

Attachment 4

City of Toronto asset inventory of small engine equipment

May 2025

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List of Abbreviations

Divisions, Agencies and Corporations: DACs
Environment, Climate and Forestry: ECF
Exhibition Place: Ex
Parks and Recreation: P&R
Solid Waste Management Services: SWMS
Toronto Transit Commission: TTC
Toronto Zoo: Zoo
Transportation Services: TS

Introduction

As part of TransformTO and the Toronto's Net Zero Strategy, the City of Toronto is committed to transitioning towards zero-emission outdoor power equipment, including eliminating Corporate owned gas-powered small engine equipment. Building on City Council's previous requests to Parks, Forestry and Recreation (now two Divisions: Parks and Recreation (P&R) and Environment, Climate and Forestry (ECF)) in 2022.EC31.4 to develop a plan to phase-out Corporate-owned gas-powered equipment, as well as the request to P&R, Transportation Services (TS) and Fleet Services to develop a transition plan and determine feasibility of phasing out Corporate-owned gas-powered leaf blowers (2021 IE25.21), the resources and pathway for a Corporate transition plan is presented in the Staff Report, including an analysis of the City's small engine equipment inventory to determine replacement timeline, electricity and charging capacity needs assessment, and estimated costs through replacement with zero emissions alternatives.

To develop the corporate transition plan, an accurate, up-to-date asset inventory of the City's small engine equipment was created, which was then analyzed to determine replacement timelines, and electricity and charging capacity needs assessments. The Corporate inventory details are presented below.

Equipment Category Counts by DACs

Based on the data collected in December 2024, the City of Toronto owns 3,551 pieces of equipment classified as small engine equipment, which is spread throughout seven DACs and 12 equipment categories. The inventory results detailed in this Appendix include all two-stroke and four-stroke engine equipment, battery-powered outdoor small engine equipment and corded outdoor power equipment along with equipment with unknown engine types.

As shown in Table 1, the three DACs with the greatest number of units are P&R, which owns 73 per cent of the small engine equipment, followed by ECF with 13 per cent and TS at seven per cent. The table also shows a breakdown of equipment by category and that grass trimmers and brush cutters are the most common type of equipment with 756 units representing 21 per cent of the total small engine equipment inventory. Both blowers and chainsaws also make up 21 per cent of the equipment (738 and 737 units respectively), with those three categories representing 63 per cent of the inventory.

Table 1: Equipment Category Counts by DACs

Categories	P&R	ECF	TS	TTC	SWMS	Zoo	Ex	Grand Total	Percentage of Categories
Grass Trimmers & Brushcutters	632	22	32	43	16	9	2	756	21%
Blowers	558	66	48	29	16	13	8	738	21%
Saws - Chainsaw	336	359	15	19	1	7	0	737	21%
Other	319	3	44	4	4	4	0	378	11%
Snow Blowers	191	0	48	0	1	4	0	244	7%
Mowers	173	0	13	20	0	0	0	206	6%
Hedge Trimmers	134	0	9	22	0	0	0	165	5%
Tillers	108	0	0	1	0	0	0	109	3%
Saws - Construction	40	0	29	0	8	3	0	80	2%
Generators	48	0	25	1	1	0	0	75	2%
Edgers & Sod Cutters	35	0	0	1	0	0	0	36	1%
Tools	6	0	3	0	18	0	0	27	1%
Grand Total	2,580	450	266	140	65	40	10	3,551	100%
Percentage of DACs	73%	13%	7%	4%	2%	1%	0.3%	100%	

Subcategories of blowers

The subcategory of blowers is broken down in Table 2 because of the potential ban on two-stroke engines, as outlined in Option B, and the public interest in leaf blowers. There are a total of 667 units classified as blowers, the majority of which are backpack leaf blowers (51 per cent). Within backpack leaf blowers, 82 per cent are four-stroke engines and would therefore not be covered by the potential bylaw. Overall, four-stroke blowers represent 46 per cent of equipment within the blower category. While backpack leaf blowers are predominately four-stroke, the hand-held leaf blowers are mostly two-stroke engines (71 per cent).

Table 2: Equipment breakdown within the blower category, by subcategory and engine type

Subcategories	2-stroke	4-stroke	Battery	Grand Total	Percentage of Subcategories
Blower - Backpack	53	280	7	340	51%
Blower - Hand Held	211	0	87	298	45%
Push Blower	0	25	0	25	4%
Turbine Blower	2	1	0	3	0.4%
Vacuum Shredder	1	0	0	1	0.1%
Grand Total	267	306	94	667	100%
Percentage of Engine Type	40%	46%	14%	100%	

Age of corporate small engine equipment

Table 3 summarizes inventory by engine type, DAC and age. Of the two-stroke engine equipment owned by P&R, there are 233 units or 25 per cent that are five years or older. Of the two-stroke engine equipment owned by ECF with known ages 73 per cent (175 units) is five or more years old. All 38 units owned by TS are less than eight years old.

