Montgomery County Council

Committee: T&E
Committee Review: Completed
Staff: Ludeen McCartney-Green, Legislative Attorney
Christine Wellons, Senior Legislative Attorney
Purpose: Final action – vote expected
Keywords: #LeafBlowers #NoiseControl

AGENDA ITEM #2A
September 26, 2023
Action

SUBJECT

Bill 18-22, Noise Control – Leaf Removal Equipment - Amendments

Lead Sponsor: Former Council President Albornoz at the request of the County Executive

EXPECTED ATTENDEES

Jon Monger, Department of Environmental Protection (DEP)
William Broglie, DEP
Frank Dawson, DEP
Mary Travaglini, DEP

COUNCIL DECISION POINTS & COMMITTEE RECOMMENDATION

- If the Council votes to take Bill 18-22 from the table, then the issue before the Council is whether to enact Bill 18-22, as amended by the Transportation and Environment (TE) Committee.
- The TE Committee recommended (3-0) the enactment of Bill 18-22 with amendments.

DESCRIPTION/ISSUE

Bill 18-22 would:

(1) prohibit the sale and use of combustion engine-powered leaf blowers and leaf vacuums by a certain date;
(2) authorize a grant program to partially offset the cost of replacing a combustion engine-powered leaf blower or leaf vacuum with an electric leaf blower or leaf vacuum;
(3) exempt the use of gas leafblower equipment for agricultural producers;
(4) require an annual report by the Department of Environment; and
(5) generally amend the law regarding noise control.

SUMMARY OF KEY DISCUSSION POINTS

- By a 3-0 vote, the TE Committee on February 13 recommended the following amendments to Bill 18-22:

  - require the Director of DEP to establish a reimbursement program;
  - clarify that the reimbursement program is subject to appropriation;
  - require the County Executive to promulgate Method (2) regulations to implement the reimbursement program;
  - require annual reporting by DEP to provide updates, summarize enforcement efforts, and make recommendations;

- exempt agricultural producers located in the Agricultural Reserve Zone from the gas-powered leaf blower mandate; and
- delay the effective date of the ban on the use of gas-powered leaf blowers until regulations for the reimbursement program are established by the County Executive and approved by the Council.

- At a prior full Council worksession in March 2023, the Council voted 11 – 0:

  - to expand the exemption for agricultural producers beyond the Agricultural Reserve Zone.

- On March 21, 2023, the Council voted (7-4) to table Bill 18-22.

  - Voting to table the bill were Councilmembers Balcombe, Sayles, Jawando, Katz, Fani-Gonzalez, Albornoz, and Luedtke.
  - Voting against tabling the bill were Councilmember Stewart, Council Vice-President Friedson, Council President Glass, and Councilmember Mink.

- If the bill is taken from the table, the Council may want to discuss and vote on additional amendments offered by several Councilmembers prior to a final vote on the bill. See staff report, pages 2 to 4. In particular, the Council might wish to consider amendments related to the sequence and timeline of implementing the bill's requirements.

This report contains:

Agenda Item #2A
September 26, 2023
Action

M E M O R A N D U M

September 21, 2023

TO: County Council

FROM: Ludeen McCartney-Green, Legislative Attorney
Christine Wellons, Senior Legislative Attorney

SUBJECT: Bill 18-22, Noise Control – Leaf Removal Equipment - Amendments

PURPOSE: Vote on Taking Bill Off the Table – hand vote
Action on bill – roll call vote

Committee Recommendation (3-0): Enact Bill 18-22 with amendments

Expected Attendees
Jon Monger, Department of Environmental Protection (DEP)
William Broglie, DEP
Frank Dawson, DEP
Mary Travaglini, DEP

Bill 18-22, Noise Control – Leaf Removal Equipment – Amendments sponsored by the Lead Sponsor Council President at the Request of the County Executive, was introduced on June 21, 2022. A public hearing was held on September 20, 2022 at 1:30 p.m.[1] The Transportation and Environment Committee held a worksession on February 13, 2023. The full Council held a worksession on March 7.

On March 21, the Council voted (7-4) to table Bill 18-22. Voting in favor of tabling were Councilmembers Balcombe, Sayles, Jawando, Katz, Fani-Gonzalez, Albornoz, and Luedtke. Voting against tabling the bill were Councilmember Stewart, Council Vice-President Friedson, Council President Glass, and Councilmember Mink.

Bill 18-22 would:

(1) prohibit the sale and use of combustion engine-powered leaf blowers and leaf vacuums by a certain date;

[1] #noisecontrol#leafblower

(2) authorize a grant program to partially offset the cost of replacing a combustion engine-powered leaf blower or leaf vacuum with an electric leaf blower or leaf vacuum;

(3) exempt the use of gas leafblower equipment for agricultural producers;

(4) require an annual report by the Department of Environment; and

(5) generally amend the law regarding noise control.

OUTSTANDING ISSUES FOR THE COUNCIL'S DISCUSSION – SEPTEMBER 26

Bill 18-22 – as amended by TE and by the Council at its prior worksession – is enclosed at ©1. Prior to a final vote, the Council may want to consider the following additional amendments.

1. Effective Dates; Transition

The Council might wish to review the timeline for implementing the provisions of Bill 18-22. The timeline under the bill - as the bill is currently drafted - would be:

- **Bill effective date.** The bill would take effect 3 months after it becomes law (e.g., 3 months after being signed into law by the County Executive). Assuming the Executive signs the bill quickly after enactment, the bill would take effect on or about December 26, 2023.

- **Ban on Sales.** Six months later, on or about June 26, 2024, the ban on sales would take effect.

- **Regulations.** Regulations on the reimbursement program would be due to the Council, for the Council's review and approval, by June 30, 2024.

- **Ban on Use.** On the date that the regulations take effect, the ban on use would take effect. This would occur on or about July 2024.

- **Time for Rebates.** The rebate program would apply only to purchases made before the bill becomes law (e.g., the date the bill is signed into law by the County Executive).

Note that under this timeline, the regulation due date, the ban on sales, and the ban on use would all occur on or about June/July 2024.

Multiple Councilmembers have indicated they might wish to amend the timeline. Councilmember Albornoz intends to propose the following timeline.

- **Bill effective date.** The bill would still take effect 3 months after it becomes law (e.g., 3 months after being signed into law by the County Executive). Assuming the Executive signs the bill quickly after enactment, the bill would take effect on or about December 26, 2023.

- **Regulations.** Regulations would still be due to the Council, for the Council's review and approval, by June 30, 2024.

- **Ban on Sales.** Six months after the effective date of the regulations, the ban on sales would take effect. This would occur on or about January 2025.

- **Ban on Use.** Two years after the regulations take effect, the ban on use would take effect. This would occur on or about June 2026.

- **Time for Reimbursements.** The reimbursement program would be available for purchases made until the ban on use takes effect. This would occur on or about June 2026.

Amend lines 53-59 as follows:

Sec. 2. Effective date; staggered implementation. The prohibition against sales under Subsection (e) of Section 31B-9, added under Section 1 of this Act, must take effect 6 months after the **[[**Act becomes law**]]** effective date of regulations adopted under Subsection (i) of Section 31B-9. The prohibition against use under Subsection (f) of Section 31B-9, added under Section 1 of this Act, must take effect **[[**1 year after the Act becomes law**]]** 18 months after the prohibition against sales under Subsection (e) takes effect. Subsection (g) of Section 31B-9, added under Section 1 of this Act, must apply reimbursement only for purchases of combustion engine-held leaf blowers or leaf vacuums made before **[[**this Act becomes law**]]** the prohibition against use under Subsection (f) takes effect.

The timeline that DEP anticipates for implementation is contained in a PowerPoint presentation at ©80. Note that the DEP timeline anticipates that a ban on use would not occur until January 2025, and that rebates would be available until July 2026. In order to facilitate DEP's timeline, amendments to the bill would be needed.

2. Amendment by Councilmember Katz – Required Notice by Retailers

Councilmember Katz intends to propose an amendment that would require retailers selling gas-powered leafblowers to post notices for consumers that the leafblowers will be banned in the County. This posting requirement would apply only during a limited time period – from the effective date of the bill to the effective date of the ban on sale.

After line 59, add the following:

Sec. 3. *Required notices*. On or after the effective date of this Act and before the effective date of the prohibition against sale under this Act, a person who sells, at retail, a combustion engine-powered handheld, backpack, or walk-behind leaf blower or leaf vacuum in the County

must provide conspicuous notice to the consumer that the leaf blower usage will be prohibited in the County.

3. Amendment by Councilmember Albornoz – Method of Adopting Regulations

Councilmember Albornoz intends to put forward an amendment to require the adoption of Method (1) regulations regarding implementation of the reimbursement program. As currently written, the bill would require the adoption of Method (2) regulations.

County Code Section 2A-15 sets forth the requirements for different types of regulations:

- Method (1): must be approved or disapproved by the Council, and if adopted, it becomes effective on the date it was adopted, or a different date specified in the regulation.

- Method (2): becomes effective when the Council approves the regulation or at a later date specified in the regulation. If the Council takes no action within 60 days of receiving the regulations, the regulation would be effective the day after the deadline. The Council can adopt a resolution to extend the 60-day deadline.

The amendment to require Method (1) amendments would be as follows.

Amend lines 21-23 as follows:

(i) Regulations. Not later than June 30, 2024, the County Executive must transmit to the Council [[Method (2)]] Method (1) regulations to establish the reimbursement program under subsection (g).

4. Amendment by Councilmember Albornoz – Temporary Exemption for Properties Equaling or Exceeding 50 Acres

Councilmember Albornoz intends to propose an amendment to temporarily exempt properties of at least 50 acres from the bill's ban on use.

Add a new section after line 59 as follows.

Sec. x. Temporary Exemption. Section 31B-9(f) of this Act must not apply to a residential or commercial property that contains at least 50 acres of land for a period of 5 years after the effective date of this Act.

For a comprehensive review of public testimony, impact statements, the TE Committee worksession, and the Council's prior worksession on Bill 18-22, please see the following staff reports:

Introduction Staff Report - June 28, 2022

Public Hearing Staff Report - September 20, 2022

Transportation and Environment Committee Worksession Staff Report - February 13, 2023

Council Worksession Staff Report - March 7, 2023

Council Action Staff Report - March 21, 2023

NEXT STEPS: Vote on whether to take Bill 18-22 from the table.
Vote on whether to enact Bill 18-22, as amended.

Bill No. 18-22
Concerning: Noise Control – Leaf Removal Equipment - Amendments
Revised: 09/20/2023 Draft No. 4
Introduced: June 28, 2022
Expires: December 28, 2023
Enacted: [date]
Executive: [date signed]
Effective: [date takes effect]
Sunset Date: [date expires]
Ch. [#], Laws of Mont. Co. [year]

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

AN ACT to:

(1) prohibit the sale and use of combustion engine-powered leaf blowers and leaf vacuums by a certain date;
(2) authorize a grant program to partially offset the cost of replacing a combustion engine-powered leaf blower or leaf vacuum with an electric leaf blower or leaf vacuum;
(3) exempt the use of gas leafblower equipment for agricultural producers;
(4) require an annual report by the Department of Environment; and
(5) generally, **[[**revise**]]** amend the law regarding noise control.

By amending
Montgomery County Code
Chapter 31B, Noise Control
Sections 31B-9, 31B-10, and 31B-12

Boldface	*Heading or defined term.*
Underlining	*Added to existing law by original bill.*
[Single boldface brackets**]**	*Deleted from existing law by original bill.*
Double underlining	*Added by amendment.*
[[Double boldface brackets**]]**	*Deleted from existing law or the bill by amendment.*
* * *	*Existing law unaffected by bill.*

The County Council for Montgomery County, Maryland approves the following Act:

Sec. 1. Sections 31B-9, 31B-10, and 31B-12 are amended as follows:

31B-9. [Leafblowers] Leaf removal equipment.

* * *

(e) *Sale of combustion leaf removal equipment – Prohibited*. A person must not sell or offer for sale a combustion engine-powered handheld, backpack, or walk-behind leaf blower or leaf vacuum.

(f) *Use of combustion leaf removal equipment – Prohibited*. A person must not use a combustion engine-powered handheld, backpack, or walk-behind leaf blower or leaf vacuum.

(g) *Reimbursement*. Subject to an appropriation by the County Council,**[[**The**]]** the Director **[[**may**]]** must establish a time-limited program based on criteria set by regulation to partially reimburse County residents and businesses that purchase electric leaf blowers or leaf vacuums to replace combustion engine-powered leaf blowers or leaf vacuums.

[[(1)**]]** (h) *Application for reimbursement.* To receive reimbursement under subsection (g), an owner of a combustion engine-powered leaf blower or leaf vacuum must apply to the Director in a form prescribed by the Director and deliver the combustion engine-powered leaf blower or leaf vacuum to the County.

(i) *Regulations.* Not later than June 30, 2024, the County Executive must transmit to the Council Method (2) regulations to establish the reimbursement program under subsection (g).

[[(h)**]]** (j) An enforcement officer may issue a civil citation under this Section if the Director receives a complaint of a noise disturbance supported by photographic evidence of a violation of subsection (f).

(k) *Annual reporting.* By February 1 of each year, the Director must submit to the Council an annual report for the preceding year on the successes or challenges of the reimbursement program, outreach activities, statistical data related to enforcement, new technology trends for electrification of lawn care equipment, and any recommended changes to the law or operating budget. The Council may request the Director to provide additional information, as needed.

31B-10. Exemptions.

* * *

(c) Section 31B-9 of this Chapter does not apply to agricultural producers located **[[**in the Agricultural Reserve Zone. Activities of agricultural producers must be consistent with the definition of agriculture under Section 2B-1**]]** on agriculturally assessed properties where farming or agricultural use and activities are permitted under Article 59, Section 3.2.6 of the Zoning Ordinance.

31B-12. Enforcement and penalties.

* * *

(f) Except as provided in Section **[[**31B-9(h)**]]** 31B-9(j), **[**An**]** an enforcement officer may issue a civil citation for any violation of this Chapter if the enforcement officer:

(1) witnesses the violation; or

(2) receives complaints from at least 2 witnesses of a noise disturbance.

Complaints by 2 witnesses are required to issue a citation under paragraph (2), but are not required to prove that a person violated this Chapter.

* * *

Sec. 2. Effective date; staggered implementation. Subsection (e) of Section 31B-9, under Section 1 of this Act, must take effect 6 months after the Act becomes law. Subsection (f) of Section 31B-9, under Section 1 of this Act, must take effect **[[**1 year after the Act becomes law**]]** on the date the Council adopts the executive regulations established under subsection (i). Subsection (g) of Section 31B-9, under Section 1 of this Act, must apply reimbursement only for purchases of combustion engine-held leaf blowers or leaf vacuums made before this Act becomes law.

LEGISLATIVE REQUEST REPORT

Introduction of Bill XX-22, Amendments to Chapter 31B

DESCRIPTION: Bill XX-22 would prohibit the sale and use of combustion engine-powered leaf blowers and leaf vacuums, authorize a grant program to partially offset the cost of replacing a combustion engine-powered leaf blowers or leaf vacuum with an electric leaf blowers or leaf vacuum, and revise County law regarding enforcement in noise control for leaf blowers.

PROBLEM: Leaf blowers are currently regulated in Chapter 31B to not exceed 70 dBA at a distance of 50 feet. However, gasoline leaf blowers, or combustion engine-powered leaf blowers (further referenced as CEPLBs) are common in landscaping, yard maintenance, and snow removal. These are a growing noise issue in Montgomery County, and are a public health risk to workers and residents in the communities where they are used.

Noise is known to create adverse health effects, as well as simply be a distraction and interrupt work for many. As to health effects, it is known to create hearing loss and tinnitus, as well as effects such as reduced mental performance and health and hypertension. Leaf blowers are known to create significant noise. These effects are acerbated for leaf blowers operators in landscape companies often minorities, as well as those nearby especially children and elderly, those working from home, and those that work overnight shifts, sleeping during typical leaf blowing hours.[1]

In Montgomery County specifically, noise from leaf blowers resulted in 62 formal complaints to DEP in fiscal year 2021. The current legislation regulates CEPLBS in Chapter 31B to not exceed 70 dBA at a distance of 50 feet. This legislation is difficult to measure and enforce if leaf blowers no longer have the original manufacturer labels. Additionally, noise is measured on a logarithmic scale in dBA. As such, the current 70 dBA allowance is doubly as loud a low 60s dBA noise more commonly seen in BLBs. As stated above, BLBs also don't have the penetrative low frequency tone. With the noise and health effects of CEPLBs, DEP is seeking to phase out CEPLBs through prohibiting sale January 1, 2022 and use beginning January 1, 2023.

The legislation also enables DEP to create a grant program for trade-in of CEPLBs or purchase of new BLBs to support this transition

[1] https://www.audubon.org/magazine/spring-2021/why-cities-are-taking-action-limit-loud-and

	away from CEPLBs for private citizens and companies in the County. With this grant program, and already affordable alternatives, this legislation is a benefit to communities and workers ensuring Montgomery County is a healthy place to live and work.
GOALS AND OBJECTIVES:	Bill XX-22 addresses the increasing noise issues from combustion engine-powered leaf blowers through phase-in of plug-in electric and battery options. This is supported through authority to create a grant program and updates to the enforcement mechanism for the noise control ordinance.
COORDINATION:	Department of Environmental Protection
FISCAL IMPACT:	Office of Management and Budget.
ECONOMIC IMPACT:	Office of Legislative Oversight.
RACIAL EQUITY AND SOCIAL JUSTICE IMPACT:	Office of Legislative Oversight.
EXPERIENCE ELSEWHERE:	There are more than 170 communities that have regulations related to leaf blowers with more than 100 prohibiting or limiting their use.[2] Both DC and Chevy Chase Village have bans on leaf blowers that go into effect January 1, 2022.[3] DC's legislation allows for the sale of a petroleum-powered leaf blower, if the customer is given written notification that it cannot be used in DC after January 1, 2022. The Town of Chevy Chase is offering a rebate on electric blowers of $200 as of April 2021. They have processed over 20 applications to date. California, in May 2021, introduced legislation to require determination of an appropriate phase out of gasoline equipment, but regulation timelines are not yet proposed.[4]
SOURCE OF INFORMATION:	Jason Mathias, Department of Environmental Protection

[2] https://www.audubon.org/magazine/spring-2021/why-cities-are-taking-action-limit-loud-and

[3] https://trackbill.com/bill/district-of-columbia-bill-234-leaf-blower-regulation-amendment-act-of-2017/1445642/ and https://www.chevychasevillagemd.gov/DocumentCenter/View/3414/ReslNo_12-01-19_Chapter-20-Sec--20-2-Leaf-blowers_finaladopted

[4] https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1346

APPLICATION WITHIN MUNICIPALITIES:	This bill applies to all municipalities that accept or adopt the County Noise Control Ordinance.
PENALTIES:	Class A

OFFICE OF THE COUNTY EXECUTIVE

Marc Elrich
County Executive

M E M O R A N D U M

March 15, 2022

TO: Gabe Albornoz, President
Montgomery County Council

FROM: Marc Elrich, County Executive

SUBJECT: Introduction of Bill XX-22, Amendments to Chapter 31B

I am transmitting the attached proposed legislation, which amends Chapter 31B in response to significant noise complaints and research on the noise impacts of gasoline or combustion engine-powered leaf blowers. This legislation would phase out the sale of handheld and backpack combustion engine-powered leaf blowers and vacuums beginning six months from enactment, and their use twelve months from enactment.

