

TC Noise questions

Draft 6/10/19

1. Battery vs Gas Equipment Performance and Economics

Q1. Do we know the relative cost differences between battery systems and gas-powered systems?

A1a A quick online check revealed that the average purchasing difference between owning gas-powered leaf blowers vs. battery-powered or electrical equipment is approximately \$100 per item. However, battery-powered blowers are cheaper to run and maintain than gas-powered blowers over time. [DC Ban Transcript (Kline) p. 7]

A1b. More manufacturers are introducing battery-powered blowers as alternatives and prices are coming down. [Transcript (Kline) p. 7; Fallows p. 5-6].

A2d. As an example, Strosnider's Hardware Store sells more battery-powered leaf blowers than gas-powered blowers, and the prices are roughly comparable, though both battery-powered and gas-powered options are sold in varying degrees of capacity. See <https://www.acehardware.com/departments/lawn-and-garden/outdoor-power-equipment/leaf-blowers?pageSize=60>.

Q 2. What is the comparative efficiency or effectiveness of gas-powered vs battery/electric blowers?

A2a. When our committee conducted some informal interviews of various landscaping companies, some indicated that battery power leaf blowers are less powerful and therefore would take more time which would increase labor costs. However, other landscaping companies, which have adopted battery-powered technology testified that it is just as powerful as gas-powered engines.

A2b. In addition, current lawn care companies that use battery leaf blowers for large acreages and for sustained periods of time said that they can accomplish the work in the same amount of time. [Transcript (Sainburg) p. 5; Transcript (Kline) p. 7, 10; Elkins2, p. 4]. To cover many lots in one day, landscapers that use battery powered equipment have informed us that they need to travel with multiple charged batteries in their trucks to swap in when the old batteries run out. The effort and time it takes to swap out batteries can be compared to the effort and time needed to refuel gas-powered equipment, though without the risks of dealing with liquid gas.

A2c. Over 140 lawn care companies use blowers other than gas-powered blowers, and they are profitable. [Transcript (Banks) p. 20] Five of these successful lawn care companies testified or submitted statements to the DC Council. [Transcript (Sainburg) p. 5; Transcript (Kline) p. 7; Banks2, p. 11]

Q3. Do we know lawn service price comparisons between firms that use battery systems vs. gas powered systems

A3 We don't have specific local data on this yet. Some firms say they would not charge more while others imply that they might.

Q 4. What is the difference in noise emitted between gas and battery/electric?

A4a. Gas-powered leaf blowers are noisier than battery-powered blowers, even when their labeled noise levels are the same.

A4b. Gas blowers have a unique and loud low frequency noise that makes them sound much louder than battery-powered blowers, . [Pollock2; Fallows2,p. 2; Small2 (Video)]

A4c. Even gas blowers that are rated by the industry as emitting the same 65 decibels as battery blowers are significantly noisier. [Transcript (Pollock) p. 16; Pollock2, p.8-9; Small p.2]

2. Landscape Company Impacts

Q1. I worry about the small independent yard workers who cannot afford to buy new electric, quiet equipment. Is there a way to consider their needs as well?

A1a. Many small, independent yard clean up companies are already operating outside the bounds of OSHA and Montgomery County requirements as they do not provide hearing protectors for their workers and/or are operating more than one leaf blower at the same time. Battery powered equipment would help prevent landscape workers from experiencing permanent hearing loss as well as health problems related to air pollution from gas combustion.

A1b. Many gas leaf blowers impact the operator's ears at 100 decibels or more. [Transcript (Johnson) p. 14; Transcript (Banks) p. 19; Banks2, p. 4]. 91 decibels for 2 hours or 100 decibels for only 15 minutes a day can result in permanent hearing loss according to the CDC. Adverse effects from noise include cardiovascular impacts, and effects on the immune system and on development. [Fink, p. 12; Banks, p. 2, 10, Elkins2, p. 3; Fallows2, p. 7]

A1c. Workers sometimes walk into the path of approaching traffic since they cannot hear the traffic because of the noise. [Transcript (Small) p. 26]

Q2 Are we putting landscape companies out of business because some people in town cannot tolerate some noise?

A2a. No. Landscape companies will have several years to adjust their equipment mix and work practices. Leaf blowers generally have a life span of 5-10 years, so a number of landscapers will be purchasing new leaf blowers during the 2.5 year phase-in. We could assist landscapers in purchasing affordable new technologies by negotiating group discounts for battery-powered equipment.

A2b. We could potentially assist another local business into the bargain by discussing a group discount option for battery-powered equipment with Strosnider's hardware store.

A2c. This is not a matter of tolerating some noise. The issue concerns the health and wellbeing of all of our residents – from pre-school aged children at home to residents that work from home to residents convalescing from illness or surgery to our older residents – all of which are impacted by this noisy equipment on a weekly (sometimes daily) basis. We have had residents explain that even with noise canceling headphones on, they are still able to hear 2-stroke gas powered leaf blowers on their street as well as other streets.

Q3. How many options do residents have today to use landscaping companies that use battery powered systems?

