was 9460; likely due to impacts of COVID-19.

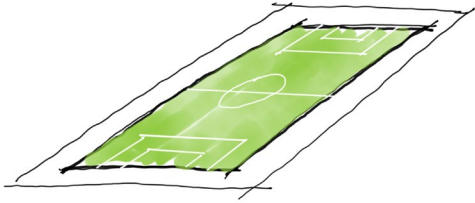
Opportunities to meet ATMP Recommendations

Intensification

Optimizing capacity of existing soccer fields along this scale of upgrades – the “Unlit Equivalent” (ULE) concept

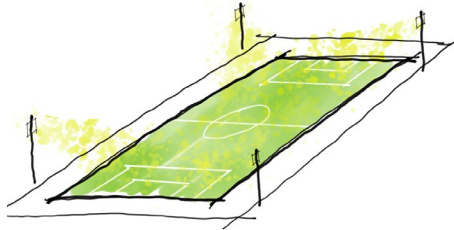
1 ULE

**Natural
Unlit**



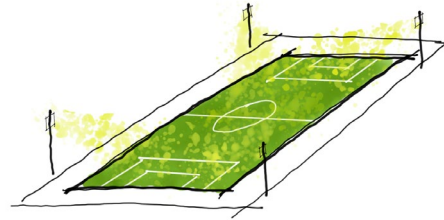
1.5 ULE

**Natural
Lit**



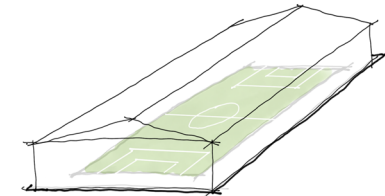
2.0 ULE

Artificial Turf



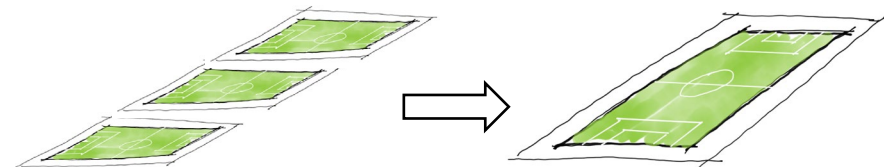
> 2.5 ULE

Indoor Dome
Seasonal or Permanent



Repurposing

Converting soccer or other sports facilities with low demand to a type of facility that is in higher demand (e.g. converting 2-3 mini fields to 1 senior field).



Update on ATMP Recommendation #33

Locations of ATMP Recommended Fields



Note 1:
Short Term – 2023 to 2027
Medium Term – 2028 to 2031
Long Term – 2033+

Legend

★ Under Review

★ Complete

★ Not in Program

— Ward Boundary

ATMP 2018 Recommendation	Field Location and Ward (W)	Total ULE	Timeline (Note 1)	Status of Field
Two (2) artificial turf fields	North Maple Regional Park #1	+2	N/A	Complete
	North Maple Regional Park #2	+2	N/A	Complete

Total ULE Fields Achieved = 4

Two (2) 9v9 fields in Neighbourhood parks	Martin Tavares District Park	N/A	N/A	Not in Program
	North Woodbridge District Park (Block 59)	+1.5	Medium Term	Under Review
	Block 41	+1.5	Long Term	Under Review
	Block 1	+1 +1	Long Term	Under Review
	Block 27		Long Term	Under Review
	Block 41		Long Term	Under Review

Total ULE Fields under review = 5

Progress on provision of Senior Soccer Fields since 2018

+ -	Soccer Field	Type	Ward	Change	Unlit Equivalent (ULE)
+	North Maple Regional Park - Field #1	Artificial Lit	1	New field constructed	+2
+	North Maple Regional Park - Field #2	Artificial Lit	1	New field constructed	+2
+	Ontario Soccer Centre - Field #1	Senior Lit	2	Added Field Lighting	+0.5
+	Ontario Soccer Centre - Field #2	Senior Lit	2	Added Field Lighting	+0.5
-	Concord Community Park - Field #1	Senior Unlit	4	Decommissioned	-1
-	Concord Community Park - Field #2	Senior Unlit	4	Decommissioned	-1
+	Chatfield District Park	9v9	3	New field constructed	+1
+	Langstaff Park	9v9	4	3 mini minis converted to a 9v9	+1
+	Summit Park	9v9	1	New field constructed	+1
+	Woodgate Pines Park	9v9	1	New field constructed	+1
+	Vaughan Grove Sports Park – Field #1	Senior Lit	2	Natural Grass to Artificial Conversion	+0.5
-	Nashville Community Church (Calvary)	Senior Unlit	1	Lease expired	-1
-	Nashville Community Church (Calvary)	Senior Unlit	1	Lease expired	-1
Total Change (2018 – 2023)					+5.5

● 2018

● 2023
We are here

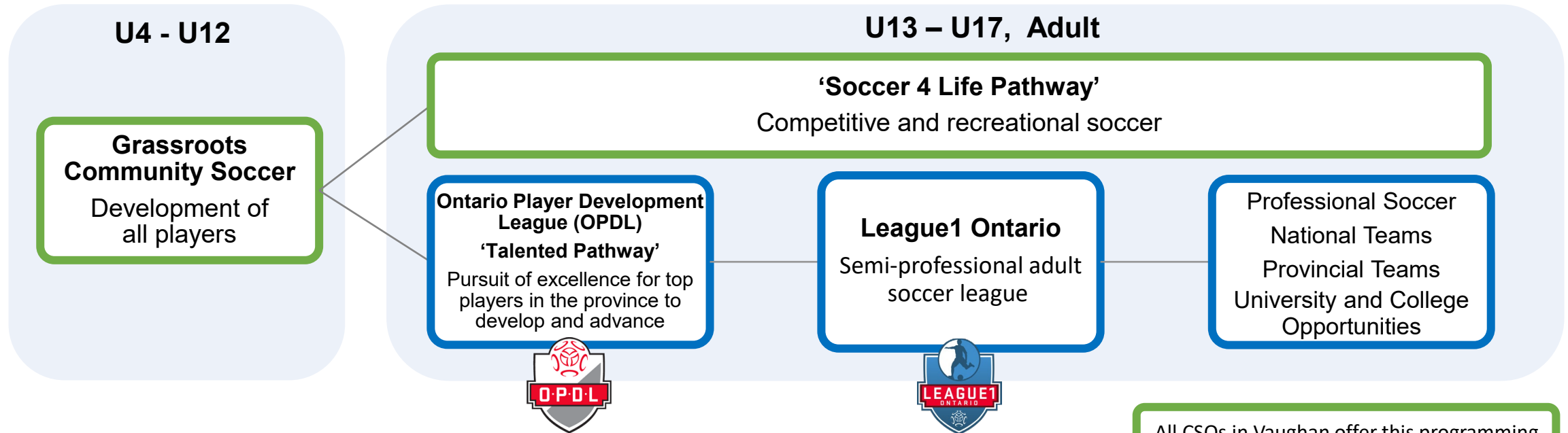
5.5 fields (ULE)
accomplished

○ 2031

6.5 fields (ULE) to be
developed by 2031

3 – Soccer CSO Engagement

Pathways for organized soccer



OPDL License Holders must follow Operational Rules such as:

- OPDL teams shall play 11-a-side.
- Field dimensions and goal sizes shall be as per FIFA regulations.
- The OPDL competition season generally operates from **May to October**
- Unless otherwise approved by OPDL, games played in the months of May, October and November shall be on an **artificial surface**.
- Matches from June 1 through September 1 can be played on grass, although use of OPDL approved **artificial fields** during this time is **strongly encouraged**.
- Games must be hosted at approved OPDL Competition Hosting Facilities.
- There is a minimum training time required for players (approximately 4.5 hours per week).