Combustion engine-powered leaf blowers are known to exceed World Health Organization and the National Institute of Occupational Safety and Health standards for daytime noise and occupational safety noise standards, respectively. Although efforts have been made to regulate the overall noise volume of such leaf blowers in recent years, the Department of Environmental Protection (DEP) still receives significant complaints from residents across the County. Research shows combustion engine-powered leaf blowers have specific low and mid-frequency noise qualities or tones that are highly penetrative and result in noise being two to four times louder than electric plug in or battery powered options at the unit and up to 400 feet away. The low frequency noise is particularly penetrative of non-heavy building materials and easily carries through windows and doors. Beyond being distracting, this noise can have adverse health effects, both auditory, such as hearing loss and tinnitus, systemic vascular disease and mental illness.

With cost effective alternative equipment available as electric options, this prohibition will phase out combustion engine-powered equipment and phase in much less noisy electric plug-in and battery powered equipment. To assist in this phase-in, the legislation also authorizes a grant

program for DEP to ease the transition for residents and companies in the County. The legislation also allows a citation to be issued from one witness complaint, rather than the two required for other noise ordinance issues.

I appreciate your prompt consideration of this action.

ME:ah

Attachments

cc: Richard S. Madaleno, Chief Administrative Officer, Office of the County Executive
Debbie Spielberg, Special Assistant to the County Executive
Adriana Hochberg, Acting Director, Department of Environmental Protection
Ken Hartman, Director of Strategic Partnerships, Office of the County Executive
Patrice Bubar, Deputy Director, Department of Environmental Protection
Jason Mathias, Legislative Manager, Department of Environmental Protection

Fiscal Impact Statement
Introduction of Bill XX-22, Amendment to Chapter 31B

1. **Legislative Summary.**

   Bill XX-22 prohibits the sale and use of hand-held and backpack combustion engine-powered leaf blowers and vacuums in the County. It further establishes a grant program to offset the cost of replacing the equipment and revises the law regarding noise control.

2. **An estimate of changes in County revenues and expenditures regardless of whether the revenues or expenditures are assumed in the recommended or approved budget. Includes source of information, assumptions, and methodologies used.**

   Bill XX-22 is not expected to have an impact on County revenues.

   As shown in Tables 1 and 2, over a six-year period, Bill XX-22 could increase expenditures by up to $1,489,546.

Table 1
Implementation Cost Summary

	FY22	FY23	FY24	FY25	FY26	FY27	Total
Outreach and Education (DEP)	$420,000	$120,000	$0	$0	$0	$0	**$540,000**
Equipment Replacement	$907,023	$907,023	$0	$0	$0	$248,250	**$2,062,296**
Contractual Changes	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	**$90,000**
Transition Grants	$110,000	$100,000	$100,000	$0	$0	$0	**$310,000**
Personnel Costs	$75,000	$75,000	$75,000	$0	$0	$0	**$225,000**
Operational Cost Avoidance	$0	($347,550)	($347,550)	($347,550)	($347,550)	($347,550)	**($1,737,750)**
Total	**$1,527,023**	**$869,473**	**($157,550)**	**($332,550)**	**($332,550)**	**($84,300)**	**$1,489,546**

Table 2
Implementation Cost Summary Description

Item	Expected Cost	Details
Education and Outreach		
Mailers	$240,000	Based on costs from mailers from the pesticide ban, to every resident and business in the County. This would be for two mailers. Reducing to one mailer saves $120,000 or one full mailer with an additional just to single family homes would save $57,000.
Advertisements	$300,000	Radio, television, and internet ad campaigns, based on costs from implementing the pesticide ban.
Subtotal	**$540,000**	
Equipment Replacement		
DGS Replacements	$14,000	Equipment replacements for Department of General Services (DGS), including gasoline handheld, backpack, and walk behind blowers.
DOT Replacements	$28,000	Equipment replacements for Department of Transportation (DOT), including gasoline handheld, backpack, and walk behind blowers.
Year 5+ DOT and DGS Battery Replacements	$7,500	Batteries require replacements after enough use, expected in year five (5) or six (6) for many pieces of equipment.
Subtotal	**$49,500**	
Non-County Equipment Replacement - These are State entities that the County cannot enforce the legislation for, but may still want to support in replacing equipment.		
MNCPPC Replacements	$473,710	The Bill isn't enforceable to MNCPPC but is recommended for MNCPPC to replace equipment if possible.
MNCPPC Year 5+ Battery Replacements	$66,750	The Bill isn't enforceable to MNCPPC but if MNCPPC is able to replace equipment, battery replacements are needed as well.
MCPS Replacements	$1,298,336	The Bill isn't enforceable to MCPS but is recommended for MCPS to replace equipment if possible.
MCPS Year 5+ Battery Replacements	$174,000	The Bill isn't enforceable to MCPS but if MCPS is able to replace equipment, battery replacements are needed as well.
Subtotal	**$2,012,796**	
Contractual Changes		
DGS Contract Increases	$90,000	DGS notes that County contracts for lawn care and landscaping are unpredictable, due to the complexity of required replacements and operational savings, but this estimate accounts for doubling the leaf management cost portion of its contracts due to the cost of equipment switching incurred to contractors.
Transition Grants		
Equipment Turn-in Rebates/Grants for Individuals and Small Businesses	$300,000	Three-year program offering $100 rebates for 1,000 applicants per year. The legislation gives DEP the authority for grants, but it is not a requirement. Prohibiting use of equipment still in useful life without offering a grant or rebate is not recommended.
Grant Management Software	$10,000	Software to manage turn-in rebates/grants (first year cost only)
Subtotal	**$310,000**	
Personnel Costs		
Grant Management	$225,000	Term-limited staff member for 3 years. Alternatively, if the Septic legislation is approved and a position added for that workload, that position can handle these responsibilities.
Operational Cost Avoidance		
Operational Cost Avoidance	($1,737,750)	Assuming an average of $350 in cost avoidance per piece of equipment per year for fuel and maintenance.
Total	**$1,489,546**	

Assumptions included in this cost estimate are detailed below.

A. Education and Outreach.

A 2015 EPA study estimates that there are 11 million leaf blowers in the United States.[1] Using this nationwide information and extrapolating using County population estimates, there could be more than 35,000 leaf blowers in Montgomery County. Montgomery County is also home to one of the largest landscaping companies in the region, Ruppert, which employs nearly 2,000 employees.[2] To succeed in having 35,000 leaf blowers retired or replaced with electric alternatives, this legislation will require a robust education campaign of the phase out and alternatives. The Montgomery County Pesticide Ban featured a similar rollout and education campaign. In that campaign, DEP spent $120,000 in a single direct mailing to each household and business in Montgomery County, and an additional $300,000 in advertising on radio, television, and internet ads. This campaign will be similar in order to ensure awareness of the legislation, timeline, rationale, and alternatives. Additional mailings, if needed, would cost $120,000 to every address or $63,000 to single family households owned over two years. A follow up mailing to single family households owned over two years at a later point is recommended.

B. Equipment Replacement.

Bill XX-22 will require direct replacement of leaf blowers that are owned and operated by the County government, namely DGS and DOT. To abide by the 12-month implementation timeline of the legislation, replacements will need to take place in FY22 and FY23 for all leaf blowers.

MNCPPC and MCPS have a significant quantity of leaf blowers in the County, but as State entities, MNCPPC and MCPS are not required to comply with this legislation. If the County wishes to support MNCPPC and MCPS in switching to electric leaf blowers, estimates for MNCPPC and MCPS are included as well.

The estimated replacement unit costs for leaf blowers are shown in Table 2.

Table 3. Equipment Replacement Unit Costs

Equipment Type	Unit Cost	Notes
Handheld	$ 200	
Backpack	$ 715	
Walk Behind	$ 715	These are uncommon and expected to be replaced with backpack options
Battery Only	$ 250	Extra or replacement batteries. Batteries are typically replaced after five years for frequently used equipment.

Leaf blowers vary in costs, from $100 to $1,100, for electric, battery operated plus additional battery costs, with handheld being on the lower end of costs and backpack more expensive. Additional batteries may cost $150 to $700 as well, and are needed for when leaf blowers are used for extended periods and not able to be plugged in. MNCPPC made purchases in 2021 that were roughly $200 each per handheld blower, but with backpack models being $325 and $1,100. These vary based on strength, in air blown and time each lasts on a charge. A variety of backpack selections will likely be made at an average cost of $715. MNCPPC, MCPS, DOT, and DGS assisted in calculating these estimates.

[1] https://www.epa.gov/sites/production/files/2015-09/documents/banks.pdf
[2] https://www.lawnandlandscape.com/page/top-100/

C. Contractual Changes.
Indirect costs will include increased costs for County contracts for lawn care and landscaping services. DGS is the main contract holder for these services and noted that it cannot predict how bids will come through. This is likely due to the complexity of increased capital costs required by contractors to abide with this legislation; however, the contractors are expected to see savings over the lifetime of the equipment. Based on a DGS contract for service in 2016 for 22 facilities, the cost per year for leaf removal is slightly more than $5,000. This is one of three contracts that DGS has for lawn services; estimation of doubling all contracts for leaf blowing service will result in about $15,000 per year.

D. Transition Grants – Grants/Rebates for Individuals and Small Businesses.
Bill XX-22 includes enabling legislation to offer a grant or rebate program for upfront costs of the electric leaf blowers or leaf vacuums for private residents and commercial entities. Such a grant program would require expenditures for both staff/stand up of establishing the grant program and the grants themselves, including an estimated $10,000 for software management of grants. Staffing needs are noted below.

Grants would be designed to incentivize trade in, and potentially additional battery costs, especially for small and minority businesses. Such a grant could look like $100 per piece of equipment for the first 1,000 applicants per year. This would total $100,000, annually, for the first three years, or $300,000 in total.

E. Personnel Costs.
There is currently leaf blower legislation that requires enforcement of the decibel level, not to exceed 70 dBA at 50 feet. To enforce the current law, DEP responded to 38 cases in FY19 and FY20. This responsibility falls to the Environmental Compliance group within DEP which has staff that responds to noise code violations. For enforcement, there is no additional staffing requests to comply with this legislation, as this Bill will be easier to enforce than the current legislation on decibel level.

One term staff member to coordinate or manage the grant/rebate program and education and outreach is expected to cost $75,000 annually for three years, or $225,000 in total.

F. Operational Cost Avoidance.
Based on literature studies, there may be cost avoidance from electric leaf blowers that will offset some additional costs, fuel savings, and maintenance savings. A University of Arkansas study found that its campus electric leaf blowers cost less than one-third of the operations and maintenance costs over a five-year period as compared to its gasoline or combustion engine-powered alternatives.[3] This was a savings of $360 per year per piece of equipment. Similarly, the Town of Chevy Chase calculated up to $345 in annual operations and maintenance savings.[4] Based on these, we estimate $350 in annual savings per leaf blower.

G. Discussion on Estimates.
At a time when all leaf blowers are being replaced, it would be strategic to evaluate needs of total leaf blowers, and/or purchase of corded electric leaf blowers instead of powered, as which is best for individual needs and cost reduction. However, replacements for DGS, DOT, MCPS, and MNCPPC are estimated using battery powered (not plugin), with expectations for additional batteries for each piece of equipment. In areas where leaf blower operations

[3] https://sustainability.uark.edu/_resources/publication-series/project-reports/reports-electric_power_tools_ua-2017-ofs.pdf
[4] https://www.townofchevychase.org/DocumentCenter/View/3097/Leaf-Blower-Cost-Comparisons-

require heavy use for multiple hours a day, the operators will require the purchase of additional battery(ies) at $250 or more each, estimated at three additional batteries per blower. These costs are captured in the estimates shown above.

Additionally, for heavy use, a gasoline leaf blower lasts five to ten years, and an electric will last five years then likely require some replacement batteries in future years. For less use batteries will need to be replaced less frequently. This estimate is based on heavier use. This estimate assumes that there is no need to update infrastructure for charging batteries overnight, as a 110v outlet is acceptable. This estimate also assumes that there will be no daytime charging in trucks and that spare (excess) batteries would be used to meet daily needs. Upgrades are available for outlets, electrifying trucks for single plug ins, or battery backups on trucks for charging, that will greatly increase costs, and may be used strategically for heavy use.

3. **Revenue and expenditure estimates covering at least the next six fiscal years.**

   See the response to Question 2.

4. **An actuarial analysis through the entire amortization period for each bill that would affect retiree pension or group insurance costs.**

   The Bill is not expected to impact retiree pension or group insurance costs.

5. **An estimate of expenditures related to County's information technology (IT) systems, including Enterprise Resource Planning (ERP) systems.**

   Bill XX-22 is not expected to impact the County's IT or ERP systems.

   Later actions that may affect future revenue and expenditures if the bill authorizes future spending.

   The Bill does not authorize future spending.

6. **An estimate of the staff time needed to implement the Bill.**
   During implementation it could take up to approximately 40 hours per week to provide education, outreach, and manage the grant program. The anticipated workload will require one new position if a grant program is offered, a Program Specialist II. The estimate above reflects the hiring of one term staff member to handle these tasks. In addition, existing staff will also be needed to conduct enforcement functions from time to time. This requirement can be handled as part of existing staff workload in the to be created DEP Enforcement and Compliance Division.

7. **An explanation of how the addition of new staff responsibilities would affect other duties.** In addition to a new term staff position for grants management, the implementation of this Bill will be handled mainly by the Environmental Compliance Unit. The enforcement is expected to be less than current enforcement efforts of the decibel level requirements.

8. **An estimate of costs when an additional appropriation is needed.**

   See the response to Question 2.

9. A description of any variable that could affect revenue and cost estimates.

Electric equipment costs are decreasing, and the EmPower Maryland Utility program is under review. These two variables could reduce future costs to purchase new electric leaf blowers and leaf vacuums.

11. Ranges of revenue or expenditures that are uncertain or difficult to project.

Not applicable.

12. If a Bill is likely to have no fiscal impact, why that is the case?

Not applicable.

13. Other fiscal impacts or comments.

Not applicable.

14. The following contributed to and concurred with this analysis:
Jason Mathias, Department of Environmental Protection
Patty Bubar, Department of Environmental Protection
Stan Edwards, Department of Environmental Protection
Mary Travaglini, Department of Environmental Protection
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Jeffrey Knutsen, Department of Transportation
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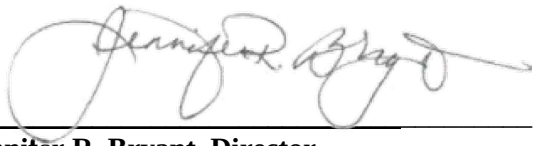

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Jennifer R. Bryant, Director **Date**
Office of Management and Budget

Racial Equity and Social Justice (RESJ) Impact Statement

Office of Legislative Oversight

BILL 18-22: NOISE CONTROL – LEAF REMOVAL EQUIPMENT – AMENDMENTS

SUMMARY

The Office of Legislative Oversight (OLO) anticipates that Bill 18-22 could narrow racial and social disparities as its benefits to Latinx employees in the local landscaping sector and County residents exceed its costs to local landscape business owners, who are disproportionately Latinx. The anticipated impact magnitude of the Bill on racial equity and social justice (RESJ) in the County is small.

PURPOSE OF RESJ IMPACT STATEMENT

The purpose of RESJ impact statements is to evaluate the anticipated impact of legislation on racial equity and social justice in the County. Racial equity and social justice refer to a **process** that focuses on centering the needs, leadership, and power of communities of color and low-income communities with a **goal** of eliminating racial and social inequities.[1] Achieving racial equity and social justice usually requires seeing, thinking, and working differently to address the racial and social harms that have caused racial and social inequities.[2]

PURPOSE OF BILL 18-22

Current law requires noise levels for leaf blowers to not exceed 70 decibels at a distance of 50 feet.[3] The Montgomery County Department of Environmental Protection (DEP), however, finds it is difficult to regulate the noise emanating particularly from gas-powered leaf blowers and vacuums when they no longer have the original manufacturer labels.[4] They also find that gas-powered leaf blowers have "specific low and high-frequency noise qualities and tones that are highly penetrative and result in noise being two to four times louder than electric plug in or battery-operated options" and these noises can be heard up to 400 feet away.[5] They further note the adverse health effects of leaf blowers on hearing loss, reduced mental performance and health, and hypertension.[6] In 2021, there were 62 formal complaints to DEP on leaf blower noise.[7]

Bill 18-22 would change current law by prohibiting the sale of gas-powered handheld, backpack, or walk-behind leaf blowers or vacuums six months after legislation is enacted.[8] It would also prohibit the use of the same varieties of leaf blowers and vacuums a year after legislation is enacted.[9] Further, the Bill would authorize DEP to establish a reimbursement program for residents and businesses who purchase electric leaf blowers in exchange for gas-powered leaf blowers and vacuums.[10] Finally, Bill 18-22 would require DEP to have one witness with photographic evidence of a leaf blower violation to issue a noise citation rather than the minimum of two witnesses required under current County statute.[11]

At the request of the County Executive, Bill 18-22 was introduced to the Council on June 28, 2022.[12]

Entrepreneurship, Landscape Contracting, Leaf Blowers, and Racial Equity

Landscape contracting has provided a pathway to opportunity for many Latinx entrepreneurs and employees. While Latinx people, like other people of color, are under-represented among business owners and earn revenue far below their White peers, they are overrepresented in the landscape contracting industry. As such, Latinx people are especially impacted by gas-powered leaf blower laws and regulations. This section describes inequities in business ownership by race and ethnicity, the demographics of the landscaping industry, and the benefits and costs associated with gas-powered leaf blowers to begin to unpack the potential RESJ implications of Bill 18-22.

Business Ownership Inequities. Prior research shows that a variety of factors adversely impact people of color as they consider starting and growing businesses, including disparities in educational attainment, personal wealth, access to mainstream capital, and exposure to entrepreneurship in family and social networks.[13] For example, a study by the Small Business Administration found that Black- and Latinx-owned businesses are more likely to have been denied credit, to receive only a portion of the funding requested, or to refrain from applying for needed funding out of fear their applications will be rejected.[14] Other factors that explain the disparity in capital include discriminatory lending practices, less wealth to leverage, recent financial challenges, and lower credit scores.[15]

Nationally, Black and Latinx residents represent 28 percent of the population, but only 8 percent of the nation's business owners with employees.[16] Available local data also show evidence of disparities in entrepreneurship by race and ethnicity, particularly with respect to revenue. For example, while the 2012 Survey of Business Owners indicated that Black and Latinx firms each accounted for 15 percent of local firms in Montgomery County and Asian firms accounted for 14 percent of County firms, Asian firms accounted for 4 percent of local business revenue, Black firms accounted for 1.7 percent of local business revenue, and Latinx firms accounted for 1.5 percent of local business revenue.[17]

More recent local data on self-employed residents also demonstrate disparities in entrepreneurship by race and ethnicity. The 2018 Census data on self-employed residents includes information on residents self-employed in their own incorporated and unincorporated business, professional practice, or farm. As noted in Table 1, White residents were overrepresented among the self-employed compared to their share of the population, while Black, Latinx, and Other residents were underrepresented among the self-employed.[18]

Table 1. Representation of Self-Employed Montgomery County Residents by Race and Hispanic Origin, 2018

Demographic Group	Population	Incorporated	Unincorporated
White	52%	67%	59%
Black	19%	11%	13%
Asian	15%	16%	13%
Multiracial	10%	5%	12%
Other	5%	1%	3%
Non Latinx	80%	85%	84%
Latinx	20%	15%	16%

Source: COVID-19 Recovery Outlook: Minority-Owned Businesses, Office of Legislative Oversight, September 21, 2020

Demographics of Landscape Contractors. While Latinx-owned businesses are underrepresented in the economy as a whole relative to their share of the population, available data suggests that Latinx-owned businesses are overrepresented in the landscaping industry. For example, a 2011 study by the U.S. Hispanic Chamber of Commerce examining the impact of landscaping and lawn care industry upon the Latinx community found that:[19]

- The landscape industry in the U.S. employs almost 1.6 million workers and generates almost 959,000 jobs in other industries. In total, Latinx people accounted for more than 830,000 workers in both categories.
- Latinx workers accounted for 35.2 percent of the landscaping and lawn care services workforce compared to 13.4 percent of all U.S. workers.
- Latinx households earned 25 percent of earnings attributable to the landscape and lawn care industry compared to 8.3 percent of earnings among all households in the U.S. economy.
- Latinx-owned businesses account for 16 percent of businesses in the landscaping industry compared to 8.2 percent of businesses nationwide.
- Latinx-owned businesses in the landscaping and lawn care industry account for 9 percent of total industry receipts compared to 1.2 percent of total receipts across all industries.