A3 Residents have been provided with a listing of landscaping companies that utilize battery powered equipment via the Shades of Green:
<http://www.townofchevy Chase.org/162/Hiring-Quiet-Landscaping-Contractors>

3. Education Program

Q1. What education programs can we advance so that people know where to look for options?

A1a. We can hold a series of demonstration workshops prior to Spring (Feb) and Fall (Oct) Cleanup times. These workshops will feature facts about battery-powered equipment, demonstrations of real equipment, as well as potential discounts for on-site purchases. Some of the workshops could be held in conjunction with other neighboring jurisdictions who have expressed an interest in working with us on this issue.

A1b. In addition, we can work with the aforementioned list of green landscaping companies so that introductory pricing is offered to Town residents (lawn mowing, etc.).

A1c. We plan a series of communications in Town information channels to educate residents and landscape companies about the benefits of switching to battery powered equipment.

4. Quiet Time Schedule Changes

Q1. If we compress the hours during which leaf blowing will be allowed, will we just have a lot more noise in a shorter period of time?

A1. Yes, that may well be the short-term result. We would not expect a small schedule change to force people to immediately switch to battery powered equipment. But in the longer run, the "market signal" of a gradually shrinking operating time window plus the looming ban in multiple jurisdictions will nudge people to switch equipment.

Q2. Should we have different quiet time schedules for weekdays, weekends, and holidays?

A2. No. It is simpler and clearer to have the same quiet time schedule for every day. That way residents will be less confused and more likely to understand and internalize the schedule.

Q3. Should quiet time restrictions be applied equally to residents, landscape services, Town contractors?

A3. Yes. It is better and fairer to apply the same schedule to everyone, equally. It would be difficult to explain to a resident that they cannot use gas powered equipment when they see a landscaper using loud leaf blowers next door at the same time, and vice versa.

Q4. What are the current quiet time rules?

A4. It is not surprising that most people really don't know the answer to this question, partly because the rules are too complicated. See <http://www.townofchevy Chase.org/128/Noise-Control>

Q5. Would it be better to start off with a small change this year, say quiet time until 9:00 instead of 10:00?

A5a. It is often not that efficient to do leaf blowing in the early morning anyway because leaves wet from morning dew are harder to move with a blower. So foregoing one morning hour of leaf blowing should not be that onerous.

A5b. We could evaluate how the pilot test works this fall and perhaps be more ambitious next year.

Q6. Should we consider reducing operating hours at the end of the day too?

A6. We have been in contact with other Chevy Chase municipalities, who expressed hesitation in expanding quiet hours at the end of the day because some residents get home from work late and then do lawn work. They would not have the option of doing that work earlier in the day.

Q 7. Should the quiet hour expansion apply only to leaf blowers, or other gas powered equipment too.

A7. Leafblowers are the biggest noise problem, so it is important to deal with them first. But it would not be unreasonable to include gas powered lawnmowers, chainsaws, etc. at the same time or at some time in the near future.

5. Impacts on Town Operations

Q1. What would the impact be on Town contractors?

A1a. (from Todd) Our contracts stipulate that work may commence at 8 a.m. on weekdays, which is when our current regulations specify that landscaping activities using power equipment may begin. If we don't allow our contractors to begin work until

10 a.m. or later, this may affect the cost and quality of service. They may need to shift the work day until 6:00 or 7:00 PM, which might disrupt some resident dinner times. Alternatively, if the contractors decide to acquire battery-powered equipment to be able to work earlier than 10 a.m. (or to conform to a total ban), this also could increase service costs and may also decrease service quality if battery-powered equipment is not as efficient or reliable as gas-powered equipment.

Q2. How will the new regulations be enforced?

A2a (from Todd) I am concerned about our capacity to enforce these more restrictive regulations and if, and to whom, fines or stop work orders are expected to be issued (and the reaction this will elicit from residents).

A2b. We probably don't need to do any enforcement this year beyond persuasion, peer pressure, good neighborliness, and some information fliers ("you may not be aware of the Town's efforts to reduce noise and pollution from gas powered leaf blowers – here's some information...")

A2c. Our committee has some specific recommendations for ban enforcement with resident assistance; the company fines would cover administrative costs.

Q 3. What kind of lawn mowers does the Town currently use for maintaining Town property (like the parks, etc)?

A3, Gas powered equipment.

Q 4. When are the landscaping and leaf removal contracts up for bid next? Should the Council consider a proposal that the next round of contracts include a prohibition on use of gas-powered mowers and blowers?

A4. We can look into that, and possibly develop some joint solutions working along with other municipalities.

6. Other Issues

Q1. What other municipalities are considering something like this? Would it be better to wait for them?

A1a DC has already imposed a ban to take effect Jan 1, 20222, unanimously passed by the DC Council.

A1b. And many cities across the country, including at least 25 in California alone, have already mandated this shift.

A1c. Nationwide, many businesses, schools, and 170 municipalities, are making the switch away from gas-powered blowers. [Banks2 p. 1, 6]

Q2. Why not ban other gas-powered equipment in addition to leaf blowers?

A2a. Other types of gas-powered equipment can be loud as well, but most of the complaints we get are about leaf blowers.