All CSOs in Vaughan offer this programming

Select CSOs in Vaughan offer this programming

What the City has heard: Soccer User Group Survey

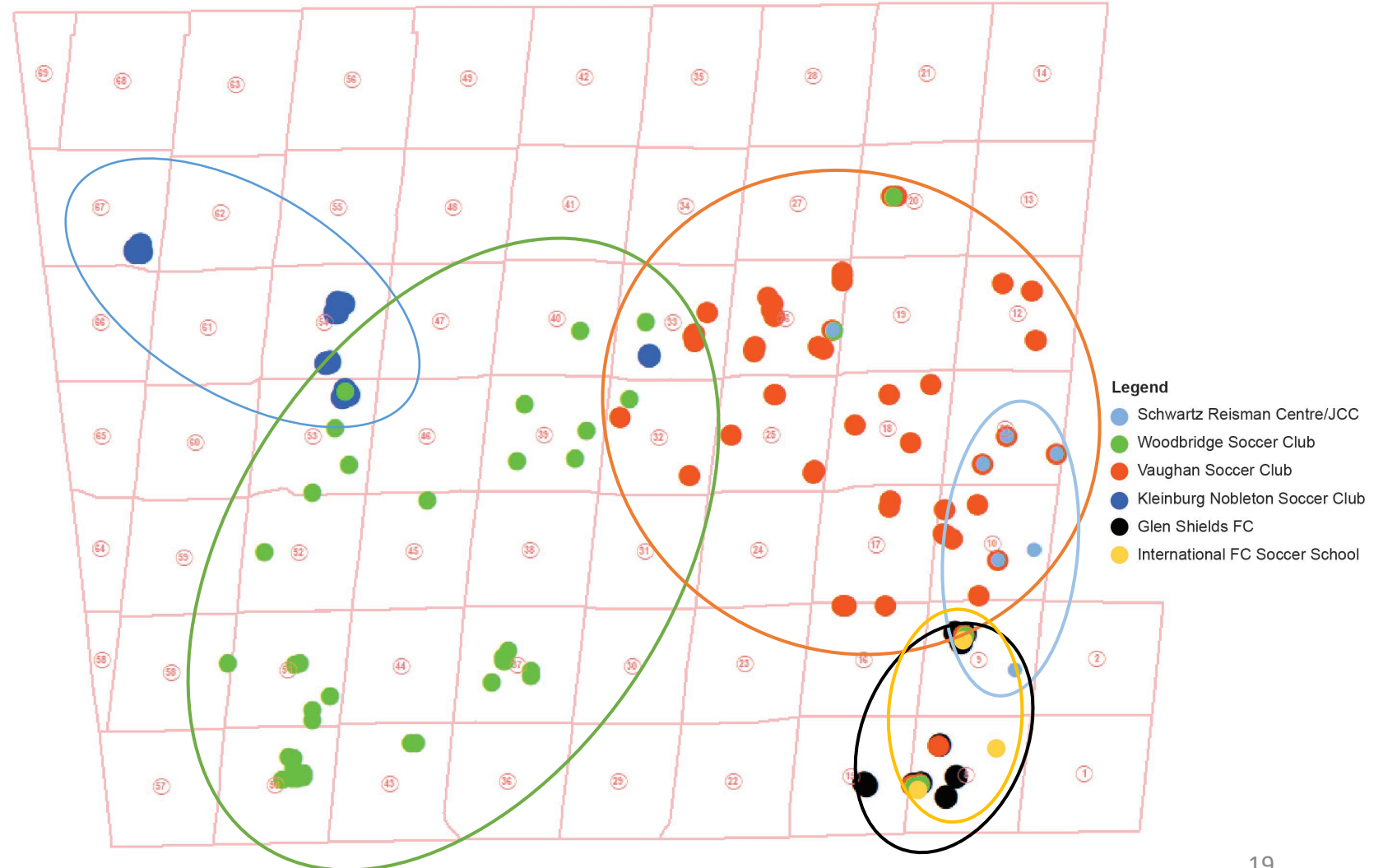
Purpose of Survey

- To collect updated information on soccer field needs and user preferences
- Inform the evaluation criteria
- Follow up meetings to discuss specifics of the survey

CSOs surveyed

- Glen Shields FC
- International FC Soccer School
- Kleinburg Nobleton Soccer Club
- Schwartz Reisman Centre/JCC
- Vaughan Soccer Club
- Woodbridge Soccer Club

Soccer Fields - User Group Geographical Distribution

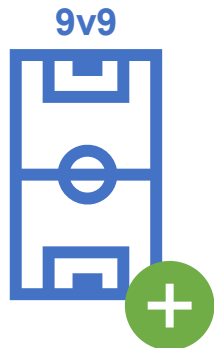


What the City has heard: Soccer User Group Survey

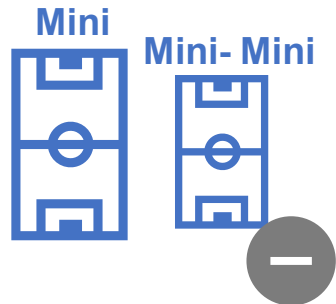
All organizations are anticipating **membership growth** to some extent over the next 5 years



Most clubs agree that there is a need for **more 9v9 fields**



Most clubs agree that there is a **sufficient supply of mini fields and mini-mini fields**, however the condition of these fields needs to be improved



Most clubs **prefer artificial turf** over natural grass for both practice and game play due to operational benefits, however a balance of surfacing is desirable



Some clubs are noticing an **increase in female membership**



Some clubs request an **increase in park patrolling** to discourage field vandalism, and non-permitted users playing on the field during times when clubs have a permit

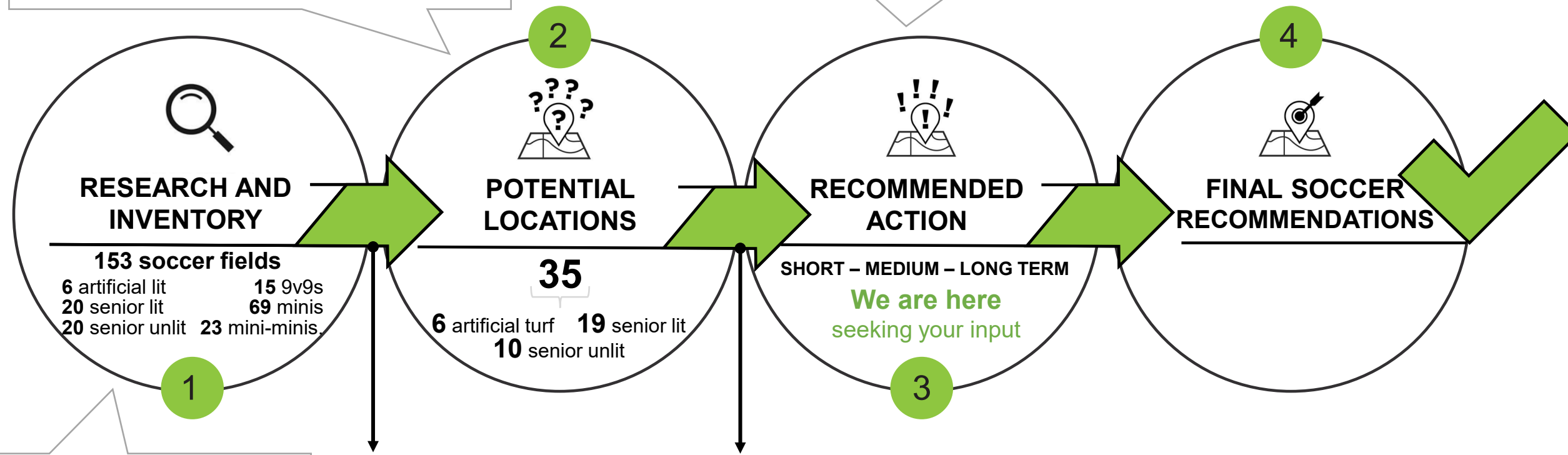


4 - Methodology & Data Analysis

Site Selection Methodology

- All 46 senior fields filtered using Tier 1 criteria to disqualify fields that are unsuitable for investment
- Advance those sites that were not disqualified due to Tier 1 criteria

- Review scoring based on Tier 2 criteria - each field received a score out of 100 percent
- Update scoring based on user group inputs (surveyed 6 CSOs)
- **Develop potential plan of action to meet ATMP recommendation No. 33 for soccer**



Confirm inventory of all soccer fields in Vaughan, including all 46 senior fields by typology:

- Artificial Lit
- Senior Lit
- Senior Unlit

- TIER 1 CRITERIA applied:**
- Site Condition
 - Ownership
 - Orientation
 - Popularity
 - Proximity to residential

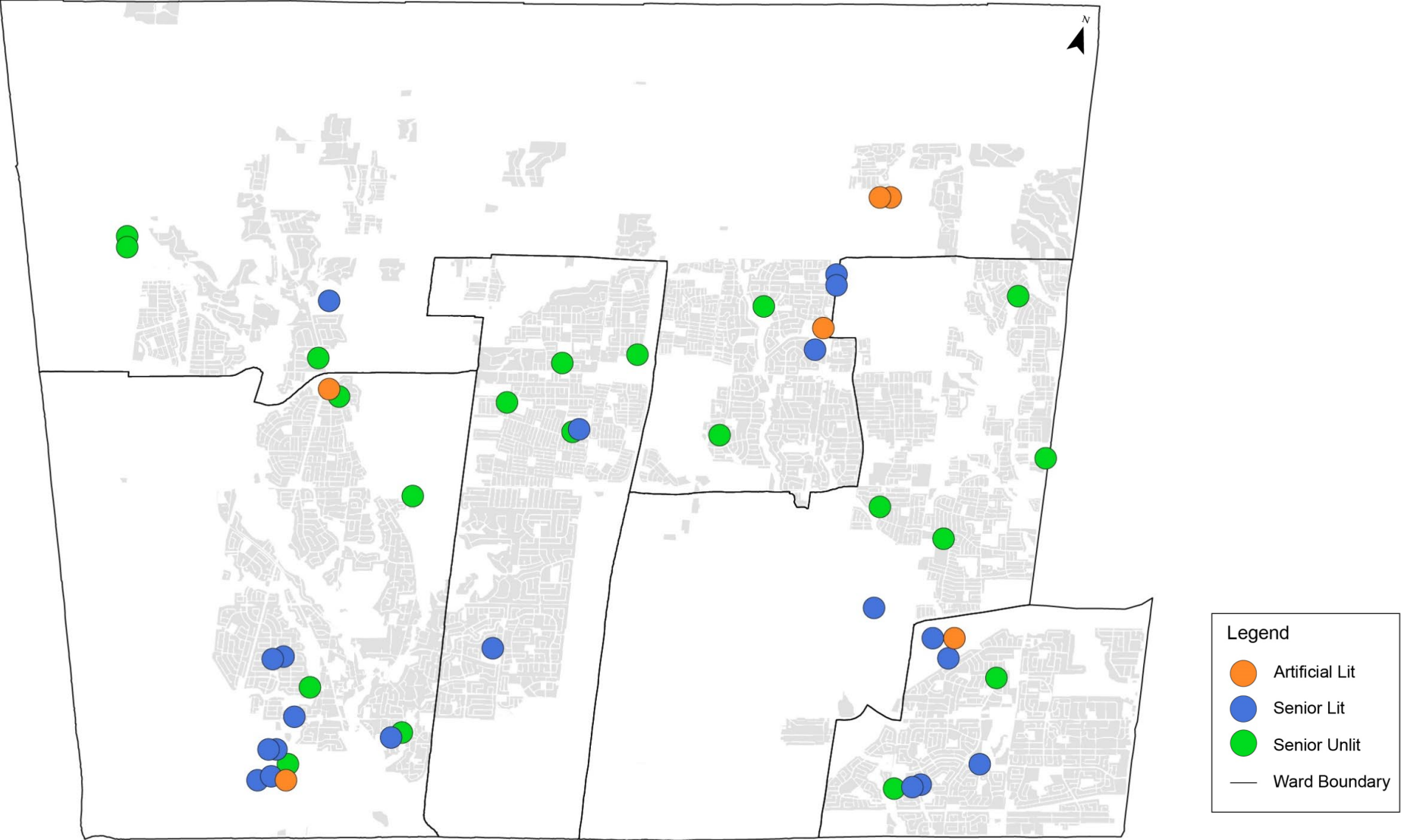
- TIER 2 CRITERIA applied:**
- User Base
 - Field Characteristics
 - Amenities

Existing Senior Soccer Fields

46 senior fields were evaluated out of 153 total fields currently under City ownership or management.