Available data suggests that Latinx residents are also overrepresented in the landscaping workforce. For example, 6 percent of all County residents worked in natural resources, construction, and maintenance occupations that include landscaping positions, compared to 21 percent of Latinx residents in 2019.[20] Anecdotal evidence also suggests landscape contractor businesses and employment play major roles in providing income and small business ownership opportunities to Latinx residents in the County. Many of these companies are family-owned and operated by recent immigrant or first- and second-generation members of Latinx communities.

Benefits and Costs of Gas-Powered Leaf Blowers. The benefits of gas-powered leaf blowers and vacuums include time and convenience in landscaping. They allow homeowners and professionals to clean landscapes and gutters, to remove debris from and around buildings and to maintain lawns in a shorter time frame than using a rake or broom. Compared to electric-powered leaf blowers, gas-powered leaf blowers can also be time and cost effective. Landscapers and homeowners already have gas-powered leaf blowers and can use them for longer time frames than electric-powered leaf blowers, which require charging and frequent battery changes to cover the same amount of square footage in the same amount of time. In short, gas-powered leaf blowers minimize the short-term costs of maintaining landscapes.

The longer-term costs of gas-powered leaf blowers, however, are significant. In addition to creating noises that can damage hearing, gas-powered leaf blowers also foster air pollution. According to the California Air Resources Board, gas-powered leaf blowers contribute to exhaust emissions that create ozone, carbon monoxide, and fine particulate matter.[21] Health effects associated with air pollution include "adverse respiratory and cardiovascular effects, including premature death, hospital and emergency room visits, aggravated asthma, and shortness of breath."[22] Population groups at risk to the adverse effects of air pollution include "the elderly, children, and those with chronic illnesses."[23]

Data on mortality and emergency room visits for heart, cerebrovascular, and chronic respiratory diseases suggest that White and Black residents in Montgomery County are at greatest risk for the negative health effects of air pollution. As noted in Table 2, White residents experienced the highest rates of age-adjusted disease mortality for all three chronic diseases between 2017 and 2019. During this same time frame, Black residents experienced the highest rates of emergency room visits for these three chronic diseases. Nevertheless, since the operators of gas-powered leaf blowers are most at risk for their associated adverse health impacts, [24] Latinx residents likely experience the most direct health costs associated with gas-powered leaf blowers in the County.

Table 2. Chronic Disease Mortality, Age-Adjusted per 100,000 Montgomery County Residents by Race and Ethnicity, 2017-19

Demographic Group	Heart Disease	Cerebrovascular Disease	Lower Respiratory Disease
White, Non-Hispanic	198.7	41.5	33.2
Black, Non-Hispanic	110.9	29.5	11.0
Asian/Pacific Islander	78.1	21.5	8.0
Latinx/Hispanic Origin	36.5	10.5	4.0

Source: Healthy Montgomery in Montgomery County, 2010 - 2019

Table 3. Chronic Disease Emergency Room Visits, Age-Adjusted per 100,000 Montgomery County Residents by Race and Ethnicity, 2017-19

Demographic Group	Heart Disease	Cerebrovascular Disease	Lower Respiratory Disease
White, Non-Hispanic	1,846.3	20.3	525.5
Black, Non-Hispanic	3,330.1	44.8	1594.1
Asian/Pacific Islander	814.6	17.2	211.2
Latinx/Hispanic Origin	1,335.3	28.2	922.7

Source: Healthy Montgomery in Montgomery County, 2010 - 2019

ANTICIPATED RESJ IMPACTS

Within the context of racial inequity in entrepreneurship and health outcomes, it is important to consider two questions when considering the anticipated impact of Bill 18-22 on RESJ in the County:

- Who are the primary beneficiaries of this bill?
- What racial and social inequities could passage of this bill weaken or strengthen?

For the first question, OLO considered the demographics of landscape business owners and employees. Landscape employees, who are disproportionately Latinx, are one of the primary beneficiaries of Bill 18-22, followed by the public at large. A ban on gas-powered leaf blowers and vacuums will reduce the health risks to landscape workers associated with loud noises and air pollution from gas-powered leaf blowers. The ban will also reduce the health risks for residents in the County, including BIPOC residents that experience health disparities in cardiovascular and respiratory health.

Available data on business ownership suggests that Latinx business owners could be harmed by the passage of Bill 18-22 as they are likely over-represented among landscape contractors in the County. Their business costs, at least in the short-term, will likely increase as they replace gas-powered leaf blowers with electric ones and allocate additional staff to cover the same amount of landscape currently maintained with gas-powered blowers. The landscape contractors increased costs would in turn primarily impact home- and business-owners in the County, who are disproportionately White. Bill 18-22's authorization of a grant program to partially offset the cost of replacing gas-powered blowers with electric ones, however, will help offset the costs of the gas blower ban on landscaping businesses and their customers.

For the second question, OLO considered data on entrepreneurship and health disparities. With the concentration of Latinx-owned businesses among landscape contractors and the likely smaller size of these businesses relative to White-owned businesses, Bill 18-22 could widen the revenue gap between Latinx- and White-owned businesses. The reimbursement program, however, could help offset this negative impact on RESJ. The concentration of Latinx employees in landscaping also suggests that Latinx residents could benefit from reduced emissions associated with electric leaf blowers. White and Black residents across the County that experience three chronic conditions most associated with air pollution - heart disease, cerebrovascular disease, and lower respiratory disease – would also benefit from the decline in emissions resulting from the ban on gas-powered leaf blowers.

Taken together, OLO anticipates Bill 18-22 could narrow racial and social disparities in the County as its overall benefits to Latinx employees in the local landscaping sector and to County residents exceed its costs to local landscape business owners, who are disproportionately Latinx. To the extent Latinx business owners are disproportionately harmed, the grant reimbursement program authorized under Bill 18-22 to help defray the cost of replacing gas-powered blowers for electric ones will dampen this harm. Further, OLO anticipates a small impact of Bill 18-22 on RESJ in the County.

RECOMMENDED AMENDMENTS

The Racial Equity and Social Justice Act requires OLO to consider whether recommended amendments to bills aimed at narrowing racial and social inequities are warranted in developing RESJ impact statements.[25] OLO anticipates that Bill 18-22 could narrow racial and social disparities as the benefits of banning gas-powered leaf blowers, particularly for Latinx landscape employees, exceeds the costs of replacing gas-powered leaf blowers for electric ones among Latinx-owned businesses and other landscape contractors, particularly with the Bill's authorization of a grant reimbursement program. As such, OLO does not offer recommended amendments for Bill 18-22.

CAVEATS

Two caveats to this racial equity and social justice impact statement should be noted. First, predicting the impact of legislation on racial equity and social justice is a challenging analytical endeavor due to data limitations, uncertainty, and other factors. Second, this RESJ impact statement is intended to inform the legislative process rather than determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the bill under consideration.

CONTRIBUTIONS

Elaine Bonner-Tompkins, Senior Legislative Analyst drafted this RESJ impact statement with assistance from Janmarie Peña, Performance Management and Data Analyst.

[1] Definition of racial equity and social justice adopted from "Applying a Racial Equity Lens into Federal Nutrition Programs" by Marlysa Gamblin, et.al. Bread for the World, and from Racial Equity Tools. https://www.racialequitytools.org/glossary
[2] Ibid.
[3] Ludeen McCartney-Green, Memorandum to County Council on Bill 18-22, June 23, 2022
[4] Jason Mathias, Legislative Request Report for Bill 18-22, Montgomery County Department of Environmental Protection
[5] Marc Elrich, Memorandum to Gabe Albornoz, Introduction of Bill 18-22, March 15, 2022

[6] Mathias
[7] Ibid
[8] McCartney-Green
[9] Ibid
[10] Ibid
[11] Ibid
[12] Bill 18-22
[13] Joyce Klein, "Bridging the Divide: How Business Ownership Can Help Close the Racial Wealth Gap" Washington: The Aspen Institute 2017; Robert Fairlie and Alicia Robb, "Why Are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritance, and Business Human Capital," Journal of Labor Economics 25(2) 2017; "Kaufmann Compilation: Research on Race and Entrepreneurship," Kaufmann Foundation, December 2016
[14] Stephen Roblin, "COVID-19 Recovery Outlook: Minority-Owned Businesses," Office of Legislative Oversight, September 21, 2020. https://www.montgomerycountymd.gov/OLO/Resources/Files/2020%20Reports/COVID-19RecoveryOutlook-MinorityOwnedBusinesses.pdf
[15] Robert Fairlie and Alicia Robb, "Disparities in Capital Access between Minority and Non-Minority-Owned Businesses: A Troubling Reality of Capital Limitations Faced by MBE's," U.S. Department of Commerce, January 2010. https://www.mbda.gov/sites/default/files/migrated/files-attachments/DisparitiesinCapitalAccessReport.pdf
[16] Joseph Parilla and Darin Redus, "How a New Minority Business Accelerator Grant Program Can Close the Racial Entrepreneurship Gap." Brookings December 9, 2020 https://www.brookings.edu/research/how-a-new-minority-business-accelerator-grant-program-can-close-the-racial-entrepreneurship-gap/
[17] Jupiter Independent Research Group, Racial Equity Profile Montgomery County, OLO Report 2019-7, Office of Legislative Oversight, July 15, 2019 https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2019/20190611/20190611_3.pdf
[18] Roblin
[19] Inter-University Program for Latino Research: A report to the U.S. Hispanic Chamber of Commerce on "The Economic Impact of the Landscaping and Lawn Care Services Industry on US Latinos." November 2011. https://latinostudies.nd.edu/assets/95362/original/ushccnational_report_novermber_21_2011_final.pdf
[20] S0201: Selected Population Profile in the United States, 2019 American Community Survey, Census Bureau.
[21] https://ww2.arb.ca.gov/sites/default/files/2018-11/Health%20and%20Environmental%20Impacts%20of%20Leaf%20Blowers.pdf
[22] https://nca2018.globalchange.gov/chapter/13/
[23] Ibid
[24] QC/PDX https://www.quietcleanpdx.org/leaf-blowers-dangers-pollution/
[25] Bill 27-19, Administration – Human Rights – Office of Racial Equity and Social Justice – Racial Equity and Social Justice Advisory Committee – Established, Montgomery County Council

Economic Impact Statement

Office of Legislative Oversight

Bill 18-22 Noise Control – Leaf Removal Equipment – Amendments

SUMMARY

The Office of Legislative Oversight (OLO) anticipates that enacting Bill 18-22 would have an indeterminate impact on economic conditions in the County in terms of the Council's priority indicators. By prohibiting the sale and use of combustion engine-powered leaf blowers and vacuums, the Bill would require certain landscaping companies and residents who currently use combustion engine-powered units to replace them before the end of their useful life with electric alternatives. These stakeholders would incur increased operating and household expenses through purchasing electric units and backup batteries. These costs, however, would be offset by the grant program described in the Bill and lower utility costs if future prices of electricity will be on average lower than gas prices. As discussed below, the Bill may also negatively impact certain fuel suppliers and the perception of the County held by businesses. Given the lack of data and uncertainty in key factors, OLO is unable to determine whether Bill 18-22 would have net positive or negative impact on overall economic conditions in the County in the short- or long-terms.

BACKGROUND

The goal of Bill 18-22 is "to ban gas-powered leaf blowers to address environmental, noise, and health concerns raised by County residents." [1] The Bill would attempt to achieve this goal by prohibiting the sale and use of combustion engine-powered leaf blowers and leaf vacuums by certain dates. The ban on the sale of this equipment would take effect six months after the legislation is enacted, and the ban on its use would take affect a year after enactment. In addition, the Bill would authorize the Department of Environmental Protection (DEP) to establish a grant program to partially offset the cost of replacing combustion engine-powered leaf blowers or leaf vacuums with electric alternatives.[2]

INFORMATION SOURCES, METHODOLOGIES, AND ASSUMPTIONS

Per Section 2-81B of the Montgomery County Code, the purpose of this Economic Impact Statement is to assess, both, the impacts of Bill 18-22 on residents and private organizations in terms of the Council's priority economic indicators and whether the Bill would have a net positive or negative impact on overall economic conditions in the County.[3]

[1] McCartney-Green to County Council, Memorandum; and Legislative Request Report, Bill 18-22.
[2] Ibid; and Bill 18-22.
[3] Montgomery County Code, Sec. 2-81B.

The focus of this analysis is to assess Bill 18-22's impacts on residents and businesses on the following priority indicators:

- household expenses and income; and
- business operating costs and income.

Due to information and time limitations, OLO is unable to quantify the Bill's impacts on these indictors or overall economic conditions in the County. Instead, this analysis identifies the primary stakeholder groups impacted by the ban on combustion-powered leaf blowers and vacuums and discusses the conditions in which the economic impacts would have an overall positive or negative economic impact in the County.

VARIABLES

The primary variables that would affect the economic impacts of enacting Bill 18-22 are the following:

- average cost of electric leaf blowers and leaf vacuums;
- number of combustion engine-powered leaf blowers and leaf vacuums currently in use; and
- difference in future gas and electricity prices.

IMPACTS

WORKFORCE ▪ TAXATION POLICY ▪ PROPERTY VALUES ▪ INCOMES ▪ OPERATING COSTS ▪ PRIVATE SECTOR CAPITAL INVESTMENT ▪ ECONOMIC DEVELOPMENT ▪ COMPETITIVENESS

Businesses, Non-Profits, Other Private Organizations

OLO anticipates that enacting Bill 18-22 would have mixed impacts on certain private organizations in the County in terms of business operating costs and income.

OLO expects the ban on the sale and use of combustion engine-powered leaf blowers and vacuums to affect the following stakeholder groups:

- landscaping companies;
- fuel suppliers; and
- retailers selling landscaping equipment.

The change in law would require **landscaping companies** to replace combustion engine-powered leaf blowers and vacuums with electric alternatives. For companies currently using combustion engine-powered units, replacing them before the end of their useful life with electric units would increase operating costs. Operating costs for affected landscaping companies also would increase from purchasing additional backup batteries.[4] However, these costs would be

[4] Hope, "Best Leaf Blowers of 2022."

partially offset for companies that take advantage of the DEP grant program (see above). Moreover, companies would experience a decrease in operating costs if future electricity prices will be lower on average than gas prices. Depending on the net impact on operating costs, the Bill could increase or decrease net business income (holding all else equal).

Bill 18-22 likely would impact certain **fuel suppliers** who experience a net decrease in business income from reduced demand for gas. In addition, if there is a significant difference in future prices of combustion engine-powered and electric leaf blowers and vacuums, the Bill would affect revenues to certain **retailers selling landscaping equipment**.

In addition to these stakeholder impacts, Bill 18-22 may have a negative impact on the perception of the County held by businesses.

Beyond these potential impacts, OLO does not expect the Bill to affect private organizations in terms of the Council's other priority indicators.

Residents

OLO anticipates that enacting Bill 18-22 would have mixed impacts on residents who own combustion engine-powered leaf blowers or vacuums in terms of household expenses and income. Replacing these units before the end of their useful life with electric leaf blowers and purchasing backup batteries would increase household expenses for these residents. However, the replacement cost would offset by DEP's grant program and lower utility costs if future prices of electricity on average are lower than gas prices. Depending on the net impact on household expenses, the Bill could increase or decrease net household income (holding all else equal).

Beyond this potential impact, OLO does not expect the Bill to affect residents in terms of the Council's other priority indicators.

Net Impact

Given the lack of data and uncertainty in key factors (e.g., future energy prices), OLO is unable to determine whether Bill 18-22 would have net positive or negative impact on overall economic conditions in the County in the short- or long-terms.

DISCUSSION ITEMS

Not applicable

WORKS CITED

Hope, Paul. "Best Leaf Blowers of 2022." Consumer Reports. June 10, 2022.

McCartney-Green to County Council. Memorandum. Bill 18-22, Noise Control – Leaf Removal Equipment – Amendments. June 23, 2022.

Montgomery County Code. Sec. 2-81B, Economic Impact Statements.

Montgomery County Council. Bill 18-22, Noise Control – Leaf Removal Equipment – Amendments. Introduced on June 28, 2022.

CAVEATS

Two caveats to the economic analysis performed here should be noted. First, predicting the economic impacts of legislation is a challenging analytical endeavor due to data limitations, the multitude of causes of economic outcomes, economic shocks, uncertainty, and other factors. Second, the analysis performed here is intended to *inform* the legislative process, not determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the Bill under consideration.

CONTRIBUTIONS

Stephen Roblin (OLO) prepared this report.

Executive Branch Responses to Council's Questions on Bill 18-22,
Noise Control – Leaf Removal Equipment – Amendments

1. What is the scope, or the number of landscaping companies employed by the County?
   As of November 2022, the Department of General Services (DGS) maintained 172 properties through the use of three vendors. DOT vendors do not use leaf blowers, and all DOT-owned leaf blowers are electric.

2. Rather than a local prohibition to banning gas-leaf blowers, would the CE consider offering a rebate/ voucher program for County users to voluntarily opt into a program?
   Although the trend in the lawn care industry is toward electrification of equipment, a rebate/voucher program alone is not likely to dramatically change the use of gas-powered blowers in the near term unless the program covers a significant portion of the replacement cost, particularly for landscaping contractors. Furthermore, only in-County businesses would be eligible for a rebate under such a program; businesses working in the County that are not located in the County would not be able to participate in any rebate/voucher program.

3. What information or research does the Executive have to indicate that an all-electric leaf blower can meet the same demand for commercial landscaping versus a gas-powered one?
   Reviews of gas and electric leaf blowers stress that both have advantages and disadvantages depending on the objectives and values of the users and the customers being served. Commercial landscaping services continue to be provided in jurisdictions around the country, including in Washington, DC, that have instituted bans on gas leaf blowers, indicating that electric leaf blowers can meet the needs of commercial landscapers. There are currently several companies in the County that provide commercial landscaping services utilizing only electric equipment.

4. The batteries in an electric-leaf blower have a limited lifespan and would require multiple replacements for a landscaping company to operate efficiently. Is there information on whether this bill would have an adverse impact on local businesses?
   Having multiple batteries may be a necessity for electric equipment that is heavily used, in the same way that extra gas and oil is needed for gas leaf blowers that are heavily used. However, reviews of leaf blower alternatives generally agree that the operating and maintenance costs of electric leaf blowers are lower than for gas leaf blowers. The net economic effect of the bill will vary depending on the size and operating practices of the business.

5. What methods would DEP recommend for a person to dispose of a battery for an electric-powered charging leaf blower? *Notably, we understand that recycling used batteries is better for the environment than dumping them into landfills. But recycling lead batteries, which are found in some leaf blowers and other electrical gardening equipment emits lead into the atmosphere and poses a cause of concern.*

Electric leaf blowers use lithium-ion batteries, not lead acid batteries. Lithium-ion batteries are recyclable at the Transfer Station (as are lead acid batteries).

6. Describe, if any, the outreach campaign, education, or notification process that would occur if this bill was adopted? Essentially, how would landscaping businesses know about the new law, especially, small businesses many owned and operated by Latinos/Latinx?
   The Fiscal Impact statement for the bill suggests a broad outreach campaign that includes mailers to residents and businesses in the County, and radio, television, and internet ad campaigns, would cost roughly $540,000. Additionally, use of County social media and newsletters could be used to publicize the ban. All materials could be translated into multiple languages, including Spanish. Details of the communication plan would be developed once the bill is adopted based on the final provisions of the law. A longer transition period may reduce the costs necessary for both outreach and incentives.

