



Committee: T&E
Committee Review: At a future date
Staff: Ludeen McCartney-Green, Legislative Attorney
Purpose: To receive testimony – no vote expected
Keywords: #LeafBlowers #NoiseControl

AGENDA ITEM #9
September 20, 2022
Public Hearing

SUBJECT

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

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

EXPECTED ATTENDEES

Members of the Public

COUNCIL DECISION POINTS & COMMITTEE RECOMMENDATION

- N/A; to receive testimony

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; and
 - (3) generally, revise the law regarding noise control.

SUMMARY OF KEY DISCUSSION POINTS

- N/A

This report contains:

Staff Report	Pages 1 - 2
Bill 18-22	© 1
Legislative Request Report	© 4
Fiscal Impact Statement	© 7
County Executive Memo	© 13
Racial Equity and Social Justice Impact Statement	© 15

Alternative format requests for people with disabilities. If you need assistance accessing this report you may [submit alternative format requests](#) to the ADA Compliance Manager. The ADA Compliance Manager can also be reached at 240-777-6197 (TTY 240-777-6196) or at adacompliance@montgomerycountymd.gov

MEMORANDUM

September 15, 2022

TO: County Council

FROM: Ludeen McCartney-Green, Legislative Attorney

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

PURPOSE: Public Hearing – to receive testimony

Bill 18-22, Noise Control – Leaf Removal Equipment – Amendments sponsored by the Lead Sponsor Council President at the Request of the County Executive, is scheduled to be introduced on June 21, 2022. A public hearing is tentatively scheduled for September 20 at 1:30 p.m.¹ The fiscal impact statement is ©7.

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; and
- (3) generally, revise the law regarding noise control.

BACKGROUND

The purpose of this bill is to ban gas-powered leaf blowers to address environmental, noise, and health concerns raised by County residents. The Department of Environmental Protection (DEP), in 2021, has received approximately 62 formal complaints as a result of noises from leaf blowers. *See* Legislative Request Report ©4.

County Code §31B-9 requires the noise level of a leaf blower must not exceed 70 dba at a distance of 50 feet. However, it has been increasingly difficult for DEP to measure and enforce

¹ #noisecontrol#leafblower

leaf blowers that no longer have original manufacturer labels. As cited in the County Executive Memorandum:

“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.” ©13.

There are more than 170 communities that have regulations related to leaf blowers with more than 100 prohibiting or limiting their use. Both Washington D.C. and Chevy Chase Village have bans on leaf blowers that went into effect on January 1, 2022. 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 the determination of an appropriate phase-out of gasoline equipment, but regulation timelines are not yet proposed. *See* Legislative Request Report ©4.

BILL SPECIFICS

Bill 18-22 would prohibit the sale of a combustion engine-powered handheld, backpack, or walk-behind leaf blower or leaf vacuum *six months* after the legislation is enacted.

Further, it would prohibit the use of combustion engine-powered handheld, backpack, or walk-behind leaf blowers or leaf vacuums *a year* after the legislation is enacted.

Bill 18-22 would also authorize DEP to establish a reimbursement program by providing a partial credit, subject to regulations, for residents and businesses who purchase an electric leaf blower and in exchange return the gas-powered leaf blower or leaf vacuum to the County. To receive the credit, the gas-powered leaf removal equipment must be purchased prior to a certain date.

Generally, two witnesses are required for an enforcement officer to issue a noise citation under Chapter 31B. However, under this bill, a person may be subject to a Class A fine (up to \$1,000), if the Director of DEP or designee receives a single noise complaint, with photographic evidence, demonstrating the use of a combustible leaf blower or leaf vacuum.

This packet contains:

	<u>Circle #</u>
Bill 18-22	1
Legislative Request Report	4
Fiscal Impact Statement	7
County Executive Memorandum	13
Racial Equity and Social Justice Impact Statement	15

Bill No. 18-22
Concerning: Noise Control – Leaf
Removal Equipment - Amendments
Revised: 6/24/2022 Draft No. 1
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; and
- (3) generally, revise the law regarding noise control.

By amending

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

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

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

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

2 **31B-9. [Leafblowers] Leaf removal equipment.**

3 * * *

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

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

10 (g) *Reimbursement.* The Director may establish a time-limited program
11 based on criteria set by regulation to partially reimburse County residents
12 and businesses that purchase electric leaf blowers or leaf vacuums to
13 replace combustion engine-powered leaf blowers or leaf vacuums.

14 (1) To receive reimbursement under subsection (g), an owner of a
15 combustion engine-powered leaf blower or leaf vacuum must
16 apply to the Director in a form prescribed by the Director and
17 deliver the combustion engine-powered leaf blower or leaf
18 vacuum to the County.

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

22 **31B-12. Enforcement and penalties.**

23 * * *

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

27 (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. 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. 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 exacerbated 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

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
<u>Education and Outreach</u>		
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	
<u>Equipment Replacement</u>		
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	
<u>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.</u>		
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	
<u>Contractual Changes</u>		
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.
<u>Transition Grants</u>		
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	
<u>Personnel Costs</u>		
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.
<u>Operational Cost Avoidance</u>		
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?

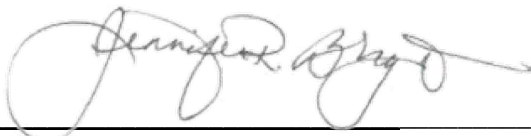
Not applicable.

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
Steve Martin, Department of Environmental Protection
Gus Montes de Oca, Department of General Services
Jeffrey Knutsen, Department of Transportation
Lynne Zarate, Department of Transportation
Amanda Aparicio, Montgomery County Department of Parks
Rich Harris, Office of Management and Budget



Jennifer R. Bryant, Director
Office of Management and Budget

2 - 22 - 22

Date



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 *Marc Elrich*

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

March 15, 2022

Page 2 of 2

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

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

RESJ Impact Statement

Bill 18-22

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

RESJ Impact Statement

Bill 18-22

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.

RESJ Impact Statement

Bill 18-22

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.

RESJ Impact Statement

Bill 18-22

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 Alborno, Introduction of Bill 18-22, March 15, 2022

RESJ Impact Statement

Bill 18-22

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_november_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