City inventory includes
153 soccer fields made
up of:

- 6 artificial lit
- 20 senior lit
- 20 senior unlit
- 15 9v9s
- 69 minis
- 23 mini-minis



Selection Criteria – Tier 1

- The Sports Facilities Study considers investment opportunities for all **46 senior soccer fields** in Vaughan.
- **Two** Tiers of site selection criteria are being used to determine ideal candidates for investments such as lighting, artificial turf, or indoor dome

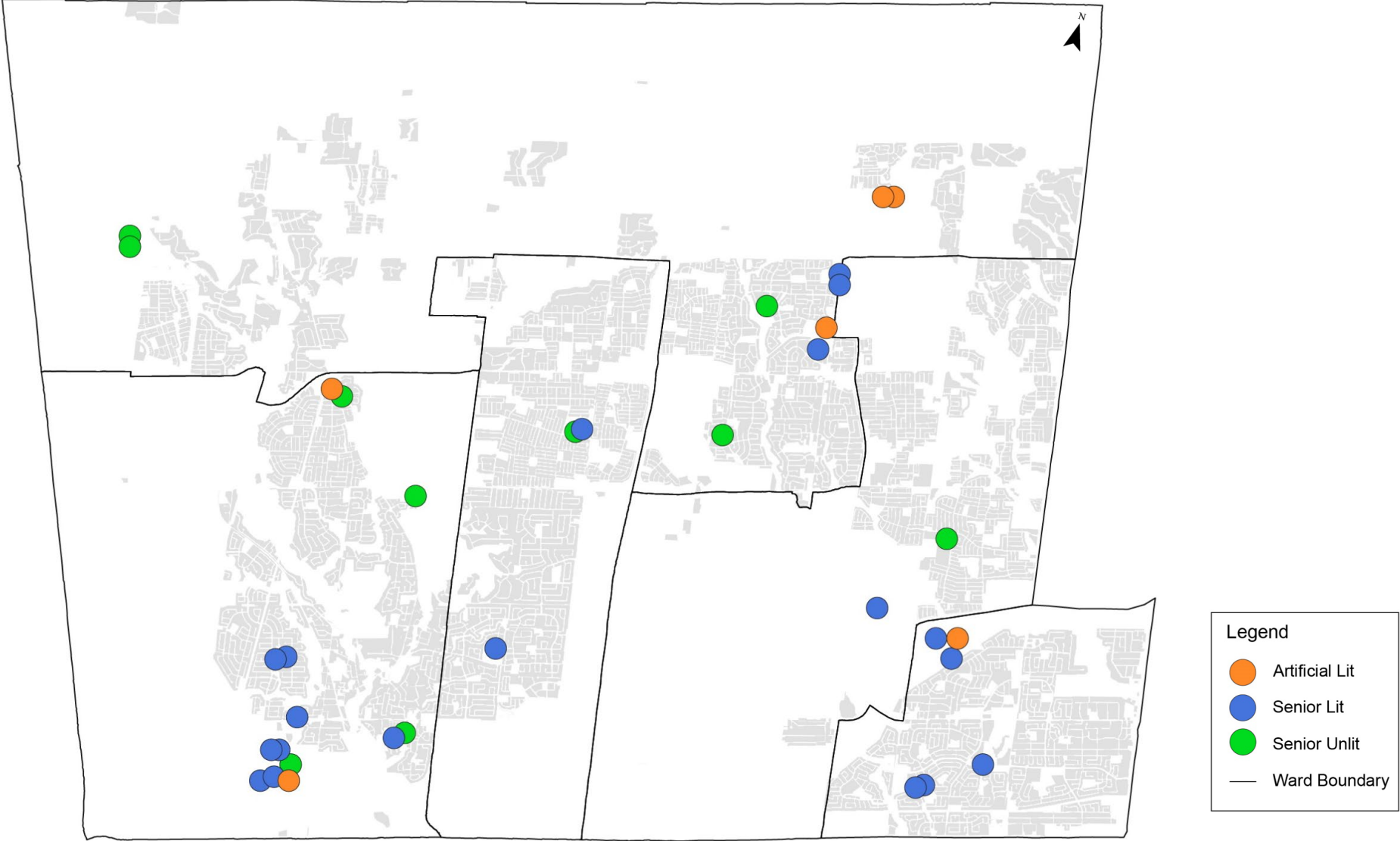
Tier 1 Criteria

Disqualifies fields that are not ideal candidates for future investment:

- Poor physical site conditions (i.e. field drainage, grading)
- Private ownership (not including School Boards)
- Soccer field is oriented east-west
- The field is booked less than 20 percent of the time.
- In a neighbourhood park in a residential area

Applying the ‘Tier 1’ criteria results in **11 of 46 fields** being disqualified.

Tier 1 Filter: 35 Senior Soccer Fields



Site Selection Criteria – Tier 2

Tier 2 Criteria

Remaining **35 fields** are evaluated using the following site selection criteria:

User Base

1. User Group Feedback (including 2023 soccer club survey)
2. Amount of Field Time Booked
3. Number of user groups sharing the field

Amenities

1. Field lighting
2. Access to parking
3. Access to washrooms

Field Characteristics

1. Park Typology
2. Number of clustered senior soccer fields
3. Field condition
4. Field ownership
5. Field orientation
6. Proximity to intensification area
7. Equity distribution

Each criterion above is assigned a weight of 5, 10, or 15 based on level of importance from the perspective of:

- User groups (feedback obtained in the survey)

Site Selection Criteria – Tier 2

4 - Methodology and Data Analysis

Criteria	Criteria Description	Criteria Assessment and Score Allocation Details	Weighting
User Base			
User Group Feedback	A CSO or public agency expressed interest in seeing this field improved in the 2023 CSO Survey, or has directly expressed interest to the City.	0: No 5: Yes	10
Amount of Facility Usage (2022)	Percentage (%) of desirable hours booked at this field. To be reviewed in conjunction with field type.	0: Booked <20% of the time 1: Booked 20 to 39% of the time 3: Booked 40 to 59% of the time 5: Booked 60 to 79% of the time 7: Booked >80% of the time	15
Number of user groups sharing the field (2022)	Number of user groups sharing the field based on booking data. A more diverse range of users may benefit from converting a field with more users.	0: 1 user 1: 2-3 users 3-: 4-5 users 5: >5 users	5
Field Characteristics			
Park Typology	Type of park which the field is located within, as per VOP 2010 Official Plan. District and Regional parks are most suitable for certain types of upgrades (e.g. lighting).	0: Neighbourhood park 3: Neighbourhood park in an industrial or secluded area OR a high school property 5: Within or adjacent to a District or Regional park	10
Number of clustered senior soccer fields for tournament play	Number of available soccer fields on the property, including the subject field. Multiple co-located fields offers opportunity for tournament play.	0: 1 soccer field 1: 2 soccer fields 3: 3 soccer fields 5: 4+ soccer fields	5
Field Condition (2022)	Existing condition of soccer field as per IPCAM data. Upgrading fields already in poor condition may align with planned life cycle replacements.	0: Very Good 1: Good 3: Fair 5: Poor	5
Field Ownership	Ownership of lands which soccer field is located on. Facilities within City-owned lands should be prioritized for investment.	0: Privately-owned 1: School Board owned 3: Shared ownership (City & School Board) 5: City-owned	10
Field Orientation	Existing orientation of soccer field. North-south orientation is preferred by industry professionals and local organizations to reduce impacts of sunlight on users.	0: East-West 5: North-South	5
Proximity to Intensification Area	Field is located within or in proximity to an Intensification area (Regional, Primary and Local Centres) as per Official Plan Schedule 1. Upgrading a field in an intensification area has potential to serve a greater number of local users.	0: >2.5 km outside of any intensification area 1: Within 2.5 km of a Local intensification area 3: Within 2.5km of a Primary intensification area 5: Within a Regional, Local or Primary intensification area	15
Equitable distribution	Ensure field investments are equitability distributed per type by community.	Geographic review	N/A
Amenities			
Park Facility Lighting	Are there existing lit sports facilities in the park? (E.g. adding new lighting will not significantly change existing conditions if adjacent baseball is already lit)	0: No 5: Yes	5
Access to Parking	Is parking available on site?	0: No 3: On-street parking only 5: Dedicated parking lot	5
Access to Washrooms	Are washroom facilities available on site? (e.g. dedicated park washrooms or washrooms in adjacent City community centre)	0: No 5: Yes	10
Total Ranking / Weighted Ranking			100

Tier 2 Filter: Scoring Results

Applying Tier 2 criteria, each of the **35 senior soccer fields** received a **score out of 100 percent** were **sorted by community**. A high score is indicative of a candidate site to be well suited for intensification or partnerships.

Field scores by type

UNLIT		LIT		ARTIFICIAL TURF	
Options to light/convert to artificial turf		Options to convert to artificial turf/dome		Options to convert to dome	
Field	Score (%)	Field	Score (%)	Field	Score (%)
Mackenzie Glen District Park ¹	61	Ontario Soccer Centre – Field West #1	85	Concord/Thornhill Regional Park	87
St. Jean de Brebeuf CHS	59	Dufferin District Park	74	North Maple Regional Park	65
Sonoma Heights Community Park ¹	56				
Emily Carr SS	43				

Notes

¹ Senior fields in District Parks should be lit. Addition of lighting will result in field meeting standard level of service.