7. Does the Executive have data related to the number of small landscaping businesses that are licensed in the County? If so, does the Executive have the capacity to send a mailing notice to those landscaping businesses?
   Notices can be sent to all landscaping businesses for which address can be obtained. In addition, entities such as homeowner/community associations, landscaping trade associations, community-based organizations supporting small businesses, and all property owners receiving mailings can serve as a conduit for reaching small landscaping businesses.

8. As introduced, the bill specifies that a violation would result in a Class A citation on the first offense; however, an alternative approach could be, for the first offense, a written warning, and then for the second offense, a citation? Is there any thought or feedback on this enforcement approach?
   This enforcement approach has been used for other County laws and would be appropriate in this situation given the challenge associated with ensuring all residents and businesses are informed of the change in law related to the use of leaf blowers, which are tools widely used to perform landscaping activities.

9. As introduced, how long would DEP offer the buy-back (rebate) program for gas-powered leaf blowers?
   The Fiscal Impact Statement contemplated offering a rebate program for three years at $100,000 per year. The details of a rebate program will need to be fully developed. DEP will address equity in the implementation of a rebate program, particularly related to small, minority-owned, and income-qualifying businesses and residents.

10. As proposed in the bill, the transition period prohibits the sale of a gas-powered leaf blower 6 months after enactment, and after a year prohibits any usage. When compared to other jurisdictions that have banned the sale or use of gas-powered leaf blowers, including California, D.C., and municipalities, such as the Town of Somerset and the Town of Chevy Chase, they have all provided a phase-in approach and provided at least two years before a prohibition would be effective.

a. Please clarify whether a phase-in approach would be considered to extend the timeframe or transition period, i.e. minimum of two years, to allow the market and users to prepare for the transition to all-electric.

   The Executive is open to discussions on the timing of the effective date for transition period, but the law should go into effect in the most expeditious way possible.

11. The federal government is exempt from DC's gas leaf-blower prohibition law, yet most of the landscaping throughout the District is primarily owned by the federal government. Further, state entities including MNCPPC and MCPS would be exempt as well. Would the mandated law place a larger burden on smaller landscaping companies when a large portion of landscaping falls within the realm of federal and state entities?
    As noted, the design of any rebate/incentive program will target small, minority-owned, and income-qualifying businesses.

12. Landscaping companies in D.C. have reverted to using a gas-powered generator to charge any electrical leaf blower equipment. Is there any consideration as to whether residents or businesses in the County decide to use the same approach as users in D.C., it may be counterintuitive to ban gas-powered blowers, because charging the equipment with a gas generator would continue to emit greenhouse gases?
    We have not heard any reports from DC of gas-powered generators being used to recharge batteries. It is likely a company would invest in additional batteries rather than a generator and the gas used to power it. Other options could include charging with permission of the owners at outdoor plugs when available or using inverters in their vehicles to charge while driving between jobs. As noted, there are several companies currently operating in the County that use all electric equipment that do not use generators. In the event generators are used, they would be subject to the County's existing noise standards.

13. The Town of Somerset and Chevy Chase's ban on gas-powered leaf blowers went into effect this year (2022). Has the department considered, first, collecting data and assessing the effectiveness of the ban in each municipality before initiating the mandate in the County (the fall season is the busiest season where an electric leaf blower would be used the most, so it may be beneficial to assess the effectiveness of implementation, any unintended consequences, or advantages post the 2022 fall season)?
    The Town of Somerset has reported that the ban has been well-received; no complaints from contractors or homeowners have been received about adverse impacts. The Town of Chevy Chase has reported the same, and even found that during the "exempt" period (a fall window to allow for gas blowers to be used) that more than half of the leaf blowing was still electric. Both municipalities reported limited violations.

NATIONAL ASSOCIATION OF LANDSCAPE PROFESSIONALS

September 12, 2021

Councilmember Tom Hucker, Chair
Transportation & Environmental Committee
Montgomery County Council
Council Office Building
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

Landscape Industry Opposition to Bill 18-22,
Noise Control – Leaf Removal Equipment - Amendments

Dear Chairman Hucker,

The National Association of Landscape Professionals (NALP) is the national trade organization representing the $98 billion landscape industry employing over 1.4 million employees in the United States. Member companies specialize in lawn care, landscape maintenance, tree care, irrigation and water management. Landscape professionals throughout the nation work daily preforming essential services to homes and businesses to maintain their landscapes, sustain the environment and enhance and maintain healthy and safe green spaces.

We share the council's intent to reduce noise from gas powered leaf blowers as quickly as possible. Still, we must do so in a responsible manner that mitigates the negative financial impact on the landscape industry that relies significantly on the ability to use high performing leaf blowers. The landscape industry in Maryland has more than 5,000 businesses, 99% of these businesses are considered small businesses and a vital industry for entrepreneurs throughout the state of Maryland.

Leaf blowers are essential for landscape industry professionals. This is because these machines are efficient tools for cleaning up leaves, grass, fertilizer granules, and other small debris from lawn and landscape sites. Since their development in the 1970s, to a large extent, leaf blowers have supplanted brooms, hoses, and rakes. Leaf blowers even perform functions that no other tool can handle effectively, such as cleaning areas covered by rock, gravel, bark, or mulch. Leaf blowers save enormous amounts of time. Most estimates suggest that it takes at least five times as long to clean a typical landscape site with a broom and rake than it does with a power leaf blower.

Landscape professionals work every day to take care of Maryland's green spaces. The landscape industry cares deeply about the environment, and we do support a responsible transition to zero-emission leaf blowers. However, the timeline proposed in this bill is too fast of a transition for

commercial users. In addition, the commercial-grade battery-powered equipment currently on the market has significant performance issues and cost issues.

Performance

Equipment performance and run-time are common concerns for landscape professionals and present technological challenges that must be overcome for widespread use of electric leaf blowers. Unlike a homeowner that uses an electric powered leaf blower for less than an hour, maybe in a given week, the landscape industry is operating commercially using this equipment daily, under rigorous conditions and during long durations. Also, many landscape professionals operate on commercial properties like corporate campuses, parks, resorts, and other large green spaces which demand stronger performance and power capabilities. Unfortunately, the available electric leaf blowers are not capable of this sort of use pattern currently.

Data provided by one major equipment manufacture that produces both gas and electric equipment illustrates the challenge. In a side-by-side comparison the performance of the electric leaf blower immediately begins to decline the moment it begins until the battery dies only 18 minutes later, while the gas-powered blower maintains a strong performance the entire hour and without unnecessary downtime to change batteries.

Cost

The entire cost for transitioning away from gas powered leaf blowers must be completely understood and realized. First, there is the immediate cost of purchasing the actual equipment, which by itself is not that different. Where the price starts to jump is when you factor in the cost of batteries, the cost to change and retrofit your shop and how you handle inferior products in the midst of a labor crisis.

From a battery perspective they are expensive, and you need multiple per each piece of equipment. One major equipment manufacturer's most advanced electric commercial/professional grade *backpack blower* has $379 manufacturer's suggested retail price (MSRP), this is without a charger. The battery cost for this unit ranges from $870 to $1,100 MSRP, more than double the price for the actual equipment. For a *handheld leaf blower,* the professional batteries range from $120 - $240 and based on only 18 – 22 minutes run time we estimate that a typical leaf blower would need nearly 10 batteries to complete routine daily tasks escalating prices of batteries per unit to approach $2,400.

Compatibility is also an issue for batteries**.** Battery technology for leaf blowers is proprietary information and therefore the batteries are not compatible between different manufacturers. This presents a problem because it would require landscape companies to move to a single manufacturer approach rather than using different equipment from different manufactures. This could lead to companies being locked into one manufacturer, reduce competition, and strengthening manufacturer influence over the company based on their specific needs.

The infrastructure on both the micro and the macro level is not currently in place to fully support this transition. On the micro level landscape companies will need to fully retrofit their shops to

support the amount of amperage that will need to be used each day to safely charge all of the electric leaf blowers. Vehicles used to transport crews and equipment will also need to be redesigned to support charging stations to ensure complete operational capabilities once out in the field, this will raise the overall "cost" factor detailed above significantly. From a macro level there is currently not enough electric equipment in the stream of commerce due to supply chain issues and even if the equipment were available the dealerships that play a critical role in assisting in maintaining this equipment is not yet in place.

The last issue with cost that we want to address is labor. Electric leaf blowers lack the same performance capabilities detailed above and require frequent battery changes both of which reduce the productivity and efficiency of a landscape crew in the field. This reduction in productivity puts landscape companies in a tough spot since they are already faced with a historic work force crisis. This proposal pushes an industry that cannot find enough willing and capable employees to now rely on less efficient equipment that takes more time and requires additional labor to perform the same task in the same amount of time to remain competitive and profitable.

All of this considered together (equipment cost, battery cost, increased labor) represents significant cost impediments to make a complete transition to electric leaf blowers.

Enforceability Issues

Aside from the barriers from the perspective of the landscape industry there are also practical and legal matters to consider. First, this legislation will be very difficult to enforce and will likely lead to additional problems and conflicts. Where is the funding coming from to enforce this? Who will enforce this? Should police be brought into handle disputes? We have seen in California those that don't understand that in California the "use" of gas-powered equipment has not been banned yet we have seen social media posts of angry neighbors getting into altercations with landscape professionals and their crews. We also believe this will lead to neighbor versus neighbor disputes. All of these are unintended consequences of passing a policy to ban the use of equipment when there is not yet a viable alternative.

The Solution

The professional landscape industry would ask that the County Council take a different approach. Rather than forcing companies to operate with electric leaf blowers that do not meet their need we would suggest incentivizing via rebate programs to subsidize the purchase of new equipment to lessen the expense and burden. This will reward early adopters rather than penalize small companies that will have a more difficult time making this transition. For example, the state of Washington is pushing forward legislation that would eliminate sales tax for gas powered landscape equipment which has received strong support from a diverse group of stakeholders. California has already pledged $30 million last year to ease the transition and are asking for even more in 2022 as part of annual process to support a transition.

As the technology advances the gas-powered equipment can be phased out and we also believe customer demands (especially in the commercial sector of the landscape industry) will increase to require the use of electric powered leaf blowers.

In Conclusion

For the reasons stated herein, NALP supports a responsible transition to electric leaf blowers. Unfortunately, we believe that due to the performance, cost, and infrastructure issues that this transition cannot occur in the timeframe outlined in the bill, but we would welcome the idea of working on proactive legislation that begins to encourage this transition rather than setting a premature mandate and penalizing the thousands of small businesses that rely on this equipment.

Sincerely

Andrew Bray
Vice President of Government Relations
National Association of Landscape Professionals

Re: Bill 18-22, Noise Control – Leaf Removal Equipment – Amendments
Tentative Public Hearing Date: 09-20-2022

I am writing in support of this Bill and am strongly in favor of the County regulating gasoline-powered leaf blowers and other unmuffled, gasoline-powered lawn maintenance equipment (e.g., weed trimmers, edgers, etc.) These devices are extremely noisy, especially in our neighborhood (Woodside Park, Silver Spring) where the environment is filled with the sound of these devices in most seasons on most days.

My wife suffers from Tinnitus, and the high decibel and harsh frequencies of these sounds cause her great suffering. At times, even inside our house (which is well insulated from noise), the noise from these machines is too much and she has had to leave the neighborhood. The noise is a major threat to her well-being, given her disability.

I am aware that adequate substitutes are available for this equipment, whether electric powered or good old manual devices like rakes.

In addition to the noise hazards, I am informed that these devices emit an extremely dangerous level of air pollutants due to their unsophisticated two-stroke engines. Combined with the noise pollution, it's absolutely essential for the County to ban the use of this equipment in our neighborhoods.

If there are some gasoline-powered lawn equipment devices that have mufflers and 4-cycle engines, so that they have noise and air pollution profiles no worse than those of lawn mowers, I would be satisfied with those machines not being banned. But all the rest have adequate substitutes, are dangerous, and have to go.

I appreciate the County's willingness to help some of the less-advantaged lawn care companies, particularly single-person operations, afford to make the switch to electric-powered equipment. That is a very equitable offer and I think it's morally correct to help them.

Thanks very much for your interest in my opinions on this important matter.

Sincerely,

Benjamin A. Berman

Benjamin A. Berman

September 18, 2022

Dr Chessa Lutter

Re: MC Bill 18-22

My name is Chessa Lutter and a 30-year resident of Montgomery County, MD. I am a nutritionist and epidemiologist, retired from the World Health Organization, and currently teleworking from home as a Senior Fellow at RTI International.

Gas-powered leaf blowers (GPLBs) negatively affect human health. According to the US CDC, they cause: hearing loss, tinnitus, cardiovascular effects, immune system suppression, stress hormone release, sleep disturbance, impaired childhood development, impaired cognition, mental health problems. These effects lead to reduced work and school productivity, and reduced quality of life. The consequences are particularly acute for children, seniors, and people with hearing disorders and neurological conditions. The more than one million workers in the landscaping industry, over half of whom are Hispanic and Latino, are at particular risk given their immediate proximity to GPLBs as they produce noise levels ranging from 102−115 decibels ("dBs") at the ear of the operator; higher than the recommended limit of 85 dBs established by the US EPA and the National Institute for Occupational Safety and Health.

Banning GPLBs will improve racial equity. The Racial Equity and Social Justice Impact Statement, states that their ban "could narrow racial and social disparities in the County as its overall benefits to Latinx employees in the local landscaping sector and to County residents exceed its costs to local landscape business owners, who are disproportionately Latinx. To the extent Latinx business owners are disproportionately harmed, the grant reimbursement program authorized under Bill 18-22 to help defray the cost of replacing gas-powered blowers for electric ones will dampen this harm". RESJIS Bill 18-22: Noise Control – Leaf Removal Equipment – Amendments (montgomerycountymd.gov)

GPLBs are damaging to the environment and contribute to regional air pollution and climate change. They generate chemicals and particulates that can violate EPA air pollution standards and emit significant quantities of ozone-forming chemicals, carbon monoxide, and other toxic air pollutants. They generate CO2 at a rate 3 to 9 times higher than electric-powered blowers, contributing to climate change.

GPLBs low-wave noise frequencies travel long distances, penetrates walls of homes, and affect homes far distant from the source. The noise caused by their use in densely urban neighborhoods affect a large number of homes. Nearly all of my neighbors employ lawncare companies that come on a weekly basis. Given how far their noise travels, I can hear them from up to 90 surrounding properties; many from within my home with windows closed.

GPLBs routinely violate Montgomery County noise standards, which are virtually never enforced. Enforcement is so poor that I have given wasting time to file complaints through the county website as they have never resulted in any change in the practices of landscapers near my home. This lack of enforcement is particularly irksome given my annual property taxes of $7,881.

The use of GPLBs is unpredictable. Landscaping crews, typically using two and up to four blowers simultaneously, work from as early as 7 am to 7 pm Monday through Sunday. I never know when the noise and gas fumes will prevent me from enjoying or working in my yard, hold a gathering of friends, or concentrate on my work and, thus, livelihood.

As a resident of Montgomery County, I insist you:

- Pass without delay MC Bill 18-22 to be effective January 1, 2023
- Mount a large-scale communications campaign in English and Spanish to inform on the new bill and that includes information on consequences of violation, and
- Enforce the bill and fine violators. Otherwise, a warning or small fine will be seen as the cost of doing business by lawncare companies.

Thank you for the opportunity to submit written testimony on Bill 18-22. Once in effect, it will reduce the multiple health and environmental hazards caused by GPLBs, improve racial equity and social justice, and contribute to the quality of life of all citizens of Montgomery County.

References

1. United States Environmental Protection Agency (EPA). Noise and its effects on children. 2009; https://www.epa.gov/sites/production/files/2015-07/documents/ochp_noise_fs_rev1.pdf.
2. Basner M. Auditory and non-auditory effects of noise on health. The Lancet. 2014;383(9925):132-1332.
3. Fritschi L, Brown AL, Kim R, Schwela DH, Kephalopoulos S. Burden of disease from environmental noise. Bonn: World Health Organization;2011.
4. Goines L, Hagler L. Noise pollution: A modern plague. Southern Medical Journal. 2007;100(3):287-297.
5. Hahad et al. Environmental noise-induced effects on stress hormones, oxidative stress, and vascular dysfunction: Key factors in the relationship between cerebrocardiovascular and psychological disorders. Oxid Med Cell Longev. 2019;4623109:1-13.
6. Munzel et al. Environmental noise and the cardiovascular system. Journal of the American College of Cardiology. 2018;71(6):688-697.
7. Stansfeld SA, Matheson MP. Noise pollution: Non-auditory effects on health. Br Med Bull. 2003;68:243-257.
8. Walker E, Banks JL. Characteristics of lawn and garden equipment sound: A community pilot study. J Environ Toxicol Stud 2017 1(1).
9. Pollock et al. Lawn and garden equipment sound: A comparison of gas and battery equipment. Journal of Environmental and Toxicological Studies. 2018.
10. Banks JL, McConnell R. National emissions from lawn and garden equipment. Undated.
11. New York State Department of Environmental Conservation. Leaf blowers. Undated; https://www.dec.ny.gov/chemical/109428.html#:~:text=Emissions%20from%20gas%20powered%20leaf,the%20amounts%20are%20even%20greater. Accessed Nov 29, 2002.
12. California Air Resources Board. Small engines in California. 2017; https://ww2.arb.ca.gov/resources/fact-sheets/small-engines-california.

13. Losacco C, Perillo A. Particulate matter air pollution and respiratory impact on humans and animals. Environ Sci Pollut Res Int. 2018;25(34):33901-33910.
14. Manisalidis, et al., Environmental and health impacts of air pollution: A review. Front Public Health. 2020;8(14).
15. Fernandes et al., . The effect of noise on attention and performance in reading and writing tasks. Codas. 2019;31(4):e20170241.
16. Sanzaki M, Kdoya T, Francis CD. Direct and indirect effects of noise pollution alter biological communities in and near noise-exposed environments. Proc Biol Sci. 2020;287(1923):2020017.

September 15, 2022

Dear Montgomery County Council:

I write in strong support of Bill 18-22, which would phase out the use of gas powered leaf blowers in our county. When our young family moved to Montgomery County more than a decade ago, we were stunned and dismayed by the near daily and year around disruptive noise of gas powered leaf blowers. They woke up our infant and toddler, often made it impossible to play outdoors with our children, and took away our ability to enjoy our patio or simply being outside for walks or relaxation. The noise was (and is) so loud it cannot be avoided inside one's home either. In fact, we have regularly suffered with two or three gas blowers next door on a single property roaring for more than an hour (at which point we leave our home). I contacted multiple landscapers to politely ask for a change and only one was willing to cut back on the gas blower usage near our home.

Quite simply, this antiquated noisy and polluting technology has rapidly been surpassed by equally powerful, clean, and quiet cordless technology (with an increasing number of thriving county landscapers using the new technology). This is why so many jurisdictions and now states have phased out the gas blowers. The incredible disruption to our qualities of life was made even more apparent during the pandemic when so many were stuck at home for school or work (and when this really should have been addressed). It is absurd that landscapers use the new clean and quiet electric blowers as now required in DC (and Chevy Chase Village) and then a few blocks over in our MoCo neighborhood the same landscapers make us suffer with the gas blowers. There is simply no reason anymore of our county to be a laggard on this issue. In fact, we are already behind when we should leaders on this issue. No wonder more than 7,000 signed a petition pleading for relief and county leadership on this issue and that so many county council candidates formally supported the pending bill.