Table 3: Inventory breakdown by engine type, DACs and age of equipment

*Percentage listed is of the total for the DAC

DAC	Age of equipment in years												
	< 2		3-4		5-7		8-10		10-20		20+		Grand Total
	2-stroke	4-stroke	2-stroke	4-stroke	2-stroke	4-stroke	2-stroke	4-stroke	2-stroke	4-stroke	2-stroke	4-stroke	
P&R	35 (4%)	77 (8%)	38 (4%)	97 (10%)	112 (12%)	172 (18%)	53 (6%)	127 (14%)	65 (7%)	152 (16%)	3 (0%)	1 (0%)	932
ECF	10 (4%)	4 (2%)	2 (1%)	5 (2%)	35 (15%)	10 (4%)	63 (26%)	7 (3%)	65 (27%)	27 (11%)	12 (5%)	0	240
TTC	0	2 (1%)	0	0	12 (9%)	3 (2%)	25 (19%)	10 (7%)	27 (20%)	46 (34%)	6 (4%)	4 (3%)	135
TS	0	2 (5%)	13 (34%)	5 (13%)	7 (18%)	11 (29%)	0	0	0	0	0	0	38
SWMS	0	0	0	0	4 (40%)	6 (60%)	0	0	0	0	0	0	10
Total	45	85	53	107	170	202	141	144	157	225	21	5	1,355
Percentage	3%	6%	4%	8%	13%	15%	10%	11%	12%	17%	2%	0%	

Small engine equipment storage locations

The transition to zero-emission outdoor power equipment will require charging batteries at the locations where the current small engine equipment is stored. Depending on the number of batteries charging and the electrical capacity at a site, some locations may require electrical capacity upgrades. Because of this, the storage locations of all the City's small engine equipment were included in the inventory data collection.

It was found that there were 146 locations where the 3,095 small engine equipment are stored throughout the City. Thirty-eight locations (26 per cent) have 85 per cent of the (2,633 pieces) of equipment, where 108 of locations only total 15 per cent (Table 4). Locations with more than 20 pieces of equipment have a higher likelihood of needing electrical capacity

upgrades due to the larger number of batteries. There are eight locations with over 100 pieces stored representing 42 percent of all the equipment in the inventory. 247 Esther Shiner Blvd and 50 Booth Ave combined have 555 pieces equaling 18 per cent of the inventory. There are 96 locations with less than 10 pieces of equipment representing 66 per cent of the locations.

Table 4: Summary of City storage locations with greater than 20 pieces of small engine equipment

	Number of Locations	Equipment	Percentage Equipment	Percentage Locations
Locations w/ Greater Than 20 Items	38	2,633	85%	26%
Locations w/ Less Than 20 Items	108	462	15%	74%
Totals	146	3,095		

Table 5 shows the breakdown of the 146 small engine City storage locations listed by address, which house the 3,095 pieces (excluding equipment with unknown engine type) of two-stroke, four-stroke and battery-powered equipment. The top 38 locations (26 per cent) store 85 per cent (2,633 units) of equipment, with 108 of locations only totalling 15 per cent of all equipment. The top two locations, 247 Esther Shiner Blvd and 50 Booth Ave, combined have 555 pieces equaling 18 per cent of the total inventory. There are 96 locations with less than 10 pieces of equipment. These locations are the least likely to require electrical capacity assessments or retrofits due to the small number of units.

Table 5: Corporate equipment storage locations in descending order by total small engine equipment with number of two-stroke, four-stroke and battery-powered equipment, excluding equipment of unknown engine type

Locations	2-stroke	4-stroke	Battery	Grand Total
247 Esther Shiner Blvd	159	173	21	353
50 Booth Ave	107	76	19	202
301 Rockcliffe Blvd	58	90	3	151
1138 Bathurst St.	70	65		135
70 Nashdene Rd	52	50	17	119

Locations	2-stroke	4-stroke	Battery	Grand Total
1132 Leslie St	25	90	2	117
27 Toryork Dr	54	51	9	114
435 Kipling Ave	32	57	18	107
101 Ridgetop Rd	61	19	3	83
1873 Bloor St W	21	45	10	76
891 Morningside Ave	36	33	1	70
305 Rockcliffe Blvd	44	14	5	63
360 Morningside Ave	16	44	2	62
919 Scarlett Rd	20	31	8	59
451 Brimley Rd	13	39	4	56
140 Bentworth Ave	17	36	1	54
441 Kipling Ave	29	10	14	53
190 Sherwood Ave	14	30	5	49
256 Centennial Park Rd	15	30		45
30 Northline Rd	5	28	9	42
361A Old Finch Ave	11	28	1	40
251 Esther Shiner Blvd	21	18		39
1369 St Clair Ave W	8	28	3	39
61 Toryork Dr	15	23		38
9 Queens Quay W	13	21	4	38
21 Alness St	10	24	4	38
1200 Lansdowne Ave	8	30		38
75 Vanley Cres	4	6	27	37
2481 Birchmount Rd	6	21	9	36
1005 Brimley Rd	1	32	2	35
4200 Yonge St	4	21	10	35
320 Bering Ave	5	30		35
3079 Birchmount Rd	5	25	3	33
64 Murray Rd	10	23		33
5720 Bathurst St	6	26	1	33