Partnership Opportunities

Several Community Service Organizations (CSOs) and two School Boards expressed interest in entering into partnerships with the City or providing financial contributions to enhance existing service levels at City-owned soccer fields. Below is a list of the proposals or requests received to date.

#	Location	Source of request	Nature of request
1	Emily Carr SS	York Region District School Board	Convert the existing senior unlit grass field to lit artificial turf
2	Ontario Soccer Centre – Field 1 or 2	Woodbridge Soccer Club	Convert existing lit grass senior field to an indoor sports dome
3	North Maple Regional Park	Vaughan Soccer Club	Construct a new indoor domed turf field
4	Nashville Road Community Church (Calvary)	Church ownership	Requested the City enter into a long-term land lease and invest in parking, playground area, field improvements to allow use of a two senior soccer field and 2 mini fields
5	Dufferin District Park	IFC Soccer School	Convert an existing senior lit grass field (Field #1) to artificial turf
6	St. Joan of Arc CHS	York Catholic District School Board	Convert existing senior grass field to artificial turf or multi-use sports dome
7	St. Jean De Brebeuf CHS		
8	Father Bressani CHS		
9	St. Elizabeth CHS		

All field ‘Intensification’ opportunities based on scoring correlated with partnership interest

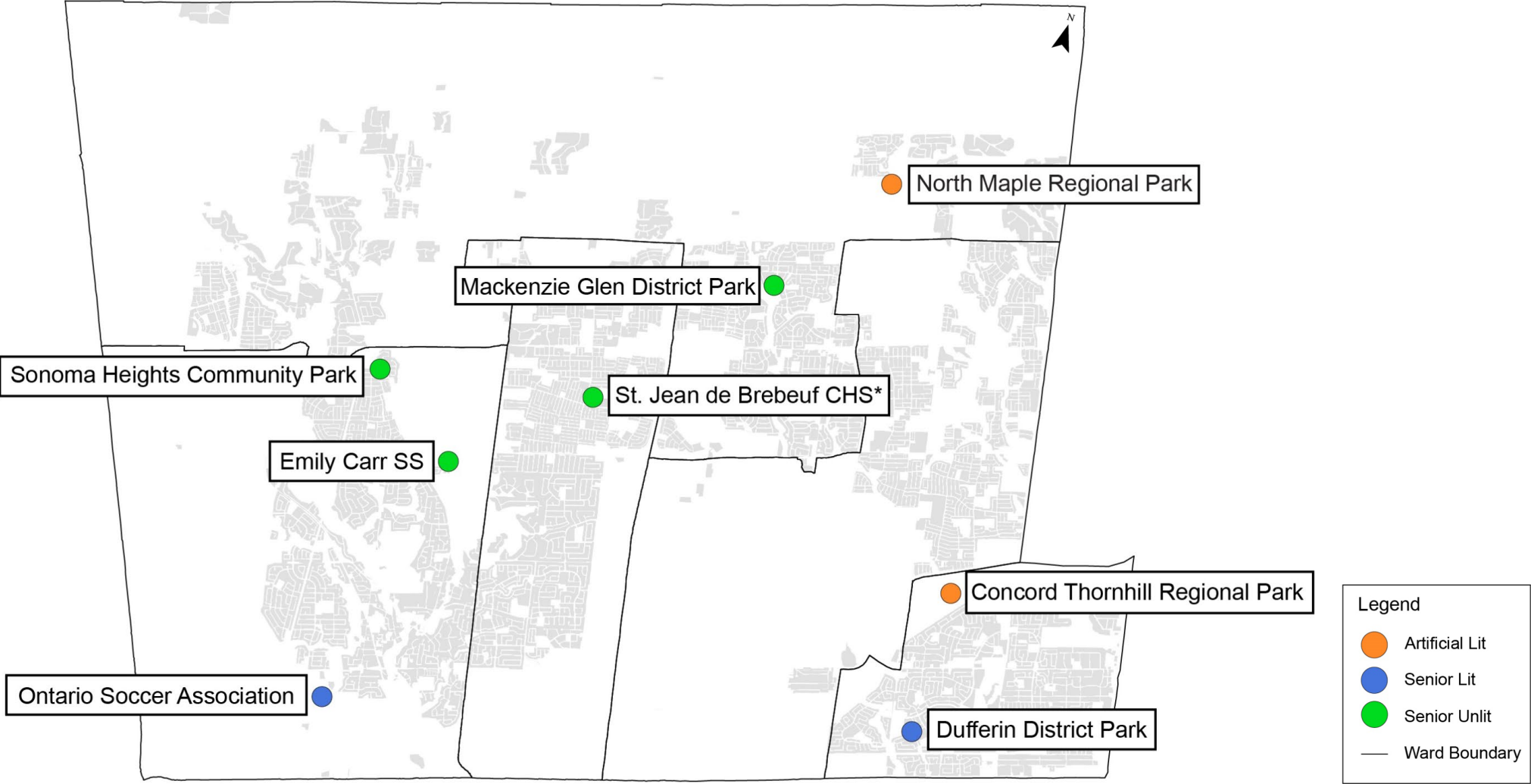
Top scoring fields matched with investment and partnership opportunities.

Soccer Field	Ward	Score (%)	Field Type and ULE	Potential Change and ULE Increase			External Partnership Interest	Top Scoring Field by Community
				Lighting	Artificial Turf	Dome		
North Maple Regional Park – Net new	1	65	-			+2.5	✓	✓
Mackenzie Glen District Park	1	61	Senior Unlit (1 ULE)	+0.5	+1			✓
St. Joan of Arc Catholic High School	1	N/A	Senior Unlit (1 ULE)				✓	
Sonoma Heights Community Park	2	56	Senior Unlit (1 ULE)	+0.5	+1			✓
Ontario Soccer Association – Field 1	2	85	Senior Lit (1.5 ULE)			+1	✓	✓
Emily Carr Secondary School	2	43	Senior Unlit (1 ULE)	+0.5	+1		✓	✓
St. Jean De Brebeuf Catholic High School	3	59	Senior Unlit (1 ULE)		+1		✓	✓
Father Bressani Catholic High School	3	N/A	Senior Lit (1.5 ULE)				✓	
Concord/Thornhill Regional Park	5	87	Artificial Lit (2 ULE)			+0.5		✓
Dufferin District Park – Field 1 or 2	5	74	Senior Lit (1.5 ULE)		+0.5		✓	✓
St. Elizabeth Catholic High School	5	N/A	Senior Lit (1.5 ULE)				✓	

Indicates a field that requires lighting to meet standard level of service

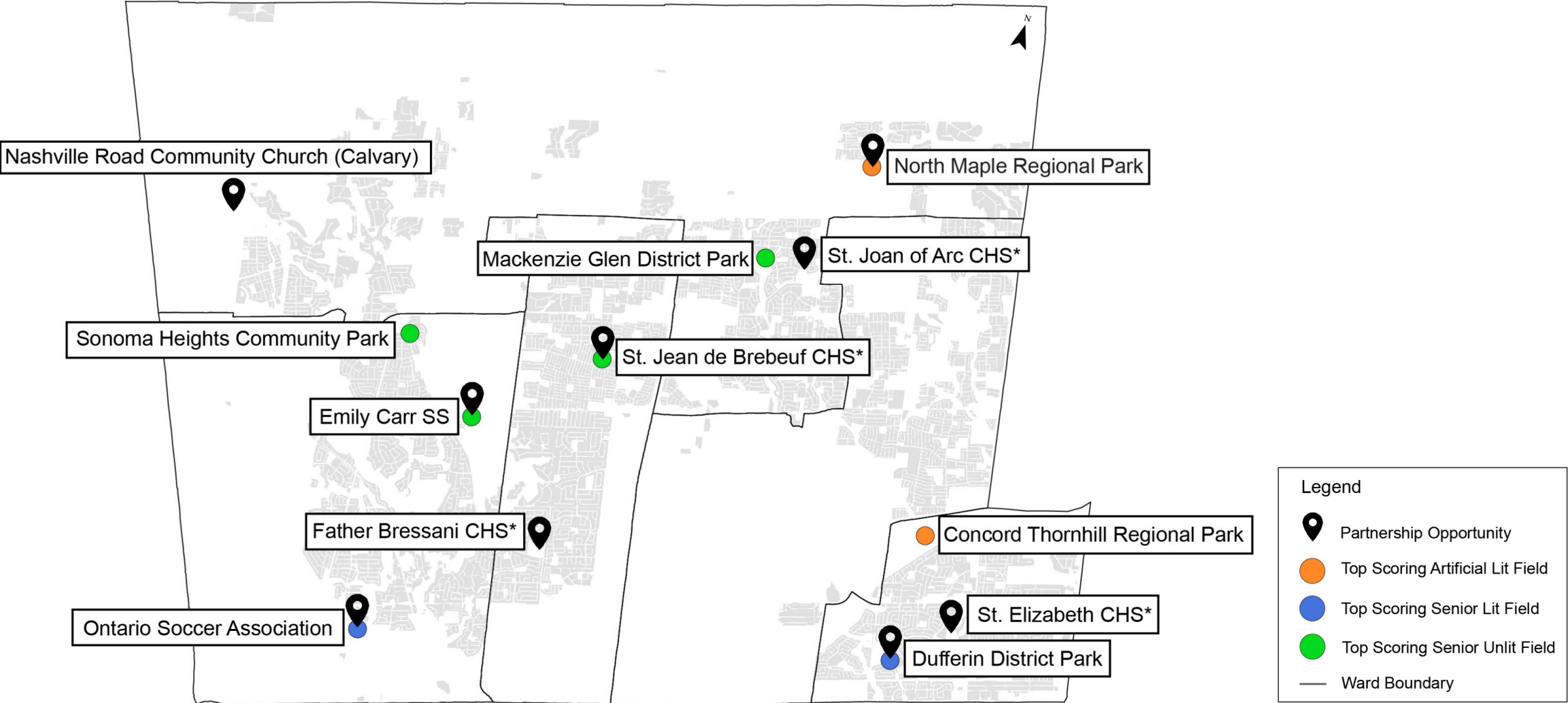
Indicates a field identified for a partnership opportunity