We also owe landscape workers something better than continued use of the antiquated unhealthy gas blowers. These are typically some of the most voiceless members of our society (certainly politically and with their employers) who are asked to use these horribly polluting and noisy machines for hours each day (not long ago I saw a young teen in our neighborhood struggling to lug one of these on his back working for a area landscaper). In fact, the county's own Racial Equity and Social Justice Impact Statement recently came to the same conclusion "*OLO anticipates that Bill 18- 22 could narrow racial and social disparities as the benefits of banning gas-powered leaf blowers, particularly for Latinx landscape employees, exceeds the costs of replacing gas-powered leaf blowers for electric ones among Latinx-owned businesses and other landscape contractors, particularly with the Bill's authorization of a grant reimbursement program. As such, OLO does not offer recommended amendments for Bill 18-22*."

The early evidence from DC is that the transition to the newer technology has gone ahead without disruption to landscapers and residents have noted great improvement in the quality of life in their neighborhoods (ask/read James Fallows of the Atlantic). Continued financial transition and rebate assistance to help our county landscapers make this an even easier decision for moving forward without delay.

Quite simply, you cannot claim to be an environmental or worker rights champion and ignore this legislation. As such, I urge you to support it without any further delay (and make the phase in six months instead of a year).

Thank you,

Chris Homan
Bethesda, MD

RUPPERT LANDSCAPE

September 12, 2022

The Honorable Gabe Albornoz, President
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Re: Bill 18-22, Noise Control - Leaf Removal Equipment - Amendments

Dear Council President Albornoz,

As a commercial landscape company operating in Montgomery County for 50 years, we (Ruppert Landscape) would like to provide the following written testimony regarding Bill 18-22, Noise Control - Leaf Removal Equipment – Amendments.

We understand the County's concern with addressing the noise created by gas-powered leaf blowers, but we feel that this bill will put an undue hardship on commercial landscape companies, our customers, and on county residents—who will be absorbing the costs associated with this bill. We estimate costs to purchase and operate battery powered blowers to be 5x's that of gas-powered models—a calculation that includes an additional 3-7 batteries (and chargers) needed for each unit to operate for an entire day *(see chart below)*. In addition, creating the infrastructure at our facilities to ensure that we have the requisite load capacity, upfitting our trailers, and creating power stations that our trailers can connect to each night we estimate will cost around $120,000 for our facility in Montgomery County.

Unlike a homeowner that uses an electric powered leaf blower for less than an hour once a week, we operate commercially using equipment daily, under rigorous conditions and over long durations. Electric leaf blowers do not provide the same amount of power and run time that gas powered blowers do. We estimate that it takes 35% more time to do the same amount of work when using battery powered vs. gas. Additionally, the need for frequent battery changes reduces the productivity and efficiency of our crews at a time when our industry (and many other service industries) is already faced with labor shortages.

Additionally, the production and disposal of these lithium-ion batteries, involves significant environmental impact. There are currently no great recycling programs with manufacturers, so this will all add additional burden to county resources in terms of disposal.

We believe that the technology and needed infrastructure just isn't here at this point to facilitate this move to battery powered equipment in our industry. If enacted, we will be passing along the added costs we incur to our customers in the form of rate increases; and county residents will be carrying the burden of the $1.5M price tag at a time when we are experiencing a national inflation rate of over 9 percent. We believe this added burden on consumers and county residents is not well timed.

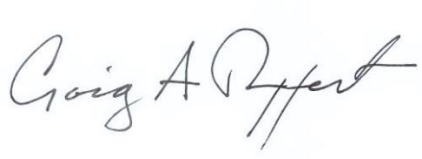
While we are always looking to invest in new technologies to improve efficiency and remain environmentally sound, we don't believe that this bill helps the environment, our community, or

our taxpayers. We share your concerns about protecting the health of our employees. Their safety is always our top priority, which is why we supply and mandate use of ear protection and provide instruction on how to properly use equipment and personal protective equipment. Perhaps an education program on how to protect operators' hearing when using gas powered blowers would be a better first step for the citizens of our county.

Where we could use help is having the council focus on improving county infrastructure and helping us maintain a competitive, resilient, and sustainable economy where businesses want to operate, and residents want to live.

With these concerns, we ask the council for an unfavorable vote on Bill 18-22, Noise Control - Leaf Removal Equipment – Amendments.

We thank you for your consideration,



Craig Ruppert
CEO Ruppert Landscape

CC: Montgomery County Executive
Montgomery County Council

Ruppert's estimated yearly cost comparison: battery vs. gas powered blowers

	Battery powered	Gas powered
Blower	$670 (*includes battery)	$500
Charger	$160	
3 Add'l batteries/chargers (spring/summer usage)	$1800	
4 add'l batteries/chargers for fall leaf removal	$2400	
Fuel/power charges	$150	$600 *(150 gal. @ $4/gallon)*
TOTAL	$5180	$1100

Additional Considerations for County's Table 2 / Implementation Costs

Table 2
Implementation Cost Summary Description

Item	Expected Cost	Details
Education and Outreach		
Mailers	$240,000	Based on costs from mailers from the pesticide ban, to every resident and business in the County. This would be for two mailers. Reducing to one mailer saves $120,000 or one full mailer with an additional just to single family homes would save $57,000.
Advertisements	$300,000	Radio, television, and internet ad campaigns, based on costs from implementing the pesticide ban.
Subtotal	**$540,000**	
Equipment Replacement		
DGS Replacements	$14,000	Equipment replacements for Department of General Services (DGS), including gasoline handheld, backpack, and walk behind blowers.
DOT Replacements	$28,000	Equipment replacements for Department of Transportation (DOT), including gasoline handheld, backpack, and walk behind blowers.
Year 5+ DOT and DGS Battery Replacements	$7,500	Batteries require replacements after enough use, expected in year five (5) or six (6) for many pieces of equipment.
Subtotal	**$49,500**	
Non-County Equipment Replacement - These are State entities that the County cannot enforce the legislation for, but may still want to support in replacing equipment.		
MNCPPC Replacements	$473,710	The Bill isn't enforceable to MNCPPC but is recommended for MNCPPC to replace equipment if possible.
MNCPPC Year 5+ Battery Replacements	$66,750	The Bill isn't enforceable to MNCPPC but if MNCPPC is able to replace equipment, battery replacements are needed as well.
MCPS Replacements	$1,298,336	The Bill isn't enforceable to MCPS but is recommended for MCPS to replace equipment if possible.
MCPS Year 5+ Battery Replacements	$174,000	The Bill isn't enforceable to MCPS but if MCPS is able to replace equipment, battery replacements are needed as well.
Subtotal	**$2,012,796**	
Contractual Changes		
DGS Contract Increases	$90,000	DGS notes that County contracts for lawn care and landscaping are unpredictable, due to the complexity of required replacements and operational savings, but this estimate accounts for doubling the leaf management cost portion of its contracts due to the cost of equipment switching incurred to contractors.
Transition Grants		
Equipment Turn-in Rebates/Grants for Individuals and Small Businesses	$300,000	Three-year program offering $100 rebates for 1,000 applicants per year. The legislation gives DEP the authority for grants, but it is not a requirement. Prohibiting use of equipment still in useful life without offering a grant or rebate is not recommended.
Grant Management Software	$10,000	Software to manage turn-in rebates/grants (first year cost only)
Subtotal	**$310,000**	
Personnel Costs		
Grant Management	$225,000	Term-limited staff member for 3 years. Alternatively, if the Septic legislation is approved and a position added for that workload, that position can handle these responsibilities.
Operational Cost Avoidance		
Operational Cost Avoidance	($1,737,750)	Assuming an average of $350 in cost avoidance per piece of equipment per year for fuel and maintenance.
Total	**$1,489,546**	

Equipment will need to be replaced more frequently; equipment purchased now will be obsolete in 3 years due to advances in technology; no provisions made for theft or breakage

No provisions for reduced productivity and additional labor hours to perform the work; leaf removal constitutes only 25-30% of blower use, likely increasing $90K estimate to 3x's that.

Bill 18-22, Noise Control - Leaf Removal - Amendments
Written testimony - Don Peterkofsky, resident in affected area

I'm a resident in one of the areas included in this bill, and I'm also concerned about and advocating for responsible actions towards curbing climate change - as I believe many neighborhood residents are.

Our neighborhood has a very significant usage of gas-powered leaf-blowers as a result of the neighborhood being a large employer of landscaping companies who provide frequent ongoing yard/landscape maintenance services. Many of these companies, as I'm sure we've all seen, often have two or even three workers using gas-powered leaf-blowers simultaneously at one location. The use of this equipment poses both an environmental and quality of life impact to residents - the environmental impact of the high carbon emissions from this equipment, and the quality of life impact by the high levels of noise pollution created by this equipment.

The gas-powered leaf blowers are very noisy, in addition to being highly polluting, and the landscaping companies using these leaf blowers frequently ignore the Montgomery County DEP and Noise Control ordinance that limits noise levels before 9am on weekends, and frequently start working and using these leaf blowers at 7:30am on Saturdays and Sundays. We live in a fairly new construction home with fully-insulated exterior walls and double-paned glass windows, yet are frequently awakened or disturbed by the sound of these leaf blowers - because the frequency and volume of the engines penetrates walls and windows of homes. Use of electric-powered alternatives would dramatically reduce the noise levels that residents are exposed to.

It's been widely known for a number of years that this type of gas-powered leaf-blower is very bad for the environment and specifically for carbon emissions. Many studies have been done and articles written about this; here's one recent excerpt:

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https://napavalleyregister.com/lifestyles/the-climate-connection-it-s-time-to-phase-out-gas-powered-leaf-blowers/article_ea84989e-7c1a-55c7-805d-41b35a9f173a.html

Air pollution and greenhouse gases

Two-stroke gas-powered engines generate high levels of pollution and greenhouse gases such as carbon monoxide, nitrous oxide and hydrocarbons. An Edmunds report found that a gas-powered leaf blower emitted 23 times more carbon monoxide and 300 times more hydrocarbons than a 2011 Ford Raptor.

CARB reports that operating a commercial leaf blower for one hour emits the same amount of smog-forming pollution as driving a 2016 Toyota Camry approximately 1,100 miles. Leaf blowers and other small gas engines combined now create more ozone pollution than all passenger cars in California.

Other communities in the U.S. have already enacted very concrete changes to stop the use of gas-powered leaf blowers and their associated carbon emissions, like the ban put in place in this California town back in October 2020:

Here in Napa County, Yountville has already passed a gas-powered leaf blower ban, combined with a subsidy program to offset the purchase of new battery or electric-powered leaf blowers and vacuums to help ease the financial burden on local businesses. Battery and electric-powered leaf blowers and vacuums are lighter, less noisy (mid-60 decibels), require less maintenance and do not generate greenhouse gases and smog compounds. New technology makes them just as powerful and similar cost to gas-powered models, with less expense for gas and oil over time.

While this bill specifically addresses the use of gas-powered leaf blowers, there two other similar devices that are also frequently used by landscaping companies and contractors, and that produce the same harmful effects of environmental and noise pollution:

- Gas-powered weed trimmers ("weed-whackers")
- Gas-powered pressure washers

Both of these pieces of equipment use the same problematic two-stroke gas engines, and produce the same concerning levels of carbon emissions and noise, as leaf blowers - and should therefore also be banned in the same way that gas-powered leaf blowers are being handled by this bill. In the same way that effective electric-powered alternatives are available for leaf blowers, they are also available for both weed trimmers and pressure washers.

I fully support the passage of this bill, and further suggest the following amendments:

1. Change the language of the bill from "gas-powered leaf blowers" to "gas-powered leaf blowers, weed trimmers ("weed-whackers"), and pressure washers", and make all three of these pieces of equipment subject to the same ban, phase-out period, and reimbursements.

   - OR -

2. Add an amendment to this bill, such that gas-powered leaf blowers are phased out and banned per the language of the bill, and gas-powered weed trimmers and pressure washers are also phased out and banned through a similar schedule and program, with the phase-out period to be staggered by six months - i.e., sale of gas-powered leaf blowers is prohibited 6 months after the law is passed, while sale of gas-powered weed trimmers and pressure washers is prohibited 12 months after the law is passed; use of gas-powered leaf blowers is prohibited 12 months after the law is passed, while use of gas-powered weed trimmers and pressure washers is prohibited 18 months after the law is passed.

Addressing the harmful carbon emissions and noise pollution created by gas-powered leaf blowers, which has a significant negative impact on our climate and environment, is an important and responsible step towards environmental responsibility and stewardship that can be taken by the County. However, leaf-blowers are only one example of a group of very problematic devices used daily in our County, and we should make every effort to provide a complete solution to this problem, in order to make an effective and impactful change. I fully support this bill, and strongly urge the Council to expand the current bill by including one of the two amendments above.

Thank you.

Testimony

I routinely see low-income Latinos, some very young, breathing in toxic fumes from gas powered leaf blowers and with no ear protection. I am sure they don't have health insurance and will do almost anything to secure a living. We as home owners and the county can and should do more to protect them where we can. I have asked many neighbors to make electric or battery operated blowers available to them. Or better yet offer to pay more and use a rake. But that is not enough. By banning gas powered leaf blowers the county is helping protect the well being of vulnerable workers.

Dear Councilmembers,

I'm asking, no begging, you to vote yes on Bill 18-22, Noise Control – Leaf Removal Equipment. This bill would ban gasoline powered leaf blowers and provide subsidies for purchasing replacement electric powered ones.

I live in what should be a quiet suburban neighborhood. However, it's impossible to walk around any time of the day without being assaulted by the loud noise of gas powered leaf blowers. These machines are also causing air pollution and contributing to global warming. To add to the aggravation, since they are almost entirely used by employees of third parties, the users leave them on causing totally unnecessary pollution even when they are not using them.

Please support this bill.

Sincerely,

Jeri Roth

In favor of Montgomery County Bill #18-22, and suggesting that the start-date be sooner:

Thank you for considering a ban on gas-powered leaf blowers. This ban will protect landscape workers from hearing loss and noxious fumes, and protect the quality of life for all of us.

Leaf blower noise assaults me: when a team of blowers is within 15 or 20 houses of mine, I can't think clearly, can't talk with friends and family, and can't do my work as a musician (composing and teaching). I don't have an alternative: I cannot work wearing ear plugs or using "mute" on zoom. At times when I was not working, I tried ear plugs and headphones, but they did not block the leaf-blower noise. I am trapped.

I want to support the small businesses – both the landscapers' and my own. We need to find a way for all these small businesses to thrive together.

A ban on leaf-blowers would be a way of saying that neighbors should treat each other with decency, not just greed.

Bill #18-22 will bring Montgomery County in line with our neighbors in Washington, DC who have already banned gas-powered leaf blowers. And of course, the ban would bring us together with people in other parts of the US who have already banned the blowers, including the state of California.

Rakes provide our best alternative, and create jobs. But electric powered leaf blowers are a reasonable compromise. Your ban would not take away the people's freedom to use a leafblowing machine.

Gas-powered leaf blowers have a more penetrating noise than the battery-powered equipment. This is not just a matter of decibels, but of pitch: the low sound of the gas-powered motors goes farther and penetrates walls much more than the battery-powered sound.

Some people do not have good hearing and they don't notice how loud the blowers are.

You should move up the date that your ban goes into effect. Lawn companies in Montgomery County who also work in DC are already switching over their equipment, which will also help them comply with existing bans in the Montgomery County towns of Somerset, Chevy Chase Village, and the Town of Chevy Chase.

You will see a lot of public support for a ban. Quiet Clean Montgomery has a petition asking for a leaf blower ban with almost 7000 signatures from Montgomery County alone. In recent months, there have been articles opposing gas-powered leaf blowers in the New York Times, the Guardian, the Wall Street Journal, and the Washington Post (plus an article in the Atlantic a few years ago).

There is momentum for a leaf-blower ban. I want to say, "Montgomery County should be a

leader," but so many jurisdictions have already banned the gas-powered leaf-blowers. Montgomery County should join in.

Thank you.
Jessica Krash

July 7, 2022

RE: Bill 18-22, Noise Control - Leaf Removal Equipment – Amendments (Public Hearing Sept. 20th)

Testimony by: John Parrish

Dear Councilmember,

The use of gas-powered blowers has got to end – the sooner the better. The peace, serenity and health of my community and the County as a whole are affected daily by the noise and air pollution emanating from these devices. Please pass this bill!

From March thru December blowers are used for yard cleanup in my Woodside Park neighborhood. Several times each week my wife and I are subjected to breathing exhaust emissions and enduring excessive noise. Seven households within 100 yards of our home including two that abut our lot employ yard maintenance crews that use gas-powered blowers. Some of the crews run multiple blowers at the same time. Three of the homes are large corner lots that take a long time to clean-up. This is particularly unnerving when we are attempting to work from home. It is even more intolerable to be working in the yard or simply attempting to relax outside. Citizens should not have to endure this imposition.

It is well known that exhaust emissions from gas-powered blowers generate fumes and particulate matter that harm lungs. The negative health effects of air pollution are well documented for all age groups. However, bad air quality has a disproportionate impact on children and senior citizens. Isn't it time we protected all Montgomery residents from these sources of air and noise pollution?

The daily noise in my neighborhood from blowers has generated many complaints on my community list-serve by homeowners pleading with their neighbors to consider another approach such as using electric blowers. This has created much tension. Passing this bill will help increase peace among neighbors.

The grant program to help offset the cost of transitioning to electric equipment is a fair and sensible way to compensate owners of gas-powered blowers and vacuums. This will also encourage a transition to more eco-friendly yards and maintenance practices. My wife and I eliminated our lawn by converting yard space to flower and vegetable gardens and natural habitat. We never mow nor do we use blowers. By the way, gas-powered lawn mowers also emit air and noise pollution. They deserve to be regulated more strictly too. Please follow in the footsteps of other communities that found a way to regulate gas-powered equipment. Please enact Bill 18-22.

Thank you for considering my comments and please pass the damn bill.

Sincerely,

John Parrish

Montgomery County Council
Legislation: Bill 18-22 Noise Control – Leaf Removal Equipment
Organization: The Climate Mobilization, Montgomery County
Position: Favorable with Amendments
Council Hearing: September 20, 2022

Dear Council President Albornoz and Council Members,

Thank you for this opportunity to testify in support of the Bill 18-22, Noise Control – Leaf Removal Equipment, with amendments. I am testifying as a member of The Climate Mobilization of Montgomery County, on behalf of the Climate Action Plan Coalition of Montgomery County.

The guiding principle of The Climate Mobilization is that we are in a climate emergency. Without an all-hands-on-deck perspective, there is no chance for our society to limit the impact of climate change on our civilization. The actions taken by the County to address the climate emergency are encouraging, but more needs to be done. This bill represents another important step in the county's efforts to reduce greenhouse gas emissions in the county 100% by 2035.

The Coalition enthusiastically supports this bill which

1. Prohibits the sale of combustion engine-powered blowers or leaf vacuums *six months* after enacted.
2. Prohibits the use of combustion engine-powered leaf blowers or leaf vacuums *a year* after enacted.
3. Authorizes DEP to establish a reimbursement program that provides a partial credit for residents and businesses who a) purchase an electric leaf blower and b) return a gas-powered leaf blower or leaf vacuum to the County.
4. Subjects persons who violate this bill to a fine up to $1,000.

There are multiple concerns regarding the continued use of leaf blowers powered by fossil fuels. These can broadly be described as falling into the categories of health, equity and climate change.

With regard to health concerns, combustion engine-powered leaf blowers are loud, producing loud low frequency noise that makes them much louder than battery-powered blowers, even when their labeled noise levels are the same. The noise from gas blowers travels much longer distances and affects significantly larger numbers of neighbors, especially in settings where the homes are closely spaced. Many combustion engine leaf blowers impact the operator's ears at 100 decibels or more. The World Health Organization (WHO) recommends no more than 85 decibels for 1h per day to prevent hearing loss, while according to the CDC, permanent hearing loss can be caused by 91 decibels for 2 hours or 100 decibels for only 15 minutes a day (1,2). Loud noise not only causes hearing loss, but epidemiological studies have shown that environmental noise is a stressor associated with an increased incidence of high blood pressure, heart attacks and stroke (3).