Locations	2-stroke	4-stroke	Battery	Grand Total
1401 Castlefield Ave	7	20	1	28
1050 Ellesmere Rd	9	16		25
1000 Jane St	6	14	3	23
125 Pharmacy Ave	6	9	3	18
4169 Bathurst St	4	12	2	18
7 Leslie St	9	6		15
781 Victoria Park Ave		11	4	15
1008 Yonge St	2	12	1	15
1116 King St W	4	9	1	14
150 Beecroft Rd	5	9		14
40 Beattie Ave	1	6	6	13
100 Princes' Blvd	7	3	3	13
101 Copperfield Rd	2	8	3	13
433 Eastern Ave	6	7		13
19 Horticultural Ave	3	2	6	11
4100 Dundas St W		6	1	7
1 Brimley Rd S		7		7
73 Colonel Danforth Trl		1	6	7
925 Albion Rd		2	5	7
1 Faustina Dr	1	2	4	7
1633 Wilson Ave		2	4	6
590 Rathburn Rd			6	6
580 Finch Ave W	1	3	2	6
1507 Lawrence Ave W		3	3	6
156 Centennial Park Rd	3	2	1	6
85 Birchmount Rd	2	4		6
2650 Finch Ave W		3	3	6
95 Black Creek Dr		2	3	5
600 Roding St	1	2	2	5
4801 Dufferin St	1	2	2	5

Locations	2-stroke	4-stroke	Battery	Grand Total
15 Clubhouse Crt	2	2	1	5
2 Rozell Rd		5		5
1501 Albion Rd		3	2	5
151 Elmcrest Rd		1	4	5
50 Falstaff Ave		1	3	4
75 Arcadian Crcl	2	1	1	4
15 Grierson Rd	1	2	1	4
35 Glen Long Ave	1	2	1	4
230 Gosford Blvd		3	1	4
350 Grandravine Dr	1	1	2	4
10 Rampart Rd	1	2	1	4
105 Norseman St			4	4
1967 Ellesmere Rd	1	3		4
40 Carl Hall Rd			4	4
888 Cosburn Ave	1	3		4
155 Culford Rd		4		4
31 Glen Watford Dr		2	1	3
1485 Albion Rd		2	1	3
2231 Lawrence Ave E		3		3
140 Antibes Dr		1	2	3
80 Lothian Ave	1		2	3
30 Sewells Rd		2	1	3
402 Shuter St	1	2		3
443 Arlington Ave		3		3
115 Black Creek Dr		1	2	3
45 Golfdown Dr	1	1	1	3
790 Queen St W		1	2	3
3383 Weston Rd		3		3
3100 Weston Rd		2	1	3
1155 King St W		3		3

Locations	2-stroke	4-stroke	Battery	Grand Total
220 Cowan Ave		1	2	3
100 Queen St W		2	1	3
4401 Jane St		1	2	3
412 Martin Grove Rd		3		3
23 Grandravine Dr	1	1	1	3
66 Sheridan Ave		1	1	2
150 Borough Dr	1	1		2
205 Wilmington Ave		1	1	2
1081.5 Pape Ave	1	1		2
2 Orianna Dr			2	2
150 Sherbourne St	1	1		2
3600 Kingston Rd		2		2
455 Cosburn Ave		2		2
870 Queen St E		1	1	2
495 Sherbourne St		1	1	2
150 Mccowan Rd		2		2
5 Glen Everest Rd			2	2
160 Neptune Dr	1		1	2
5 Replin Rd			2	2
2 Rowntree Rd		1	1	2
18 Ourland Ave	1		1	2
200 Eglinton Ave W		1	1	2
340 Park Lawn Rd	1	1		2
25 Stanley Rd		2		2
550 Broadview Ave		2		2
875 Dufferin St		2		2
1260 Dufferin St			2	2
150 Greenwood Ave		2		2
1386 Victoria Park Ave		1	1	2
31 Drummond St			2	2

Locations	2-stroke	4-stroke	Battery	Grand Total
292 Manse Rd		2		2
640 Dundas St E	1	1		2
711 Lake Shore Blvd W		1		1
333 Annette St		1		1
2467 Eglinton Ave E		1		1
6 Williamson Rd		1		1
171 Pellatt Ave	1			1
1501 St Clair Av W		1		1
230 The Esplanade			1	1
205 Humber College Blvd			1	1
245 Main St		1		1
750 Bloor St W		1		1
1020 Yonge St		1		1
28 Colonel Samuel Smith Park Dr		1		1
2213 Dufferin St			1	1
140 Commander Blvd		1		1
93 Birchmount Rd		1		1
953 Gerrard St E			1	1
725 Logan Ave		1		1
2075 Queen St E		1		1
1675 Lake Shore Blvd E		1		1
Grand Total	1,077	1,661	357	3,095