Tier 2 Filter: Top Scoring Results



Scoring results correlated with partnership opportunities

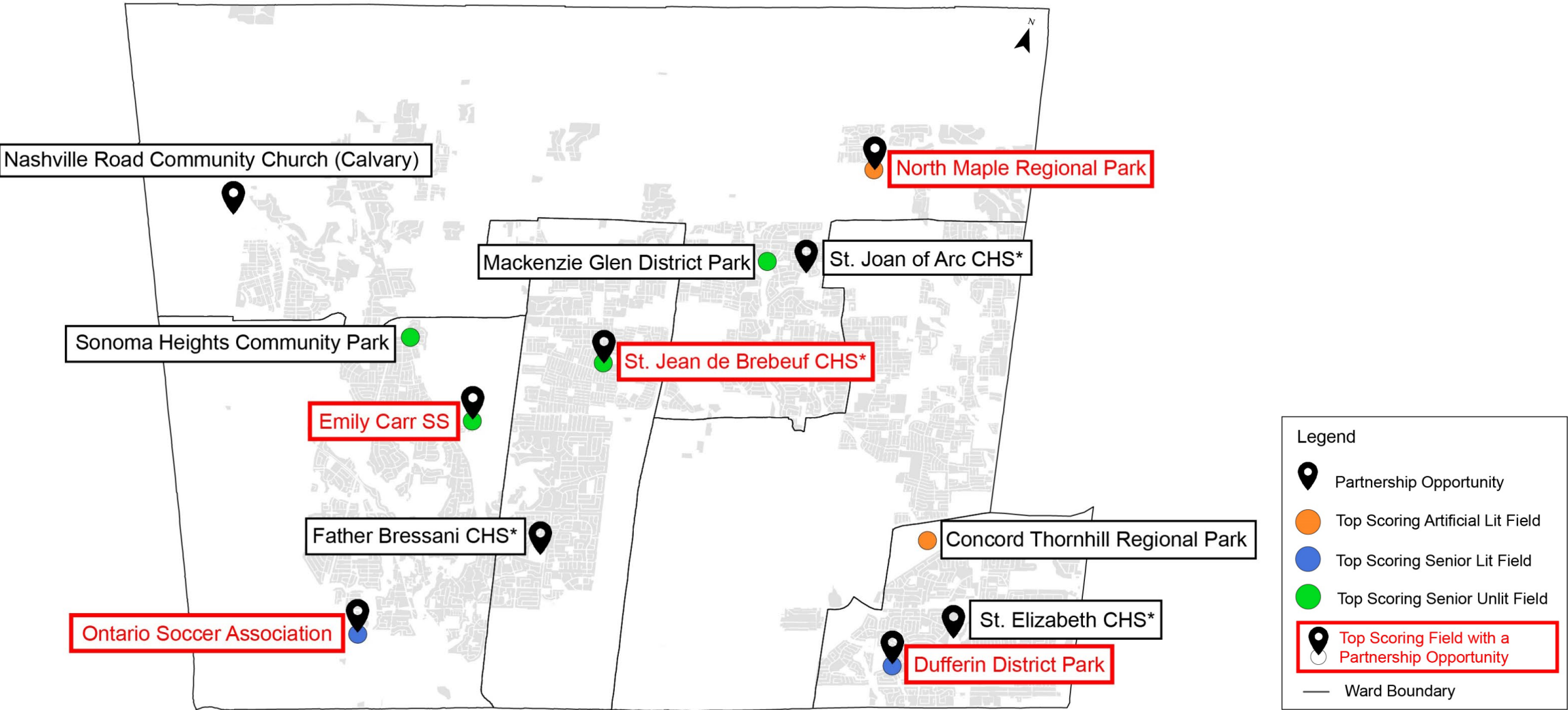
Top scoring fields and investment and partnership opportunities geographic distribution.



*YCDSB is interested in partnering on one of these fields.

Scoring results correlated with partnership opportunities

Top scoring fields and investment and partnership opportunities geographic distribution.



*YCDSB is interested in partnering on one of these fields.

5 - Investment & Partnerships

Field 'Intensification' Scenario to 2031

+ -	Soccer Field	Type	Ward	Change	Unlit Equivalent (ULE)
+	North Maple Regional Park - Field #1	Artificial Lit	1	New field constructed	+2
+	North Maple Regional Park - Field #2	Artificial Lit	1	New field constructed	+2
+	Ontario Soccer Centre - Field #1	Senior Lit	2	Field was lit	+0.5
+	Ontario Soccer Centre - Field #2	Senior Lit	2	Field was lit	+0.5
-	Concord Community Park - Field #1	Senior Unlit	4	Decommissioned	-1
-	Concord Community Park - Field #2	Senior Unlit	4	Decommissioned	-1
+	Chatfield District Park	9v9	3	New field constructed	+1
+	Langstaff Park	9v9	4	3 mini minis converted to a 9v9	+1
+	Summit Park	9v9	1	New field constructed	+1
+	Woodgate Pines Park	9v9	1	New field constructed	+1
+	Vaughan Grove Sports Park – Field #1	Senior Lit	2	Natural Grass to Artificial Conversion	+0.5
-	Nashville Road Community Church	Senior Unlit	1	Lease expired	-1
-	Nashville Road Community Church	Senior Unlit	1	Lease expired	-1
Total Change (2018 – 2023)					+5.5
+	Sonoma Heights Community Park	Senior Unlit	2	Convert to Senior Lit	+0.5
+	Mackenzie Glen District Park	Senior Unlit	1	Convert to Senior Lit	+0.5
+	Emily Carr SS	Senior Unlit	2	Convert to Artificial Lit	+1
+	North Maple Regional Park	-	1	Construct New Indoor Dome	+2.5
+	Dufferin District Park – Field #1	Senior Lit	5	Convert to Artificial Lit	+0.5
+	Ontario Soccer Association – Field #1	Senior Lit	2	Convert to Artificial Lit	+0.5
+	St. Jean De Brebeuf CHS	Senior Unlit	3	Convert to Artificial Lit	+1
Total Change (2023 – 2031)					+12

Short-Term Recommendations

Medium- to Long-Term Recommendations

2018

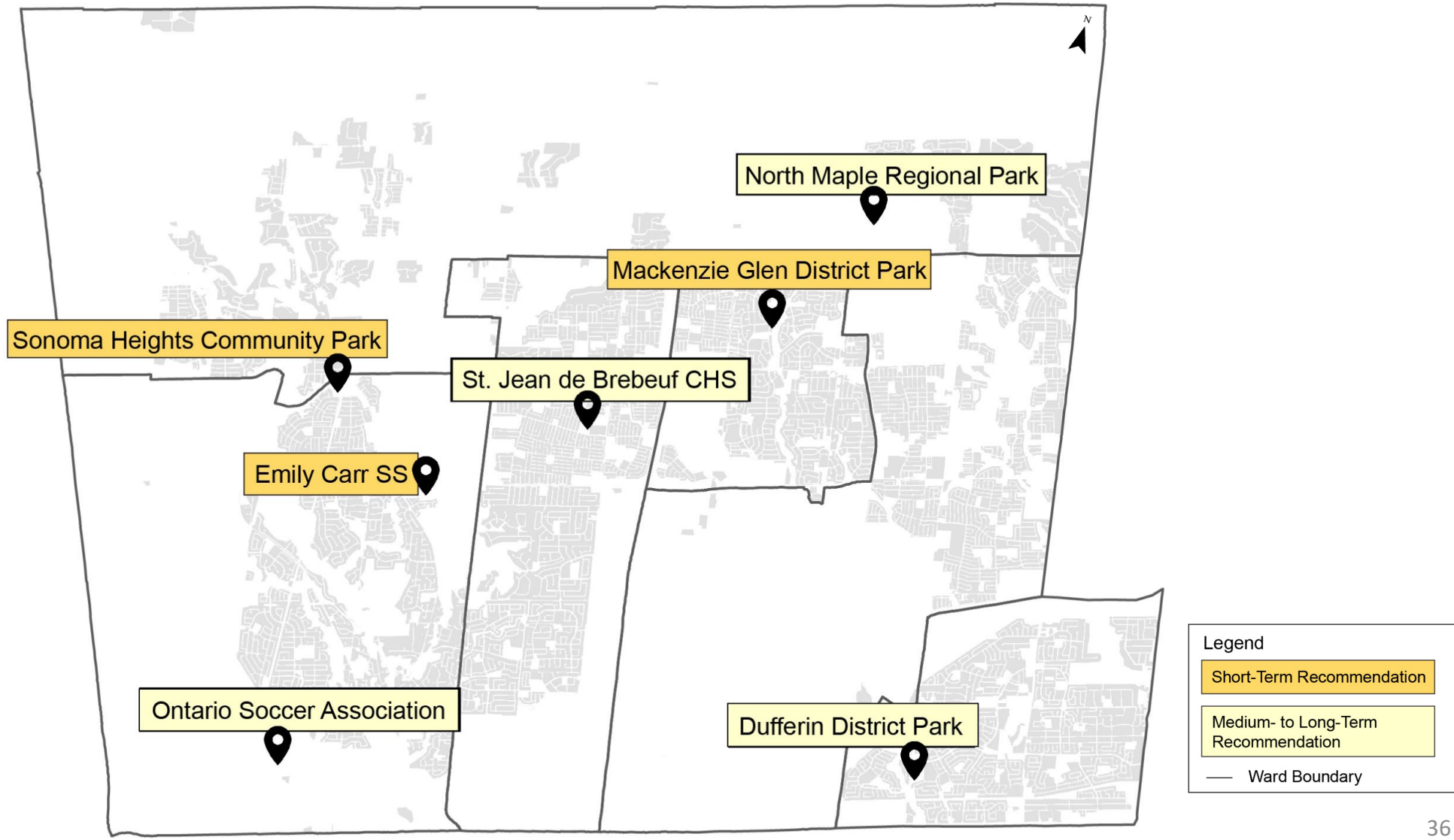
2023

5.5 additional
fields (ULE)
accomplished

Opportunity to provide
all 6.5 remaining fields
needed to reach 12 fields
recommended
by the ATMP

2031

Field ‘Intensification’ Scenario to 2031



Cost of acquiring new parkland for soccer fields

‘Intensifying’ existing senior soccer fields using the above plan has the potential to ‘free up’ **6 to 10 hectares of future parkland** at a **value of up to \$80 M**.