Combustion engine-powered leaf blowers use engines that are highly inefficient and distribute toxicants that, when inhaled, can harm users and bystanders. Exhaust emissions from leaf blowers include hydrocarbons from both burned and unburned fuel, and which combine with

other gases in the atmosphere to form ozone, carbon monoxide, fine particulate matter, benzene, acetaldehyde, and formaldehyde (4). While all these compounds can cause negative health effects, the latter three compounds are considered probable human carcinogens.

Addressing the equity concerns, the people at most immediate risk to health damage from the noise and combustion engine emissions are the lawn workers. Many of these individuals use these combustion engine leaf blowers throughout the day, for many days every week. Indifference to their exposure implicitly ignores their long-term health concerns.

The third issue raised by the continued use of combustion engine-powered leaf blowers is the need to mitigate the impact of fossil fuels where ever and whenever possible. The burning of fossil fuels is what created the climate emergency. We cannot ignore the need to eliminate their use, and even more so, the combustion engines that power these devices are amongst the most inefficient. Several studies have compared the emissions of leaf blowers to that from cars. One hour of a running a combustion engine-powered leaf blower produces the same amounts of toxicants as driving a car over 1000 miles (5). As a society, we need to move away from fossil fuels as quickly as possible. Part of that action is to eliminate the routine use of fossil fuels in all our activities. This view of addressing climate change is similar to the denormalization of tobacco use that occurred when indoor air quality laws banned smoking in restaurants, bars and other public spaces. It is now rare to see people smoking in doors in public. This has played an important part of the significant reductions in smoking over the past decades. This bill will similarly further the denormalization of fossil fuels, and play a role in the overall reduction of greenhouse gas emissions that is needed to address climate change.

The change called for in this bill, phasing out the use of fossil fuel powered leaf blowers and incentivizing the switch to battery powered leaf blowers, is not a new concept. This action is taking place all over the country, and in our own backyard. Chevy Chase Village instituted a ban on combustion engine leaf blowers that went into effect on January 1, 2022 (6). Similarly, Washington DC's ban on these leaf blowers also went into effect on January 1, 2022 (7). It is estimated that at least 170 jurisdictions across the country have instituted some form of leaf blower ban. Regarding jurisdictions larger than Montgomery County, legislation recently passed in California has banned the sale of combustion engine leaf blowers, as well as other equipment that uses small fossil fuel powered engines, starting in 2024 (8). These efforts show that the phase out of combustion engine leaf blowers is achievable and gaining momentum. The passage of this law would place Montgomery County well within this effort, and serve as an additional model for other jurisdictions, to take the negative impacts of combustion engine leaf blowers seriously, and act similarly to phase them out.

The Climate Action Plan Coalition recommends an amendment to Bill 18-22. This bill is well designed, providing near term goals for implementation and a straightforward mechanism for imposing fines on individuals who violate the bill. One issue of concern is the pathway that supports the phase out of the tools. We need to support in an equitable manner access to electric replacements and additional batteries to small and minority business. The reimbursement program needs to be described in greater detail and include a sliding scale for the extent of reimbursement based on the annual earnings of landscaping companies and residents, as well as support for buying additional batteries. Notably, in Washington DC, a bank is providing loans with zero or low interest to support the transition. This type of initiative should be supported in Montgomery County, as well.

Thank you for your time.

On behalf of The Climate Action Plan Coalition, Montgomery County,

Kevin Walton
The Climate Mobilization, Montgomery County

Link to Bill 18-22
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20220628/20220628_4.pdf

References

1. Berglund B, Lindvall T, and Schwela DH (Eds.). (1999). Guidelines for Community Noise. World Health Organization, Geneva, Switzerland. https://apps.who.int/iris/handle/10665/66217
2. What Noises Cause Hearing Loss? CDC. https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html
3. Munzel T, Schmidt FP, Steven S, Herzog J, Daiber A, and Sorensen M. (2018) Environmental noise and the cardiovascular system. J Amer Coll Cardiology 71:688-697.
4. A report to the California legislature on the potential health and environmental impacts of leaf blowers. (2000) California Air Resources Board. https://ww2.arb.ca.gov/sites/default/files/2018-11/Health%20and%20Environmental%20Impacts%20of%20Leaf%20Blowers.pdf
5. California Air Resources Board Fact Sheet https://www.arb.ca.gov/msprog/offroad/sore/sm_en_fs.pdf
6. Gas-Powered Leaf Blowers Banned in the Village. https://www.chevychasevillagemd.gov/CivicAlerts.aspx?AID=314
7. Leaf blower regulations. https://dcra.dc.gov/leafblower
8. California moves toward ban on gas lawn mowers and leaf blowers. https://www.latimes.com/california/story/2021-10-09/california-moves-toward-ban-on-gas-lawnmowers-and-leaf-blowers

Lauren S. Ruby
[redacted]

I have owned my home in the Woodside Park neighborhood of Silver Spring since November, 2005.

The noise generated by gas leaf blowers has utterly ruined my right to quiet enjoyment. I cannot plan to spend any time outdoors enjoying my yard because a leaf blower often appears to disturb the scene without warning, making it impossible to hold a conversation, play with my dog, read, rest or really do anything. I am constantly driven indoors by the noise of gas leaf blowers.

The noise they make disturbs me indoors as well. They force me to close all my windows but the noise can be heard indoors even so. My livelihood depends on working from home, but I cannot do so without interruption by the racket, which frequently disrupts my business calls.

We residents already endure a lot of inescapable noise from tree trimming and removal equipment, as well as lawn mowers. Gas-powered leaf blowers are not necessary in the same way and should be eliminated to at least alleviate the noise pollution problem.

These machines are a nuisance and, as such, they have no place in residential neighborhoods.

Sincerely,

Lauren Ruby

Lauren Ruby

Submission Date: 9/2/2022 **Hearing Date: 9/20/2022**

BILL: 18-22, Noise Control — Leaf Removal — Amendments

My name is Lynda DeWitt, and as a landscape professional, I strongly support Bill 18-22. I've been using battery-powered equipment, including blowers, since 2009, when I started Solar Mowing, a quiet, emission-free lawn care company based in Bethesda.

Now in our 14th year, we've never had an advertising budget. People seek us out; they're hungry for solutions to all the problems linked to gasoline-powered lawn equipment. Customers often tell me that they don't know we're there unless they see us through a window — a fact they also share with friends and neighbors.

I've heard the argument that electric leaf blowers can't do the job of their noisy counterparts. That's flat-out wrong. There's not been a job we couldn't do. We use hand-held blowers after we mow to clear debris from walkways and other hardscapes. And backpack blowers for leaf cleanups in the fall. We also use rakes when clearing beds so as not to disturb mulch.

Crews take enough batteries with them to last the day. We charge the batteries — with wind and solar energy — at the end of each day. Our most powerful, long-lasting battery takes 45 minutes to fully charge.

By shifting — finally and completely — to battery-powered lawn care equipment, we protect workers and children playing outside, and we don't interrupt people working and studying inside.

I'm tired of telling people outside Solar Mowing's service area that no, sorry, I can't recommend any other company who uses quiet equipment. It's past time to ensure all Montgomery County residents have safe and quiet lawn care.

Thank you for the opportunity to submit testimony on this important legislation.

September 16, 2022

Dear Council Members:

The Chevy Chase West Neighborhood Association Board strongly requests that the Council support the banning of gas powered leaf blowers in Montgomery County. We support the County Executive's proposed Bill (18-22, Noise Control – Leaf Removal Equipment – Amendments) to ban the use of gas-powered leaf blowers. We note this is a well-documented goal of the Montgomery County 2022 Climate Work Plan.

The scientific, ecologic, noise, and health-related facts clearly demonstrate the numerous benefits that our communities and workers will realize with the adoption of this ban. Fortunately, there are several alternatives to using gas-powered leaf blowers for yard maintenance. Battery powered leaf blowers have already been adopted by vendors and homeowners alike. As you know, the District of Columbia, along with many other communities have already adopted comprehensive laws to protect their citizens from this source of noise and pollution.

We are pleased the proposed change would authorize a grant program to partially offset the cost of replacing a combustion engine-powered leaf blower with an electric leaf blower or leaf vacuum.

Our neighborhood association board urges the Council to support this important change to eliminate gas powered leaf blowers in Montgomery County.

Sincerely,

The Chevy Chase West Neighborhood Association Board

To: Montgomery County Councilmembers
Re: Bill 18-22, Noise Control – Leaf Removal Equipment - Amendments
Subj: Testimony submitted by Ms. Roberta G Steinman
Date: July xx, 2022

I support a ban on the sale and use of combustion engine-powered leaf blowers and leaf vacuums in Montgomery County

Banning the use of Gas-powered leaf blowers will improve air quality, reduce noise pollution, and bring some peace back into our neighborhoods.

Gas leaf blowers have become a persistent source of air and noise pollution. We hear their loud, high-pitched noise from mid- to late February each year until the following January. Additionally, pollution from leaf blowers compounds leads directly to other forms of air pollution. When gas leaf blowers are operating in full force in our neighborhood, we must **close our doors and windows** instead of simply allowing the fresh air and breeze to cool our homes. My husband and I spend a lot of time outdoors because we are native plant and vegetable gardeners, and there is always outdoor work to do. The gas-powered leaf blowers make working outdoors unpleasant, nerve wracking, and dangerous. The fumes and dust are toxic both for us and for the pollinators, and the toxic dust and pollution settles on the plants. As a result, we race back inside every time the blowers show up in our vicinity.

The **health consequences of breathing polluted air affects all – regardless of age, race, socioeconomic demographic, or species**. Everyone in our neighborhood – human or non-human –is harmed by both the noise and the breathing of the exhaust of unnecessary leaf blowers. I live in a walkable neighborhood where many people enjoy being outdoors - walking, running, pushing babies in stroller, walking the dog, and taking their daily exercise regimen. But that pleasurable and healthful activity has become so unpleasant due to the pollution and noise from the omnipresent gas-powered leaf blowers that we are forced to severely alter or curtail that activity altogether.

Gas-powered blowers produce double the number of decibels and have a lower sound frequency than electric leaf blowers. Because they cause high levels of sound at low frequencies, the roar of gas blowers can be heard 23 houses away from a lawn that's being blown, whereas the sound of electric blowers only will travel six houses away. There are so many eco-friendly alternatives, including electric blowers, rakes, and leaving the leaves on the ground.

But it doesn't adversely affect just we humans. The environmental effects of blower noise, dust, and particulate matter causes birds, frogs, pollinating insects and other creatures to vacate the area, which is detrimental to our local ecosystems.

In addition to negative effects on the environment, the noise and toxic fumes generated by gas-powered blowers impact the health and safety of workers who use them on the job. Landscape workers and others may experience hearing loss and respiratory problems due to extensive exposure to two-stroke, engine-driven leaf blowers.

Some landscaping companies argue that going green and using electric power tools will slightly reduce their efficiency and make them less competitive. This is precisely why a ban will be so beneficial, as it will level the playing field across all companies and not allow a small number of free-riders to profit from the good will of ecofriendly companies.

It's time for Montgomery County (and the state of Maryland) to join communities across the U.S. and ban the sale and use of gasoline-powered leaf blowers.[1]Gas blowers emit hydrocarbons at rates up to nine times higher than those generated by electric blowers. It's estimated that using a commercial leaf blower for one hour emits as much pollution as driving a 2016 Toyota Camry from D.C. to Miami. One study showed that a leaf blower's two-stroke engine can produce nearly 300 times the hydrocarbon emissions of a pickup truck, as well as much more toxic carbon monoxide and nitrous oxide fumes.

It is time to act. Our health, the air we breathe, our well-being is simply more important than the 'illusory' efficiency of gas=powered blowers. I say 'illusory' because the use of these devices does not factor in their substantial external adverse impacts.

Let's get on with this ban and bring peace and quiet and civility back into our neighborhoods.

Thank you.
Respectfully submitted
Ms. Roberta G Steinman

[1] Over 20 cities in California have completely banned all gas-powered leaf blowers and the results have been entirely positive. The bans are reported as being 90 – 95% enforceable, of little burden to enforce, and citizen satisfaction with the bans is reported to be as high as 100%. (https://mont.thesentinel.com/2019/05/02/american-lung-association-moco-air-is-unhealthy/)

Bill 18-22 Noise Control – Leaf Removal Equipment – Amendments
Montgomery County Council
September 20, 2022

Position: Oppose

Background: Bill 18-22 would prohibit the sale and eventually the use of gasoline-powered leaf removal equipment.

Comments: The Maryland Retailers Association has concerns about Bill 18-22 Noise Control – Leaf Removal Equipment – Amendments. The proposed ban deadlines on the sale and use of gasoline-powered leaf blowers would be burdensome to consumers and lawncare companies living and working in Montgomery County.

At this time, the EPA is in the third phase of pollutant controls for small engine-powered equipment, resulting in up to 90% reductions in exhaust gas and evaporative emissions from previously unregulated machines. Many believe outdoor power equipment is unregulated, but that is not true and equipment in this space has drastically changed in recent decades. In 2021, the majority of handheld products including leaf blowers are zero emission equipment and 80% of all product shipments were electricity-powered devices.

As the market is clearly already transitioning away from gas-powered equipment, we believe that consumers should be allowed to continue to use the equipment they already own until it needs to be replaced, rather than forcing a ban by a specific date. We understand that the bill as written includes a County-sponsored rebate program for equipment replacement, but without the inclusion of more details like specific dollar amounts, it is impossible to say whether the program will be sufficient to cover the costs forced onto consumers by the County.

We would urge the County Council to allow the market to continue its current trajectory towards "greener" equipment at a natural pace without imposing bans and deadlines on the community. Thank you for your consideration.

I am writing to express my support for the Gas Powered Leaf Blowers (GPLBs) Ban. GPLBs are harmful and disruptive to the lives of me, my family, neighbors, and all Montgomery County Residents, in particular are more of us are working from home. For the entire year, I spend hours a day listening to the disruptive and incredibly annoying drone of leaf blowers with noise levels that are harmful to the health of residents and lawn care workers. In my neighborhood, and in much of Montgomery County, the houses are close together. The noise levels from GPLB are so loud that if a leaf blower if being used anywhere close by, anyone in my household who is outside on our deck working or on the phone, immediately has to go indoors. But, more disturbing is that once inside, the noise is inescapable and disruptive. The noise is so loud and intrusive that not only does it disrupt concentration, make it difficult to carry out work but also eventually starts leads to headache. There is simply no escaping this sound that often goes on for hours a day. The sound is so intense, unrelenting, and disruptive because GPLBs produce noise levels ranging from 102-115 decibels, which is higher than the recommended level that the US EPA and National Institute for Occupational Safety and Health have established. The noise travels farther and penetrates exterior walls of our home and all homes and businesses in Montgomery County. In addition, GPLBs emit large quantities of harmful air pollutants, generating CO2 at a rate 3 to 9 times higher than electric-powered blowers, c as GPLS are hazardous to our health and well-being, and Montgomery County should do as well immediately. Please pass this ban as it is the right thing to do for the citizens of Montgomery County in terms of restoring the ability to have peace in our homes and also in terms of protecting the environment by reducing pollution.

I am writing to express my support for the Gas Powered Leaf Blowers (GPLBs) Ban. GPLBs are harmful and disruptive to the lives of me, my family, neighbors, and all Montgomery County Residents, in particular are more of us are working from home. For the entire year, I spend hours a day listening to the disruptive and incredibly annoying drone of leaf blowers with noise levels that are harmful to the health of residents and lawn care workers. In my neighborhood, and in much of Montgomery County, the houses are close together. The noise levels from GPLB are so loud that if a leaf blower if being used anywhere close by, anyone in my household who is outside on our deck working or on the phone, immediately has to go indoors. But, more disturbing is that once inside, the noise is inescapable and disruptive. The noise is so loud and intrusive that not only does it disrupt concentration, make it difficult to carry out work but also eventually starts leads to headache. There is simply no escaping this sound that often goes on for hours a day. The sound is so intense, unrelenting, and disruptive because GPLBs produce noise levels raging from 102-115 decibels, which is higher then the recommended level that the US EPA and National Institute for Occupational Safety and Health have established. The noise travels farther and penetrates exterior walls of our home and all homes and businesses in Montgomery County. In addition, GPLBs emit large quantities of harmful air pollutants, generating CO2 at a rate 3 to 9 times higher than electric-powered blowers, c as GPLS are hazardous to our health and well-being, and Montgomery County should do as well immediately. Please pass this ban as it is the right thing to do for the citizens of Montgomery County in terms of restoring the ability to have peace in our homes and also in terms of protecting the environment by reducing pollution.

TESTIMONY IN SUPPORT OF BILL 18-22, BANNING COMBUSTION ENGINE-POWERED LEAF BLOWERS

This testimony is being submitted in strong support of Bill 18-22, which would prohibit the sale and use of combustion engine-powered leaf blowers, and take other steps in support of such a ban.

The Council should enact the bill forthwith, for the following reasons:

- **Combustion engine powered leaf blowers are causing serious harm to the health and well-being of county residents.** According to a recent article in Harvard Medicine magazine, noise pollution drives hearing loss, tinnitus, and hypersensitivity to noise, and can also cause or exacerbate heart disease, diabetes, sleep disturbances, stress, mental health and cognition problems, and even low birth weight. In Europe, which has better data than the United States, chronic noise exposure contributes to an estimated 48,000 new cases of heart disease *each year*. https://hms.harvard.edu/magazine/viral-world/effects-noise-health.

In my personal case, a one-time exposure to several extremely loud leaf blowers over a year ago has severely impacted my life by causing me to be acutely sensitive to everyday noise (a medical condition known as hyperacusis). The continued use of gas-powered leaf blowers by local landscaping companies causes me ongoing pain and discomfort and limits my ability to walk in my neighborhood or even remain in my house. But even for people who do not suffer as I do, gas-powered leaf blowers are a major threat to their health and well-being.

- **Minority groups suffer the most from noise pollution.** According to the Harvard Medicine article, "people in neighborhoods with low socioeconomic status and higher proportions of residents of color bear the brunt of noise pollution in the United States." Moreover, this legislation will protect the hearing and general

health of people who work for landscaping companies, including workers of color.

- **The legislation does not unduly burden landscaping businesses.** First, many gas-powered leaf blowers that are being used by landscaping companies already violate existing Montgomery County noise ordinances. Using an app on my phone, I myself have measured the decibel levels when a landscaping company operated gas-powered leaf blowers near my house, and the readings were well in excess of that permitted by the existing county ordinance. My experience walking in adjacent neighborhoods confirms that the leaf blowers used by other landscaping companies are just as loud (this is based on my ear, rather than the app). The health and well-being of county residents outweighs the burden on landscaping companies to stop their already-illegal noise pollution.

  Second, the bill would establish a reimbursement program to help defray the cost of battery-powered leaf blowers. This should alleviate the financial burden on landscaping businesses.

- **The enforcement provisions of the bill are also crucial.** Enforcement of the proposed ban is essential. As already noted, the existing noise limits in current law are not well-enforced. The bill would make it easier for an enforcement officer to issue a noise citation, based on a single noise complaint and photographic evidence of violation. I strongly support this provision. The county should also consider proactively sending out inspectors to monitor compliance with the ban even in the absence of a complaint.

Thank you for the opportunity to testify on this important matter.

Yoel Tobin
Montgomery County, MD
Submitted August 2022

TESTIMONY/COMMENTS OF LLOYD GUERCI

on

BILL 18-22, NOISE CONTROL – LEAF REMOVAL EQUIPMENT – AMENDMENTS

Council President Albernoz and Councilmembers:

I offer the following views on Bill 18-22 (Bill template (montgomerycountymd.gov)).

I DO NOT OBJECT TO A MANDATED PHASE-OUT OF GASOLINE POWERED LEAF BLOWERS.

On the basis of relative risk, however, this legislation is not a priority at all. Moreover, from an overall perspective, this can hardly be justified on air pollution grounds. The existential environmental risk is climate change, primarily from combustion of fossil fuels, which produces carbon dioxide. The amount of carbon dioxide is proportional to the amount of fossil fuels combusted. Leaf removal equipment does not use a huge amount of fossil fuel. In contrast, businesses driving to locations to remove/blow leaves have big pickup trucks that consume a lot of fuel. The focus should be on larger sources of CO_2.

Moreover, a holistic environmental assessment would note that batteries for leaf blowers are not cheap, so users won't have lots of extras, and smart businesses will not be caught with only dead batteries on hand with more work to be done that day. They will have generators on their trucks or trailers to charge batteries as needed. Those generators will consume fuel and generate carbon dioxide. Furthermore, the production of batteries has substantial environmental consequences.

I OPPOSE A GRANT PROGRAM, INCLUDING A BUY-BACK STIPEND, BY MONTGOMERY COUNTY

Historically, a number of products have been declared illegal or their use declared illegal. This includes, for example, the pesticide DDT, polychlorinated biphenyls (PCBs), lead-based paint, and automotive snow tires with carbide studs. Did the government pay Montrose Chemical for DDT in stock; did the government pay Monsanto for PCBs; did the government pay NL (formerly National Lead) Industries or paint suppliers for lead-based paint in stock? Of course not.

There is no basic need for a grant program to buy back leaf blowers.

It cannot be disputed that Montgomery County needs to do more on programs like affordable housing. Resources that should go to real priorities like affordable housing should not go instead to programs like a grant/buy-back program for combustion engine-powered leaf blowers and leaf vacuums. In any event, if the County proceeds with a grant/buy-back program, there should be a maximum amount of money appropriated for all programmatic costs and disbursements, with no further appropriations.

What's more, businesses have either expensed the costs of the leaf blowers on taxes or are depreciating them. A grant/buy-back program would unduly enrich them.

THERE WILL BE FAR MORE TO A COUNTY GRANT PROGRAM THAN SEEMS TO HAVE BEEN ESTIMATED. SO, LET'S NOT HAVE ONE AND LET OWNERS SELL THEIR GASOLINE POWERED LEAF BLOWERS ON E-BAY OR ANOTHER PLATFORM.

Some of the problems of a county grant/buy-back program that require expensive effort are:

Determining if the leaf blower works. If not, why pay money for it? And, if people figure out that they can acquire a non-functional leaf blower for little and trade it in for more, they will. Who will administer this assessment and determination?

Rendering the turned in leaf blower totally damaged and non-workable. Leaf blowers that are turned in will need to be secured and permanently disabled. Two examples demonstrate this point. First, for years, Sears replaced Craftsman hand tools that broke. Sears put them in storage and then disposed of them as trash. The problem was that the returned tools were taken from storage or the disposal processes and resubmitted to Sears for a second tool replacement. Sears came up with a program to change the form of the tools so they would not be recognizable for a second return.

Second, in 2009, the National Highway Traffic Safety Administration ran a program under the CARS Act, colloquially known as Cash for Clunkers. Old gas guzzler vehicles would be turned in for new vehicles with better fuel economy, with a rebate applied to the purchase of the new vehicle. A concern was that the gas guzzling, traded-in vehicles would then be resold. As a solution, the traded-in vehicle was required to be scrapped, have the engine rendered unusable, and have its body crushed or shredded. To render the engines unusable dealers were required to add high weight sodium silicate to the engine oil fill and run it. See 49 CFR Part 599 Appendix B; See *generally*, https://www.gao.gov/assets/gao-10-486.pdf.

How will these concerns be addressed/managed in a grant program for combustion engine-powered leaf blowers and leaf vacuums? By whom? Where? What will be done with residuals (another environmental issue)?

ENFORCEMENT OF THE PROPOSED LAW NEEDS TO BE THOUGHT THROUGH AND IMPROVED

The bill would prohibit the sale and use of combustion engine-powered leaf blowers and leaf vacuums by a certain date.

If this bill is enacted, insofar as problems will arise, they likely will be in "use" of combustion engine-powered leaf blowers and leaf vacuums.

Suppose someone complains that a neighbor or its landscaping contractor or gutter cleaner is using a combustion engine-powered leaf blower. What next?

Is the county going to send an inspector? From what department, and do they now have extra people to look into the complaint? But, if it is a leaf blowing operation, the alleged offender likely will be gone by the time the inspector gets to the location of the alleged offense. Then what?

What are the enforcement procedures? Is the county going to press charges based on the unverified complaint of someone? To whom will the complaint be addressed and how will the county know who is

the defendant/respondent? What tribunal will hear the action? What if the complaining neighbor does not show up for the proceeding?

What are the sanctions? Are they enough? Shouldn't a second offender's business license be suspended or revoked, if you are serious about this proposed law?

Respectfully submitted,

Lloyd Guerci
Hunt Ave.
Chevy Chase, MD 20815

AGRICULTURAL PRESERVATION ADVISORY BOARD

September 19, 2022

Gabe Albornoz, President
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Re: Bill 18-22, Noise Control – Leaf Removal Equipment - Amendments

Dear Council President Albornoz,

On behalf of the Montgomery County Agricultural Preservation Advisory Board, APAB, we would like to provide this testimony in opposition to Bill 18-22, Noise Control – Leaf Removal Equipment - Amendments.

Our understanding is that Bill 18-22 will prohibit gasoline blowers that farmers rely upon to clean dust and debris off their agricultural equipment.

The Agricultural Reserve was created to ensure that Montgomery County would have productive farmland for food and fiber production for future generations. The County Government continues to propose policies that restricts the farmers ability to produce food in a cost-effective way. Electric blowers are inefficient when used to clean our equipment throughout the day as we travel from one farm. Bill 18-22 would negatively impact our farmers because they cannot rely upon electric blowers that only hold a charge for an hour or two. It is time consuming and cost prohibitive for the farmer to go back to the base operation to recharge the batteries or to purchase numerous batteries so they can continue to plant and harvest their crops. We ask the Council to exempt agricultural producers from the gasoline blower prohibition.

We thank the County Council for this opportunity to present our views to exempt agricultural producers from Bill 18-22, Noise Control – Leaf Removal Equipment – Amendments.

Sincerely,

Michael B. Jamison

Michael Jamison, Chair

Cc: Jeremy Criss, Director, Office of Agriculture

The Economics

of Switching to

Battery-Powered Leaf Blowers:

A Cost Comparison

June, 2022

Santa Cruz Coalition for a
Healthy & Safe Environment

contact@chasesantacruz.org
chasesantacruz.org

Contents

Background

Most leaf blowers and other landscaping tools are still powered by the two-stroke engine, a lightweight but highly polluting machine with heavy impacts on air quality, the health of landscape workers, and communities at large.

In recent years battery-powered equipment has improved in many ways, including power output, battery capacity and longevity, and price. Its ability to fully replace gas-powered equipment for most jobs has led to their adoption by numerous commercial landscape companies, school districts, and municipal parks and public works departments and convinced many cities that there is no remaining reason not to ban their gas-powered predecessors. In 2022, at least 25 cities in California alone have full bans on gas-powered leaf blowers, and more are preparing to. Commercial and municipal landscape crews in these cities are already maintaining properties of all sizes effectively with cleaner and quieter battery-powered equipment.

Still, some policymakers considering whether to regulate gas-powered landscape tools in their city or to transition their municipal landscaping crews to battery power are concerned or uncertain about the cost. While the health and environmental benefits of switching to battery equipment are clear and large, there is little clarity on the economics.

(Gas-powered landscaping tools have battery-powered equivalents, but this study focuses on leaf blowers, due to their ubiquity and outsize impacts.)

Key questions for landscapers, cities, and policymakers include: How much does it cost to replace a gas blower with a battery-powered equivalent? How do their operational costs compare? Can the cost of switching pay for itself? If so, how long does it take, and how much money would it save over time?

A cost comparison could look at both the purchase and operational costs of both gas and battery leaf blowers and compare them. That would answer the question, If one is considering the purchase of a new (or extra) leaf blower, which would be cheaper over time? But this study asks the slightly different question, For landscapers who *already* own gas-powered leaf blowers, **what is the net cost of *switching* to battery-powered blowers and using them over time?**

Costs considered

Much of the cost of a power tool is paid not just at the cash register but also at the gas pump, throughout its entire working life. Just as printers require ink to in order to print, power tools require energy and energy costs money.

So the question of whether switching to battery-powered leaf blowers will cost more money than continuing to use gas-powered ones requires also considering the *cost to operate* them, year in and year out.

Santa Cruz C.H.A.S.E. calculated the purchase and operational costs of two sets of commercial-grade leaf blowers of comparable power output in two different operational scenarios. The purchase price of the gas blowers was excluded, to reflect the assumption that the landscaper already owns the gas blower.

Costs Considered in Analysis		
	Gas-powered	Battery-powered
Purchase of new equipment:	—	Battery leaf blower
	—	Extra batteries, charger, etc.
Ongoing operational inputs:	Gasoline	Electricity
	Oil	Future battery replacement, if applicable
	Yearly maintenance	NA

Operational Scenarios

Professional and municipal landscapers maintain a range of property sizes, from small yards and city properties to office parks and large recreational parks, and use leaf blowers for different lengths of time each day. To capture this variation, we considered two scenarios: one in which the power of the gas and battery blower is suitable for mid-sized properties and the blowers are run for three hours per day, and another in which the power is suitable for large properties and the blowers are run for five hours per day.

These are the scenarios considered and the blower models analyzed:

	Gas-powered	**Battery-powered**
Scenario A		
Model	Husqvarna 525BX	EGO LB7654
Power output (at nozzle)	459 cfm, 192 mph	580 cfm, 200 mph
Battery	NA	2x BA2800T (280 Wh)
Usage	3 hours per day	3 hours per day
		
Scenario B		
Model	Stihl BR 500	Stihl BGA 200
Power output (at nozzle)	544 cfm, 207 mph	553 cfm, 188 mph
Battery	NA	1x AR 3000 L (1,522 Wh)
Usage	5 hours per day	5 hours per day
		

Results

The two charts below show the costs of switching to the battery-powered leaf blower (green line) and of continuing to use an existing gas-powered blower (red line).

The y-coordinate (height) of the green lines at year zero reflects the initial cost of the battery blower and battery equipment. The red lines begin at $0, reflecting no initial cost for continuing to use the gas blower.

The height of the lines across time reflects the added cost of the operational inputs mentioned above. The steepness of the red lines reflects the significant ongoing cost of gasoline to the operation of a gas blower. The green lines slope up as well, but very gradually, as the cost of the electricity which charges the batteries is relatively small. The brief upturn in the green line at year three in Scenario A reflects the purchase of two new replacement batteries (which may not be necessary).

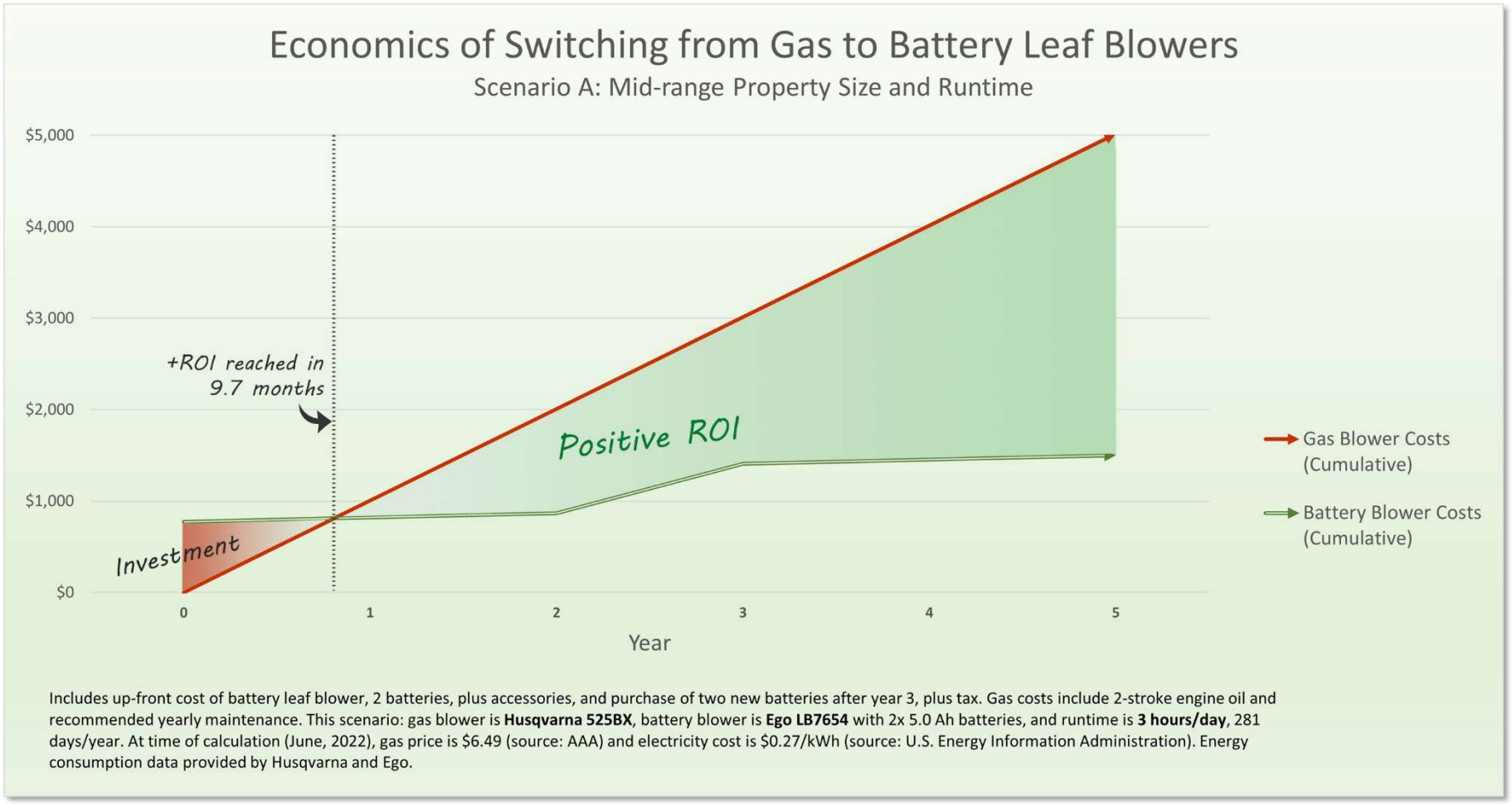
The costs reflected by the lines are cumulative. So the cost displayed at year two, for example, is not what the landscaper would have paid *in* year two, but in total after two years. This allows the visualization of the point in time at which positive return on investment (ROI) is reached.

The point of intersection of the two lines is when the overall cost of switching to the battery blower is *less* than the cost of continuing to use the gas blower. At that point, the purchase of the battery equipment has been recouped. And after that point, the growing gap between the lines reflects the increasing money saved by switching to the battery blower.

Scenario A: Mid-range Property Size and Runtime

In the first scenario, the up-front cost of the battery equipment is $772, including tax. **Positive return on investment is achieved in 9.7 months.**

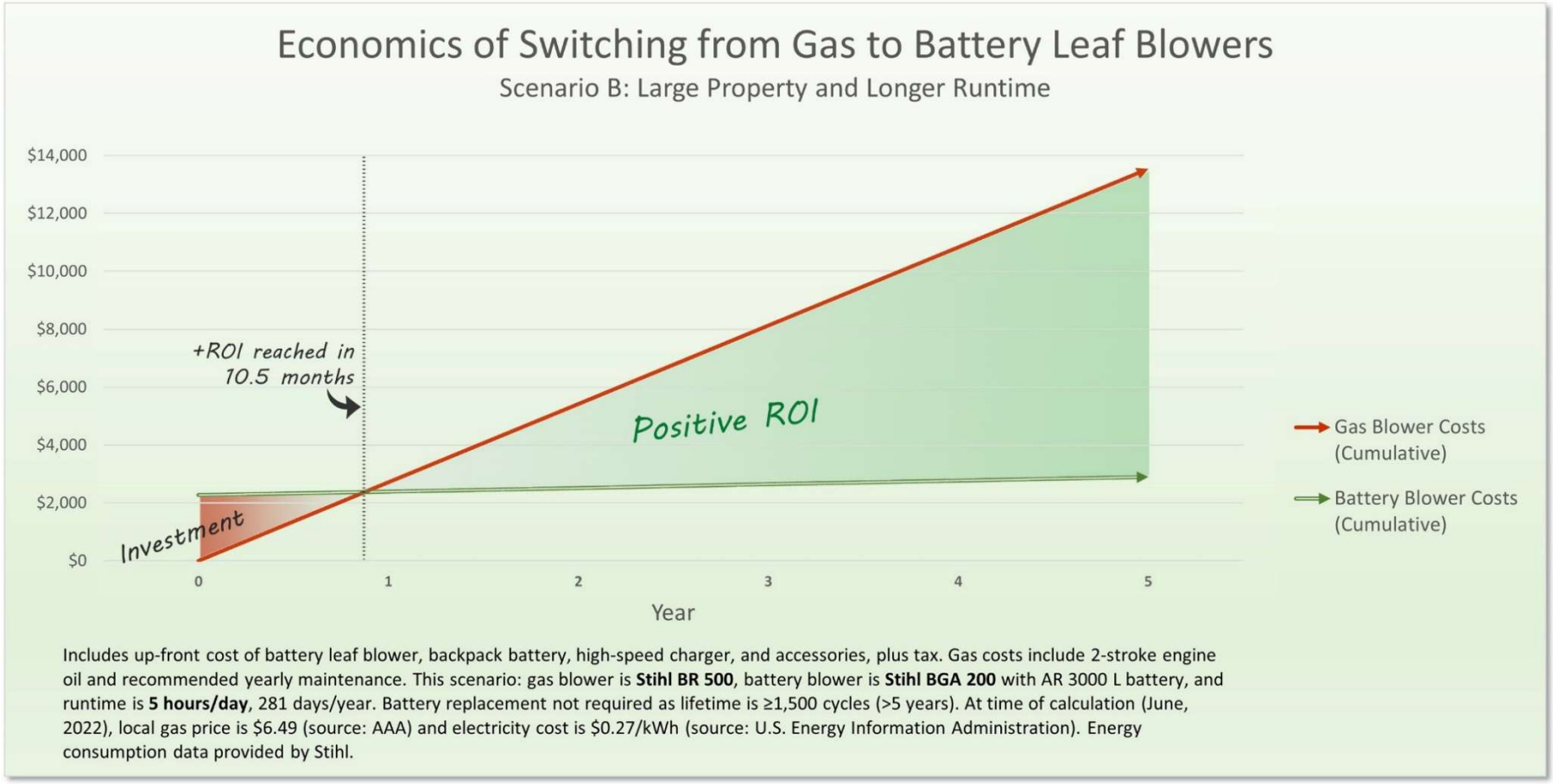
By the end of the second year, switching to the battery blower would already have saved $1,142.



Scenario B: Large Property and Longer Runtime

In the second scenario, the up-front cost of the battery equipment is $2,261, including tax. **Positive return on investment is achieved in 10.5 months.**

By the end of the second year, switching to the battery blower would already have saved $2,904.



The Stihl battery blower and backpack battery selected for Scenario B are in many ways top-of-the-line, so their initial purchase price is high compared to most other battery equipment. But its power rivals that of the commercial backpack blower, the high-capacity battery lasts about five hours, and the battery is mounted on a backpack so the weight distribution is comfortable and familiar. Despite the higher up-front cost, it still achieves positive return on investment quickly—in 10.5 months. And after that, the savings (or increase in annual profits) is serious—over $2,500 per year.