Land area required per senior field	Number of physical fields needed to meet gap of <u>6.5 ULE fields</u>	Amount of land required to accommodate fields	Approximate value of land ¹
1.4 ha	4 to 7 senior fields	6 to 10 ha	\$48 to \$80 million

Notes

¹ Assumes land at \$8,030,640/hectare (\$3,251,271/acre) based on Development Charge Background Study 2022. Excludes capital costs of sports field construction and associated overall park construction to support visitors.

Costs and revenue rates of ‘intensified’ fields

Type of Field Conversion	Estimated Capital Cost	Estimated Operating Cost increase	Permitting Revenue Increase
Senior Unlit to Lit	\$350,000	\$7,000	\$5,500 - \$6,300 ¹
Senior Lit to Artificial Lit	\$3.35 million	\$16,000	\$117,000 - \$147,000 ^{1,2}
Senior Unlit to Artificial Lit based on 50/50 partnership	\$2.05 million	\$16,000	\$117,000 - \$147,000 ^{1,2}
Construct New Indoor Dome	Third party lease	\$0	TBD

Notes:

¹ Excludes hourly lighting fees

² Permitting revenue directed towards turf renewal reserve fund

Intensification Scenario – aggregate costs to intensify

Recommended Timing	Ref. No.	Soccer Field	Existing Field Type	Proposed Change	ULE Change	Est. Capital Cost	Est. Annual Operating Cost
Short-Term	A	Sonoma Heights Community Park	Sr. Unlit	Lighting	+0.5	\$350,000	\$7,000
	B	Mackenzie Glen District Park	Sr. Unlit	Lighting	+0.5	\$350,000	\$7,000
	C	Emily Carr SS	Sr. Unlit	Artificial Turf + Lighting	+1	\$2.05 million ¹	\$16,000
Medium Term	D	North Maple Regional Park	-	Dome	+2.5	Third party lease	\$0
	E	Dufferin District Park – Field #1	Sr. Lit	Artificial Turf	+0.5	\$3.35 million	\$16,000
	F	OSA – Field #1	Sr. Lit	Dome	+1	Third party lease	\$0
	G ²	St. Joan of Arc CHS ³	Sr. Unlit	Convert to Artificial Lit	+0.5 to +1	\$2.05 million ¹	\$16,000
		St. Jean De Brebeuf CHS	Sr. Unlit	Convert to Artificial Lit			
		Father Bressani CHS	Sr. Lit	Convert to Artificial Lit			
		St. Elizabeth CHS	Sr. Lit	Convert to Artificial Lit			
	Totals				+6.5 – 7.0	\$4.8 to \$6.1 million	\$46,000 to \$62,000 annually

Notes:

1 Costs are based on 50/50 cost share with School Board for conversion to artificial turf.

2 1 of 4 fields listed is to be considered at this time.

3 Field is currently privately-owned and not part of the City's inventory. Any operating costs incurred on this field would be new as it is not currently maintained by the City.

In Summary

Investment and partnerships to “intensify” existing senior soccer field present the following key benefits

1. Cost avoidance of parkland acquisition towards providing soccer fields.
2. Secured parkland can be freed and directed towards other community priorities.
3. Optimized asset utilization and decreased burden to tax base.
4. Leveraging existing lands and assets for additional revenues.
5. Increased user group satisfaction and advancing local soccer programs.

6 - Recommendations

Recommendations

Short-term

1. Review scope and costing details for identified short-term soccer field improvements at:

- Mackenzie Glen District Park
- Sonoma Heights Community Park
- Emily Carr Secondary School (in partnership with York Region District School Board),

Funding for design and construction submitted for consideration in the 2024 capital budget process.

Medium to Long term

2. Consider additional soccer-related partnerships, funding contributions and development opportunities with local school boards and recognized Community Services Organizations for improving City-owned/managed infrastructure to support soccer growth demands to 2031.

3. A long-term land lease and related capital investments at the Nashville Road Community Church site not be considered at this time.

Up next: Comparable analysis on baseball diamonds.

Comments and Questions?



Public Works Service Level Review Winter Maintenance

May 2023



Transportation and Fleet
Management

Agenda

1 Background

2 Road Operations

3 Safety and Risk Assessment

4 Severe Weather Response Plan

5 Winterization Reserve

6 Recommendations





Background



Why Service Level Reviews Matter



- **Responsive to the needs of the community** – services meet and are adaptive to community needs and expectations
- **Efficient** – service processes are optimized and right-sized (using resources - people, materials, equipment, infrastructure, buildings - the best way possible)
- **Effective** – services are delivered with better quality and possibly in new ways
- **Making evidence-informed decisions** – using data and process performance indicators to evaluate service delivery efficacy



Why This Service Level Review Matters



Key Activity in the Term of
Council Service Excellence
Strategic Plan



Audit of Winter
Maintenance (2018)



Planning for Growth





Winter Maintenance in Vaughan



Approximately
90,000
windrows



More than
2,200 lane km
of roads

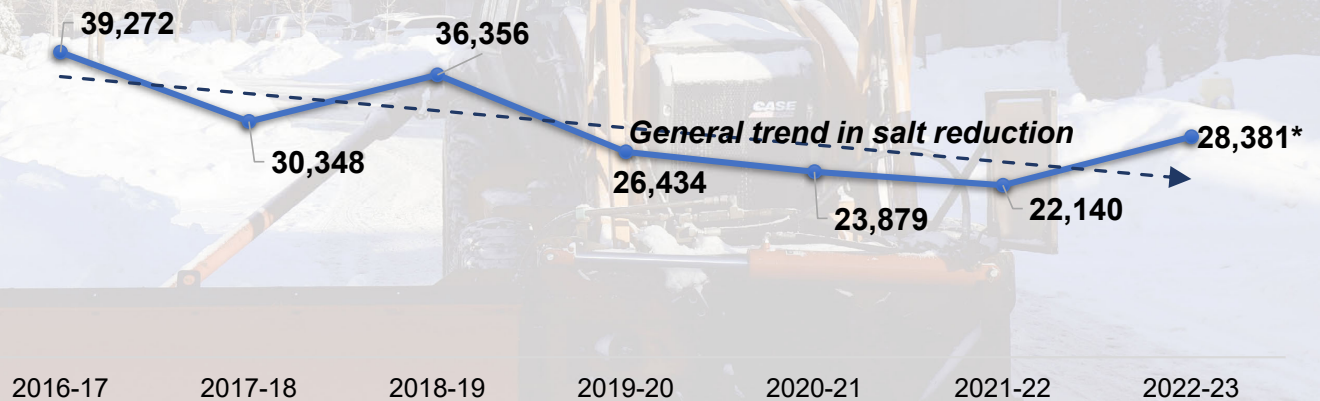


More than
1,200 km
of sidewalks



More than
130 crosswalk
locations

Salt Usage by Season (in tonnes) – Roads

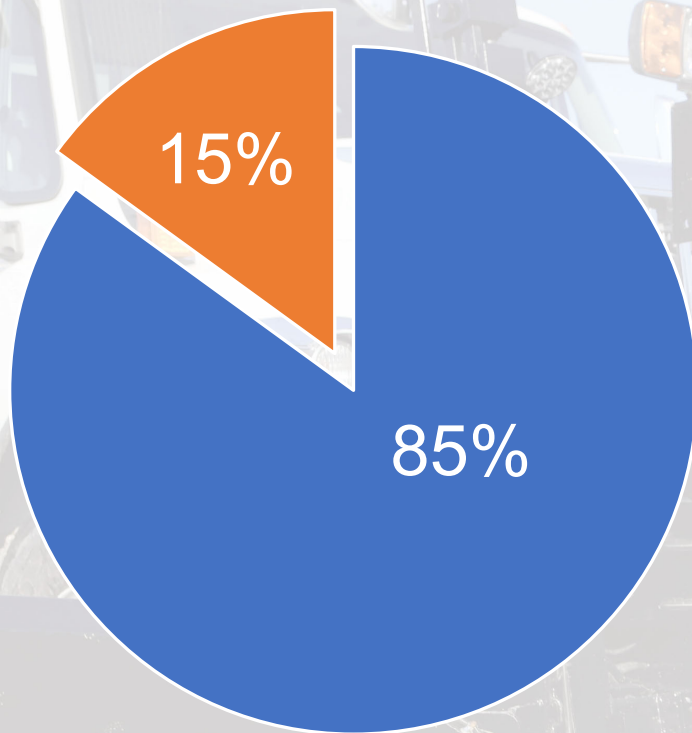


*While having less events in the 2022-23 season, it had an increase in freezing rain events as well as multi-day events resulting in an increase in salt usage due to the application of salt numerous times during one event.

A Winter Season in Vaughan



% OF PLOWING EVENTS



■ Average # of Winter Events (46)
■ Average # of Plowing Events (7)



Winter Operations Events by Type by Season

Table 1: Winter Operations Event History by Season

Season	Salting	Plowing & Salting	Total
2016-17	39	6	45
2017-18	32	10	42
2018-19	50	9	59
2019-20	46	6	52
2020-21	29	9	38
2021-22	45	4	49
2022-23	30	6	36

2022 Citizen and Business Survey



- Areas to be protected and maintained included winter maintenance services
- **Road snow removal** was identified as a primary area for maintenance

Overall, there is an **increase** in winter maintenance areas:

- Road snow removal increased **5 points**
- End-of-driveway snow removal increased **1 point**

Key Terminology

BARE PAVEMENT

- Denotes fully cleared snow from a driving surface.