Summary of Results

	Leaf blower specs				Cost over 5 years				
	Air Volume (CFM)	Air Velocity (MPH)	Noise dB(A)	Equipment Price, New[1]	Scenario Usage	Total cost[2]	$/year, annualized	**Time to Pos. Return on Investment (ROI)**	**Avg. annual savings after ROI**
Husqvarna 525BX gas blower	459	192	92	($317)	3 hrs/day, 281 days/yr	$5,017	$1,003	-	-
EGO LB7654 battery blower + 2x 280Wh batteries	580[3]	200	64	($772)		$1,501	$300	**9.7 months**	**$858**
Stihl BR 500 gas blower	544	207	65	$590	5 hrs/day, 281 days/yr	$13,541	$2,708	-	-
Stihl BGA 200 battery blower + 1,522Wh backpack battery	553	188	59	$2,261		$2,889	$578	**10.5 months**	**$2,583**

[1] includes tax and all required accessories; cost of new gas blowers excluded from analysis, included here for reference

[2] includes cost of new battery equipment; excludes cost of gas blower (assumes already owned)

[3] delivers 765 CFM on turbo

Methods

As noted in the background section, the overall cost is comprised of the purchase price of equipment plus ongoing operational costs.

Initial purchase cost

Gas-powered

For the gas-powered leaf blowers, the current purchase price was excluded as the analysis calculates the cost of *switching* from gas- to battery-powered equipment; the gas-powered leaf blower is already owned.

However, for the sake of comparison, the cost of the two gas blowers in scenarios A and B were $317 and $590, respectively, including tax (see summary of results on prior page). If a landscaper has to replace a broken leaf blower with a new gas blower, or buy an extra one, this of course would need to be added in any comparison with battery-powered blowers.

Battery-powered

This amount includes the new battery-powered leaf blower, plus enough extra batteries to last a full day of use (three or five hours, depending on scenario) *without recharging*, plus required accessories, plus optional fast charger. (Many battery blowers are sold as part of a kit which includes one battery, a charger, and necessary accessories.)

The cost of equipment was the lowest price found locally or online at the time of the study (June, 2022), and includes sales tax.

Annual operational costs

Gas-powered

The annual cost to operate the gas-powered leaf blowers was found by first determining the hourly cost of consumable inputs (gasoline and oil).

The main operational input is gasoline, the cost of which depends on the amount used and the local price of gasoline. Oil is also required for two-stroke engines. The engines also require periodic maintenance (approximately annually) to keep them in working order, including replacement of the spark plug, air filter, and fuel filter.

The hourly cost of gas used was found by first taking the average fuel consumption rate of each gas blower (found in manufacturer-published data) and multiplying by the local cost of regular unleaded gasoline, which at the time of this report is $6.49 per gallon in Santa Cruz County (source: AAA). (The gas price was divided by 128 to convert from gallons to ounces.) The product was then multiplied by 49/50 to allow for the addition of oil at a 1:50 ratio.

Hourly cost of gas ($)	=	*Fuel consumption rate (fl. oz./hr)*	*x*	*Cost of gas ($/gal) ÷ 128*	*x*	*49/50*

Then the cost of oil was added; at a recommended 1:50 ratio, 1/50 of the fuel volume consumed was multiplied by the price of two-stroke engine oil.

Hourly cost of oil ($)	=	*1/50*	*x*	*Fuel consumption rate (fl. oz./hr)*	*x*	*Cost of oil ($/fl. oz.)*

The resulting hourly cost of inputs was then multiplied by the number of hours of use per day (three or five, depending on the scenario), and the number of days of use per year (assumed a schedule of 5.5 days per week x 51 weeks per year = 281 days per year) to arrive at the annual cost of fuel and oil consumed.

Annual cost of consumable inputs ($)	=	*Hourly cost of gas ($/hr)*	+	*Hourly cost of oil ($/hr)*	*x*	*Hours of operation per year*

Finally, the cost of annual two-stroke engine maintenance was added ($150/year at the local small-engine repair shop), resulting in the total annual cost of operation.

Annual operational cost ($)	=	*Annual cost of gas and oil ($)*	+	*Annual maintenance ($)*

Battery-powered

The main operational inputs are electricity, the cost of which depends on the amount used to charge the batteries and the local cost of electricity and, depending on the battery's expected longevity in terms of recharge cycles, potentially the purchase of new batteries after x years. (Battery blowers do not require significant maintenance as they have a simpler design and no carburetor or fuel filter.)

The energy consumption rate of the battery blowers was found by taking the battery content (in kWhs), dividing by manufacturer-published data on the runtimes of the battery/blower combination, and then adding 10% to account for the energy lost in the charging of batteries.

Energy consumption rate (kWhs/hr)	=	*Battery content (kWh)*	÷	*Battery runtime (hrs)*	*x*	*1.10*

The hourly cost of consuming that electricity (running the battery blower) was then calculated by multiplying by the local cost of electricity. At the time of this report, this was $0.27/kWh (source: U.S. Energy Information Administration).

Hourly cost of operation ($)	=	*Energy consumption rate (kWhs/hr)*	*x*	*Cost of electricity ($/kWh)*

As with the gas blower calculations, the resulting hourly cost of operation was then multiplied by the number of hours of use per day (three or five, depending on the scenario), and the number of days used per year (281) to arrive at the annual cost of electricity consumed.

Annual cost of electricity ($)	=	*Hourly cost of electricity ($/hr)*	x	*Hours of operation per year*

Finally, because rechargeable batteries lose their ability to hold a full charge over time, the analysis treats them as a consumable operational input and considers the need to replace them with new batteries at a later date.

In Scenario B, the high-capacity backpack battery is rated by the manufacturer (Stihl) at 1,500 charge cycles. Even if its capacity dropped significantly after this point, the battery would have lasted longer than the span of this analysis (5 years).

In Scenario A, the batteries are rated by the manufacturer (EGO) at 1,000 charge cycles. At this work schedule, they would maintain their capacity for at least 3 ½ years. To be conservative, this analysis assumes no further usability and therefore adds the cost of (two) new batteries after year three. (This is why the green line on the chart turns upward at year three before resuming its previous slope.)

So the cost of replacement batteries (if indicated by work schedule and charge rating) is treated as an operational cost and is added to the cost of electricity.

Annual operational cost ($)	=	*Annual cost of electricity ($)*	+	*Cost of new batteries after x years, if needed ($)*

The annual operational cost was added to the up-front cost of new battery equipment to arrive at the overall cost of switching to battery leaf blowers, at each year up to year five.

Rate of Return

This study also calculated the rate of return of switching to battery blowers. This is a common metric to determine the level of success of an investment, and takes into account the difference between the initial investment amount and its ending value after a period of time. So if a property was purchased for $1 million and was sold for $1.5 million five years later, the profit ($500,000) is a rate of return of 50%. And since it took 5 years to realize, it represents an average annual gain of 10%. (If the investment were one that compounds over time or pays dividends as a percentage of the invested amount, a geometric mean would be used and the annual growth rate would be lower than 10%; but the total gain would still amount to 50%.)

A similar calculation can be applied to the case of switching to battery-powered tools. The profit is the difference between what the landscaper would have paid to operate the gas tool and what they would actually pay to operate the new battery tool, totaled over the five-year time period. This is analogous to profit from the sale of an appreciated stock or property because it is money in the bank which would not

be there if the investment were never made. And the cost of the investment is the cost of the new battery equipment. The annual average is arithmetic rather than geometric because the expected gains (savings) are the same amount each year and do not compound.

$$\textit{Avg. annual rate of return (\%)} = \frac{\textit{Five-year operational cost savings (\$)} - \textit{Cost of new battery equipment (\$)}}{\textit{Cost of new battery equipment (\$)}} \div \textit{5 years} \times \textit{100}$$

Assumptions

It should be noted that this analysis is conservative in many ways:

- Landscape businesses already anticipate needing to replace their existing gas blowers when they reach the end of their usable lifespan. But for simplicity, this analysis treats 100% of the cost of (battery) equipment as a new and unanticipated cost. In reality, whatever impact the cost of new battery equipment has on a landscaper's budget, it is effectively reduced by what the landscaper would have paid to replace the existing gas blower at the end of its service life. And the older the existing gas equipment is, the cheaper the true cost of the new battery equipment.
- The cost of new equipment is for one battery leaf blower (or kit) plus required accessories, but companies or cities that want to replace several gas blowers or their whole fleet can likely benefit from volume discounts.
- Electric motors are simpler than gas ones, and likely to last longer before needing replacement.
- It assumes the lithium-ion batteries will need replacing immediately after they have undergone the minimum charge cycles guaranteed by the manufacturer. In practice, they often perform well for much longer.
- Some landscapers already using battery tools recharge their batteries on the go, using customers' outlets or inverters in their trucks. We added the cost of a high-speed charger ($129 plus tax) to the EGO blower in Scenario A, which would allow for even more blowing time if the first battery is charged while the second is in use. The 5Ah battery recharges in 40 minutes. (No advantage would be gained with rapid charging in Scenario B as only one battery is required.)
- The use of gas blowers requires extra time to mix the fuel and oil at the proper ratio and refill the tank periodically. This was not added to the cost of gas use.
- Battery technology continues to get better all the time—longevity increases and prices fall. So the economics of switching are likely to continue to improve at a significant rate. On the gas side, the price of gas is highly volatile (a common landscaper complaint), and is not assumed by economists to decline in the long term like battery prices are.

For all these reasons, the economics of switching to battery-powered leaf blowers are likely even better than this analysis suggests, today and into the future.

Discussion

In either scenario, landscapers recover the initial cost of purchasing a battery-powered leaf blower in less than a year, and achieve significant savings (higher profits) every year after.

The primary reason for this is the large difference between the cost of gasoline and battery power for the same resulting power output. The differential across time is large enough to dwarf the purchase cost of the battery equipment.

It should be noted that the short time to positive return on investment does not rely on historically high gas prices. Analysts don't expect oil prices to fall significantly any time soon, but even if the local price of gas were to drop by 40% tomorrow, it would delay the time to positive ROI for battery-powered blowers by only about four months.

(As mentioned, this study looks at the cost of switching from an existing, operable gas leaf blower to a new battery-powered one. The economics are even better in the case of adding another leaf blower, as when landscapers have to replace an inoperable gas blower or want to expand their fleet. In these cases, the time to positive ROI is even shorter and the savings higher as they would have to add the cost of a new gas blower to the gas-powered side of the equation.)

When considering the conversion to battery leaf blowers as an investment, the rate of return is far higher than can normally be obtained in other ways. The average annual rate of return for switching to battery equipment in the two scenarios is 91% and 94%, respectively. It is hard to find a better investment anywhere. Even the broad stock market, one of the best and most reliable investments for the last 25 years, has returned "only" about 10% per year, on average (or slightly higher using arithmetic mean).

The high rate of return and short time to positive ROI also make it easier for a landscaping business of any size to finance the initial cost and to spread it out over time (see section on financing below).

Switching to battery power benefits landscape companies in even more ways—economic and otherwise—beyond what is considered here. It reduces the significant health impacts of two-stroke engine exhaust and noise on the company's workers, who operate the machines for hours each day. This in turn means happier, more productive, and more reliable workers. It also increases the workers' comfort, since they don't have to suffer the noise and high vibration of gas blowers or return home each day smelling like gasoline. And it benefits the company's clients, who also no longer have to suffer the fumes and noise. It could even increase a company's pool of potential clients, as some people avoid hiring landscape maintenance companies because of the expected noise and fumes.

And when a company switches to battery-powered leaf blowers, it immediately improves the economics of switching to other battery-powered landscaping tools too, like string trimmers, edgers, hedge trimmers, etc. The major power tool brands make batteries that work across many of their electric tools. A landscaper can remove a battery from a leaf blower, insert it into a hedge trimmer, and continue working. Since there is no need to buy new batteries for every new battery-powered tool, the cost of buying other battery tools is lower and landscapers can expand their fleet of battery tools as the savings on fuel accumulates further cash reserves.

Despite the highly favorable economics of battery-powered blowers, most landscape companies have not yet made the switch. Reasons include the belief that power or battery longevity are insufficient (the most powerful leaf blowers available are still gas-powered, but even large properties don't require the highest output blowers); the reluctance to purchase equipment that is more expensive than previously-purchased gas blowers (when you include the cost of extra batteries), combined with an underappreciation of the magnitude of savings to be realized; and simple inertia—the tendency to embrace the status quo and avoid change until it is required.

However, many landscapers who are aware of the favorable economics of battery-powered leaf blowers have already made the transition. Santa Cruz C.H.A.S.E. maintains a directory on its website of several such companies. As time passes, and as more cities take proactive steps to reduce air pollution and fight climate change, more landscape companies and municipal maintenance crews are switching to battery power. But absent regulation or major campaigns, wider adoption of new technologies can be slow.

Financing the Transition to Battery Power

The economics of switching to battery equipment are in fact even easier than this analysis shows, for reasons beyond the conservative assumptions mentioned. This study assumes the cost of new equipment will be fully paid, out of pocket and up front, but there are many ways businesses of all sizes commonly finance new purchases and investments, enabling even the smallest of companies to acquire new equipment immediately.

Small business loans, for example, are perfectly suited for investments in equipment that is expected to lower costs or increase profits. Even a loan with terms of 13% interest (the upper end of the U.S. Small Business Administration's interest rates for microloans) could be easily repaid, with interest, within a year because the first-year savings from switching from gas to battery is greater than 113% of the cost of the equipment, in both of the scenarios analyzed. And all the savings after the loan repayment are essentially free money.

There are also financing options for companies unable or unwilling to apply for a loan. For example, large retailers like Home Depot commonly offer interest-free financing on new purchases for periods like six months. The savings at the end of six months would amount to more than half of the cost of the new equipment, so the landscaper would already have about 60% of the cost of new battery equipment in hand.

There are numerous other ways to smooth the transition for landscaping companies: manufacturer incentives; rent-to-own, low-interest offers, and other retail purchase incentives; and battery equipment rental, which allows the savings on gasoline to build until it reaches the purchase price of new equipment.

Landscapers can also add a temporary surcharge to customers' bills, and remove it when it has paid for the new equipment. Many businesses already add a temporary "gas surcharge" when gas prices are high, which customers are accustomed to and understand. And businesses are much more amenable to charging a temporary surcharge when there is a level playing field among their competitors, as there is when a policy applies city-wide. This also advances equity as it ensures that the people who are chipping in for the transition—the customers—are the ones who are benefiting from the landscaping service.

There are also non-commercial options for landscapers and municipalities.

California passed AB 1346 last year, which bans the sale of new small, off-road engines like gas-powered leaf blowers by 2024. (It doesn't ban their use, so without local regulation, existing gas blowers will still be in use for years.) The bill came with an initial $30 million to help small landscaping businesses make the transition, and lawmakers may allocate more such funding in the meantime.

Finally, grants that fund programs to improve local air quality and reduce greenhouse gas emissions are commonly offered through air pollution control districts, community choice aggregators, government agencies, and other institutions. These are becoming more common as electrification of the highest-polluting machines and technologies is increasingly recognized as a cheap and easy path to fighting climate change and achieving cleaner air.

Leaf Blower Incentive Program Study and Model Recommendations

Updated Sept 18 2023

Leaf Blower Incentive Program (LBIP) Program Development

Progress in response to Council interests:

DEP conducted research on programs implemented by state and local jurisdictions around the country to develop an incentive program that could be implemented in Montgomery County and that would reduce the impact of a gas-powered leaf blower ban on small, fiscally constrained landscapers.

Key points of current proposed rebate program:

1. Starting the rebate program to correspond to the implementation of the ban on the sale of gas-powered leaf blowers, and in advance of the effective date of the ban on use of gas-powered leaf blowers
2. Placing a time-limit (e.g., two years) on the rebate program and on the number of rebates that a business or residence would be eligible for
3. Making rebates available for both County residents and businesses/landscapers, with higher rebates to small businesses/landscapers
4. Requiring trade-in of an existing gas-powered leaf blower in order to be eligible for a rebate

Leaf Blower Incentive Program (LBIP) Program Development (Continued)

Key points of current proposed rebate program:

5. Requiring mailing addresses in Montgomery County to be eligible for the rebates, but not requiring proof of citizenship or immigration status
6. Conducting extensive outreach and education to ensure that residents and businesses understand the effective dates associated with the ban, as well as how to apply for the rebate. We would place particular emphasis on small landscaping companies, and retailers, to educate them both on the upcoming ban and on how the rebate program works. Outreach program would be sensitive to the diversity of the County in multiple languages.
7. Working with retailers to facilitate access by small businesses to the rebate program, and with community organizations to promote understanding of the rebate program and how to access it.

Steps to finalize rebate program and draft regulations:

- Integrate Council feedback
- Survey industry (local retailers, manufacturers, and landscaping companies)

Launch and Timeline (Tentative)

Sept 2023

Council passes ordinance banning the sale and use of gas powered leaf blowers and authorizes incentive program. Initiate rebate program development.

July 2024

Rebate program begins.

Ban on sale of gas powered leaf blowers goes into effect.

January 2025

Ban on use of gas powered leaf blowers (6 months after ban of sale goes into effect).

July 2026

Rebate program ends.

Regulations and Outreach (Tentative)

Sept 2023

DEP surveys industry to finalize rebate program design

Jan 2024

Regulations sent for public comment

Feb 2024

Public comment review starts

March 2024

Regulations approved by Council

Outreach begins on ban and rebate

Program Governance –Rebate Costs

	Commercial	Commercial: Revenue Qualifying*	Residential
Average - maximum equipment price (pre-tax)	$1,000 - $1,300**	$1,000 - $1,300**	$200 - $350***
Peer Organization Rebate Range	$50 - $500	-	$25 - $350
Recommended rebate amount	50% of average price	75% of average price	50% of average price
Recommended rebate amount	$500	$750	$100
Annual rebate limit	2	2	1
Estimated rebates/year	187	148	955
Estimated given in rebates/year	$93,500	110,000	$95,100

*__Revenue Qualifying__ – Self-certified by applicant. Those that generate annual revenues of less than $250,000 or employ less than 5 employees.
**Commercial backpack leaf blower with two batteries and charger
***Residential handheld leaf blower with battery and charger

Estimated Costs: Ban & LBIP

Fiscal Impact Statement (FIS) Ban	FY24	FY25	FY26
Outreach/Education	$220,000	$200,000	$120,000
Administrative Costs	$25,000	$75,000	$75,000
Subtotal – Ban FIS	**$245,000**	**$275,000**	**$195,000**
LBIP Rebate Program Costs	**FY24**	**FY25 - Year #1 Rebates**	**FY26 – Year #2 Rebates**
Rebate Costs	$ -	$300,000	$300,000
Contractor/Program Costs	$150,000	$150,000	$150,000
Already Programmed DEP Funds	***$100,000***	***$100,000***	***$100,000***
Subtotal - LBIP	**$50,000**	**$350,000**	**$350,000**
TOTAL NEW FUNDS: Ban & LBIP	**$295,000**	**$625,000**	**$545,000**

FIS BAN includes estimated costs for:

- Outreach/education commensurate pesticide law: mailing to all addresses in Montgomery County. Outreach and education includes graphics and outreach materials in 6 languages, website additions, digital/print/radio/ bus/metro ads, social media posts, mailings.
- Administration/oversight of contracts, outreach, education, and public communication,
- Although not reflected here, additional contract costs for DGS landscape contracts ($15k for 6 years).

LBIP Rebate Program Costs: Direct Rebate Costs + Additional administrative costs for outreach/education; rebate application and tracking database; rebate/voucher/trade-in/funds tracking, participant communication, retailers/distributers relationships; running events, etc. FY24, 25, 26 DEP budgets include $100,000 programmed each year for administrative cost.