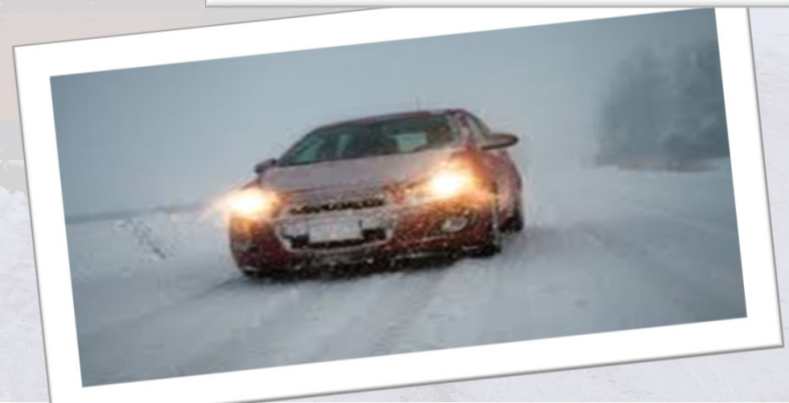
SAFE AND PASSABLE

- A road surface that is free from as much ice and snow as is practical and may be traveled safely at reasonable speed.



SNOW PACK

- Snow pack is hard-packed snow on a roadway.



Jurisdictional Review



Service Level	 BRAMPTON	 MARKHAM	 VAUGHAN	 Richmond Hill	 TORONTO
Mains					
Residential					
Windrow		 *persons with disabilities and elderly residents only	 *all residential driveways, within 4 hours after plow	 *all residential driveways, up to 13 hours after snowfall	 *clear all residential driveways, where mechanically possible

Legend:	 = Bare Pavement	 = Safe & Passable	 = Snow Pack
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Road Operations

Service Level Options



1. STATUS QUO

2. INTERMEDIATE

3. MINIMUM MAINTENANCE
STANDARDS (MMS)

Option 1: Status Quo

Roads Operations



SERVICE LEVEL

- Mains and Residential maintained to bare pavement
- Plowing operations: 5 cm threshold

Timeline:

- 4 hours for Mains
- 12 hours for Residential

COST

- Total cost is \$9.7M

Vaughan is the only municipality with this high level of service.



Service Level Options



1

STATUS QUO

SERVICE LEVEL

Mains: bare pavement
Residentials: bare pavement

Plowing Mains: 5 cm
Plowing Residentials: 5 cm

TIMELINES

Mains: 4 hours
Residentials: 12 hours

COST: \$9.7M

2

INTERMEDIATE

SERVICE LEVEL

Mains: bare pavement
Residentials: safe & passable

Plowing Mains: 5 cm
Plowing Residentials: 8 cm

TIMELINES

Mains: 4 hours
Residentials: 12 hours

COST: \$9.2M

3

MMS

SERVICE LEVEL

Mains: safe & passable
Residentials: safe & passable

Plowing Mains: 5-8 cm
Plowing Residentials: 8-10 cm

TIMELINES

Mains: 6-12 hours
Residentials: 16-24 hours

COST: \$8.4M

Safety and Risk Assessment



- True North Safety Group (TNS) performed an analysis on winter collisions in Vaughan compared to surrounding municipalities
- Collisions increased during winter events for all four municipalities with the smallest percentage increase associated with Vaughan
- Findings showed that the impact of Vaughan's winter maintenance activities on winter event collisions is statistically significant
- Contributing to 13% fewer collisions in comparison to the surrounding municipalities



Windrows

Service Level Options



1. STATUS QUO

2. PLOW-WINDROW COUPLING:
MAINTAINING STATUS QUO
TIMELINES



Option 1: Status Quo

Windrows



SERVICE LEVEL

- Windrow clearing is performed during plowing operations
- Windrow unit follows the plow (performed within 4 hours of the pass of the plow)

Timeline:

- Mains cleared within 8 hours
- Residentials cleared within 16 hours

COST

- \$2.1M

IMPACT

- Up to four-hour delay for windrow clearing

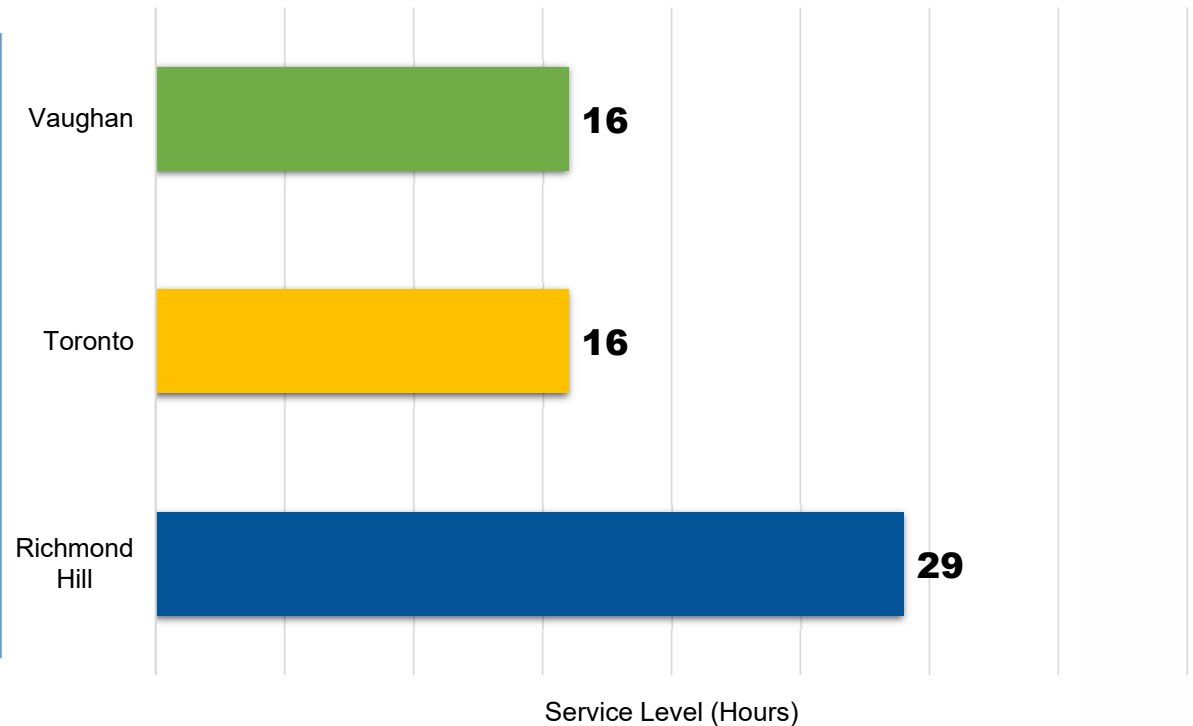


Windrow Clearing Comparison



- Vaughan begins plowing and windrow operations at 5cm
- Toronto begins plowing operations at 8cm and windrows begin at 25cm
 - *Service is *only* offered where there is no on-street parking, roads are wide, and there are no other obstructions*
- Richmond Hill begins plowing windrow operations at 10cm

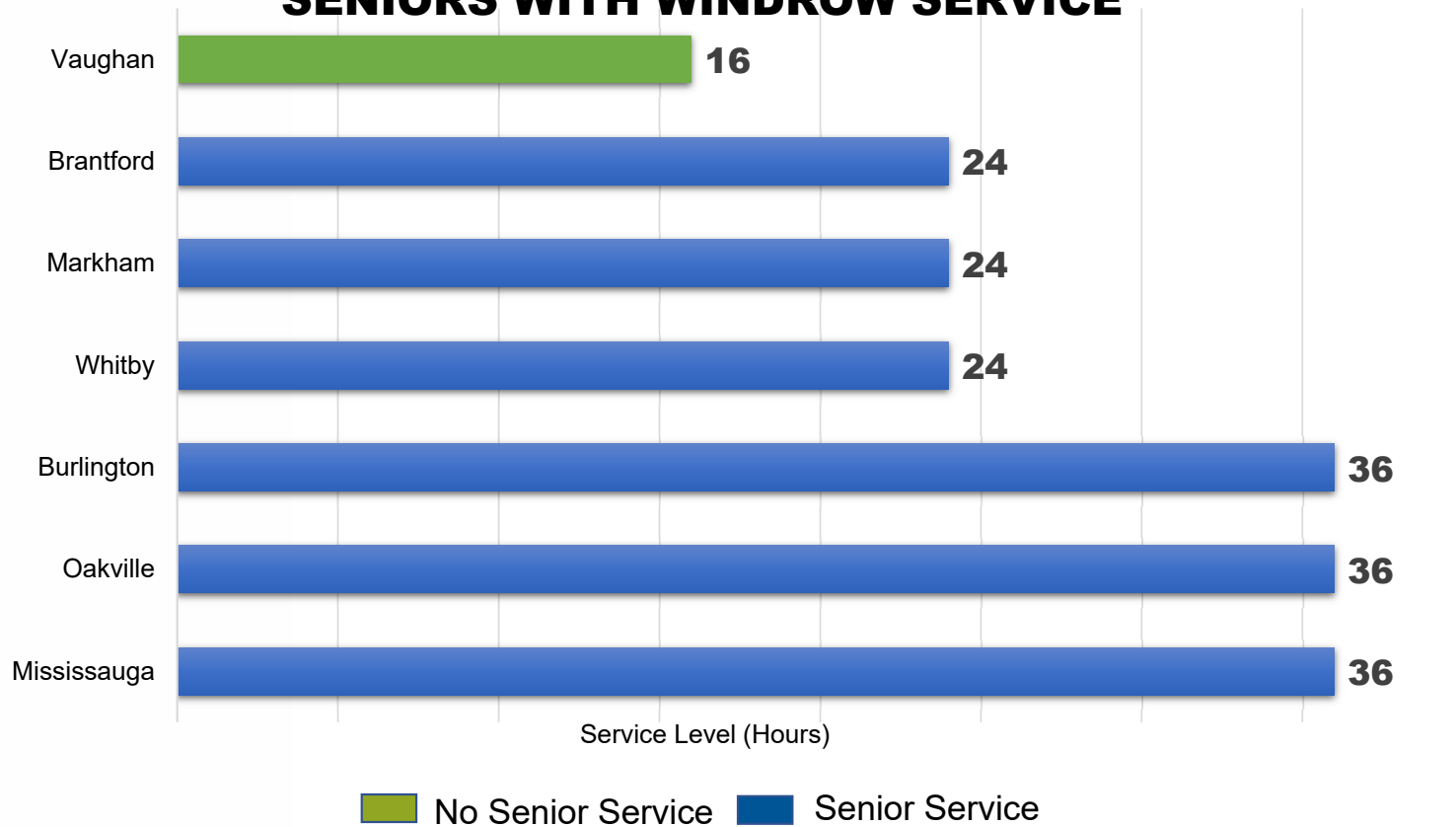
WINDROW CLEARING SERVICE



Windrow Programs Across the GTA



MUNICIPALITIES WHO PROVIDE SENIORS WITH WINDROW SERVICE



Service Level Options



1

STATUS QUO

SERVICE LEVEL

- Windrow clearing is performed during plowing operations
- Windrow unit follows the plow (performed within 4 hours of the pass of the plow)

COST: \$2.1M

2

PLOW-WINDROW COUPLING: MAINTAIN STATUS QUO

SERVICE LEVEL

- Windrow clearing is performed during plowing operations
- Windrow unit is coupled with plow so that driveways are cleared as close to the pass of the plow as possible

COST: \$4.1 - 5M*

*Pricing quoted 7 years ago; does not include COVID pricing

Snow Removal

Service Level Options



1. STATUS QUO

**2. SNOW STORAGE
CAPACITY ISSUES:
LANEWAYS, NARROW STREETS
AND CUL-DE-SACS**

Option 1: Status Quo

Snow Removal



CURRENT SERVICES PROVIDED

- In Woodbridge and Kleinberg BIAs: Snow removal when snow piles on curbs (0.5 m)
 - **\$30K** per operation, typically 3-4 times per year
- Snow removal in laneways and narrow streets is done after severe storms as required
 - **\$330K** per operation, typically one time per year

IMPACT

- Negative feedback from residents in laneways and narrow streets due to lack of snow storage



Snow Removal Service Level Options



1 STATUS QUO

CURRENT SERVICES PROVIDED:

- Woodbridge & Kleinberg BIAs: Snow removal when snow piles on curbs to 0.5m
- Snow removal in laneway and narrow streets done after severe storms as required

COST:

BIAs → \$120K (~4x/year)
Laneways and Narrow Streets → \$330K (~1x/year)

Average season total of \$450K

2

SNOW STORAGE CAPACITY ISSUES:

LANEWAYS, NARROW STREETS & CUL-DE-SACS

SERVICE LEVEL:

In addition to current services provided:

- Snow removal services on laneways and narrow streets*
- Snow removal services on cul-de-sacs

COST:

BIAs → \$120K (~4x/year)
Laneways and Narrow Streets → \$1.32M (~4x/year)
Cul-de-sacs → \$456K (~1x/year)

Average season total of \$1.9M*

**Note: This type of snow removal is already done for severe storm types 3 and 4*



Severe Weather Response Plan



Clearly defines service delivery and sets expectations



Provides flexibility to operating departments during larger events



Reduced calls once this is established (to Mayor and Members of Council)



Other municipalities assess service levels based on severity of storm; Toronto is the only municipality with this plan



Severe Weather Response Plan

Primary Roads



Treatment Condition:

- ✓ Roadway: Bare Pavement
- ✓ Windrow: One Car Width
- ✓ Start Plowing: 5 cm

Time to Complete (hours)				
	Storm Type 1 0-5 cm	Storm Type 2 5-20 cm	Storm Type 3 20-35 cm	Storm Type 4 35+ cm
Roadway (after snowfall)	4	4	6	8
Windrow (after plow)		4	8	12



Severe Weather Response Plan

Secondary Roads & Laneways



Treatment Condition:

- ✓ Roadway: Bare Pavement
- ✓ Windrow: One Car Width
- ✓ Laneways (narrow streets): Bare Pavement
 - *Snow removal on laneways and narrow streets will be performed for Storm Types 3 and 4
- ✓ Start Plowing: 5 cm



Time to Complete (hours)				
	Storm Type 1 0-5 cm	Storm Type 2 5-20 cm	Storm Type 3 20-35 cm	Storm Type 4 35+ cm
Roadway (after snowfall)	12	12	16	20
Windrow (after plow)		4	8	12
Laneway (after snowfall)	12	12	16	20

Communications Plan



This past winter season, more than 125 winter communications were done using the following tactics:

- Public Service Announcements and Council Communications Packages
- Educational videos on City services
- Proactive media outreach
- eNewsletters
- Brochures
- Social media (both organic and paid) to the City's 70,000 followers
- Mobile signs
- Website content, mailers, signage and much more.



Summary of Options & Recommendations



ROADS

OPTION 1:
Status Quo

Cost: \$9.7M



OPTION 2:
Intermediate
Cost: \$9.2M

OPTION 3:
MMS
Cost: \$8.4M

WINDROWS

OPTION 1:
Status Quo

Cost: \$2.1M



OPTION 2:
Plow-Windrow Coupling
Cost: \$4.1M - \$5M*
*estimated

SNOW REMOVAL

OPTION 1:
Status Quo

Cost: \$450K

*Current Budget: \$200K



OPTION 2:
Snow storage
capacity issues
Cost: \$1.9M



Winterization Reserve

Background and Strategy



Background



2018 Audit Report Recommendation:

Complete a review of winter maintenance strategies and budgets to ensure alignment with Council directives and historical and anticipated spending

PURPOSE OF WINTERIZATION RESERVE

- To offset significant unfavorable budget variances due to severe winter conditions
- To be used to offset unforeseen year-end Winter Control Divisions variances due to severe weather conditions which put the City in an overall unfavorable position

Winterization Reserve



CURRENT RESERVE

- \$5.5M

WINTER RESERVE STRATEGY

- Net annual surplus funds generated within the Public Works Winter Control Division or City-wide. Contributions will occur as required
- Recommended Target: A maximum of 40% of the four-year Winter Maintenance annual adjusted average costs
- Under authorization of the DCM, Corporate Services/CFO, funds may also be used to phase-in unexpected expense pressures (i.e. contract negotiations, etc.)





Conclusion

Recommendations



Conclusions and Recommendations



- Vaughan currently has a comprehensive winter program that has among the highest levels of service for winter maintenance in the GTA. This contributes to 13% less collisions
- Based on this analysis, it is recommended to maintain current service levels.
- Public Works recommends \$250K in funding to sustain current snow removal operations without impacting the winter reserve.
- To increase citizen satisfaction in extreme weather events, it is recommended that the City proceed with the proposed Severe Weather Response plan.



Thank You



Draft Site Alteration By-law

Presentation to Committee of the Whole:
Working Session
May 31, 2023



What is Site Alteration?

The placement of fill on land, the removal of topsoil or the alteration of the grade of land.

Site alteration is primarily undertaken to improve drainage, increase suitability of land for development or improve the use of agricultural lands.



What is Excess Soil?

Excess soil is soil that is in excess of a construction or development project (source site). The excess soil is not needed after excavation and must be moved to a new location (reuse/receiving site).



Issue with Excess Soils

Growing focus on urban development and growth will result in an increased generation of excess soils and the related challenges for municipalities, developers and local communities.

Challenges for Municipalities

1. Must support responsible development
2. Address concerns over source and quality of excess soil to protect agricultural land, water and the natural environment.
3. Issues with illegal dumping, commercial fill operations and illegal land uses

Challenges for Developers

1. Increasing costs for transporting excess soil.
2. Challenged to find appropriate sites for beneficial reuse.

Challenges for Local Residents

1. Nuisances such as noise and dust.
2. Increased truck traffic on local roads.
3. Adverse effects from illegal land use.
4. Inconvenience from repeated or continued non-compliance.

Fill By-law 189-96

Fill By-law 189-96 has been in effect since 1996 and is outdated, not aligned with current regulations and best industry practices.

By-law 189-96 also lacks sufficient inspection and enforcement language that properly authorizes MLEOs to effectively monitor and address matters of non-compliance.

Need for New Approach

The new approach must recognize the need to:

1. The city's responsibility to support responsible development
2. Protect natural environment and human health.
3. Limit potential adverse impact to local community and city infrastructure.
4. Develop effective monitoring & enforcement tools to address non-compliance.
5. Address growing concerns over the source and quality of excess soil.
6. Update permit requirements and cost recovery mechanisms.
7. Recognize when site alteration is not part of normal farming practices.

New By-law Highlights

1. Comprehensive list of definitions and terms
2. New Director Authority
3. By-law Exemptions
4. Permit Requirements
5. Permit Processing & Administration
6. Enforcement Tools: AMPs & Special Fines
7. Additional Inspections Fees & Security Deposit



Stakeholder Engagement

Working with Corporate Communication team develop and implement a Stakeholder Engagement Plan.

Important to engage with development industry representatives, TRCA, local community and other groups to gather feedback on the proposed Draft Site Alteration By-law and Applicant Guide.



Term of Council Priorities

Environmental Sustainability: Encouraging responsible development and ensuring landowner are held responsible for proper management of excess soils.

City Building: as City develops long-term planning and policies to meet housing need, excess soil management must be a consideration.

Project Timelines

- May 31 Committee of the Whole Working Session
- Stakeholder Engagement over the summer months.
- Compile comments and feedback to refine Draft By-law and Applicant Guide.
- Return to Committee of the Whole in Q4 with final report.



Thank You.

