Belfast City Council

PEOPLE AND COMMUNITIES COMMITTEE

Subject:	**Notice of Motion – Trial of the Compact Mechanical Sweeper**
Date:	4th March 2026
Reporting Officer:	Stephen Lenoard, Director of OSS and Resources and Fleet
Contact Officer:	Caroline McGeown, Senior Performance and Improvement Officer

Restricted Reports				
Is this report restricted?	**Yes**		**No**	x
If Yes, when will the report become unrestricted?				
After Committee Decision				
After Council Decision				
Some time in the future				
Never				

Call-in				
Is the decision eligible for Call-in?	**Yes**	X	**No**	

1.0	**Purpose of Report/Summary of main Issues**
1.1	At the Committee meeting on 3 June, Members agreed that officers undertake a trial of the compact mechanical sweeper currently used in the City Centre, within neighbourhood areas to assess how fit for purpose it would be in tackling dog fouling on our streets.
1.2	At the People & Communities Committee meeting on 10 February, members requested an update on the findings from the trial of the compact mechanical sweeper, specifically in relation to its effectiveness in removing dog fouling from streets within the neighbourhoods.
1.3	The purpose of this report is to provide Members with an update on the trial and to present the findings arising from it.

2.0	**Recommendations**
2.1	The Committee is asked to note the content of this report.
3.0	**Main report**
	Context
3.1	Dog fouling remains a persistent and significant issue across Belfast. It is not only unsightly and unpleasant but also poses risks to public health, animal welfare, and the local environment. The matter has been raised at Committee on numerous occasions, reflecting ongoing concerns from Members and the public.
3.2	A detailed report was presented to Committee on 3 June 2025, outlining the complexity of the issue and the range of actions currently being undertaken by Belfast City Council to tackle the issue. At that meeting, 11 recommendations were agreed to strengthen the Council's approach to tackling dog fouling. One of these recommendations stated:
3.3	*"Undertake a trial of the new mechanical sweepers in the City Centre within neighbourhood areas to assess how fit for purpose they would be in addition to the use of Fidos and undertake market research to look at other potential machinery options for neighbourhoods."*
3.4	In response, a trial of this sweeper was carried out between August and November 2025. One trial was conducted in each area of the city, except for the North, which received two trials due to data indicating it experiences the highest levels of dog fouling. In addition, a special one-off controlled trial was undertaken to minimise external variables such as cleansing schedules and new fouling, and to allow direct observation of the machine's capabilities.
3.5	**Trial Methodology** The CNS Performance and Improvement Unit analysed available data and intelligence to identify dog fouling hotspots across the city. These locations were then validated by Area Managers, who selected the specific streets to be included in the trial. In total, 84 streets were selected for the Area trials. The special controlled trial focused on two known hotspot locations for high volumes of dog fouling in the North: Whitewell Road and Serpentine Road.
3.6	The Quality Monitoring Team conducted a pre-survey and post-survey for each trial, recording the number of dog fouling incidents observed. Data was captured using Microsoft Forms and analysed using Excel pivot tables.
3.7	In addition to the monitoring surveys, service user surveys were undertaken to gather the views and experiences of the operatives using the machines. This provided qualitative insight into operational challenges, usability, and other factors not captured through the quality monitoring data.
3.8	**Variables Affecting the Area Trial Results** Several factors may have influenced the outcomes of the Area trials: • Operatives received only one day of training, meaning they were not yet fully proficient in operating the machine. • Streets may have been cleansed using other methods during the trial period, making it difficult to isolate the impact of the sweeper alone.

- There was a delay between the pre- and post-surveys, during which additional cleansing or new dog fouling may have occurred. In later trials, this was tightened by scheduling the pre-survey the day before the trial and the post-survey the day after.

3.9 These variables limited the ability to draw definitive conclusions from the Area trials alone.

Controlled Trial

3.10 To address these limitations, a special one-off controlled trial was undertaken. In this trial:

- An experienced operative from the City Centre team operated the sweeper.
- The Quality Monitoring Officer completed the pre-survey immediately before the sweeper was deployed and the post-survey immediately after cleansing was completed.
- No other cleansing methods were used, ensuring that results reflected the performance of the sweeper alone.
- Given the short timeframe, it is considered unlikely that new dog fouling occurred during the trial.
- Senior Officers from the Performance and Improvement Team and the Cleansing Team were present to ensure no external factors influenced the results and to observe the machine's capability in practice.

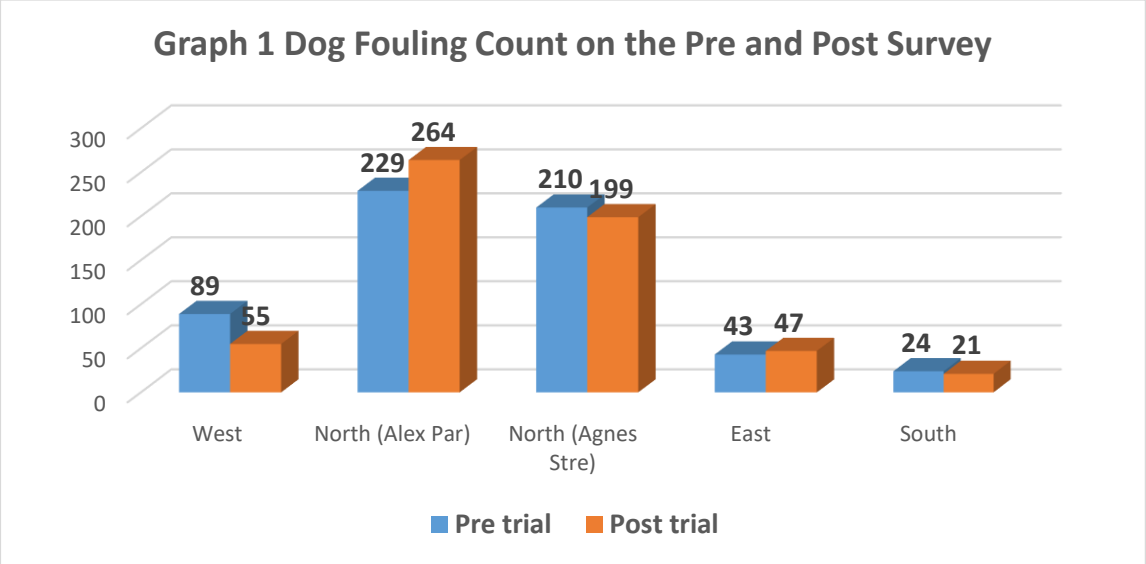
3.11 This controlled approach provided a clearer and more reliable assessment of the machine's performance without the influence of external variables.

Findings from the Area Trials

3.12 Graph 1 shows the difference in dog-fouling observations recorded during the pre- and post-intervention quality monitoring surveys. Three out of the five trial areas showed a positive change, with a reduction in the number of dog fouling incidents observed. However, the overall reductions were generally modest, except for the West, which demonstrated a significant decrease of nearly 50%.

3.13 These findings suggest that, for a variety of reasons, the machine alone cannot completely remove all dog fouling from our streets. The external factors outlined above could have an impact on these outcomes. Other factors contributing to this limitation were also explored further through the service-user feedback and the controlled trial results.

Graph 1



Impact	West	North 1	North 2	East	South
Difference	- 34 (47%)	+ 35 (+14%)	- 11 (5%)	+ 4 (+8%)	- 3 (13%)

Other findings from the Area Trials

3.14 Out of the 84 streets that the sweeper was trialled on, it couldn't access 32 streets, also for some it only partially accessed.

The reasons reported for restricted or blocked access included:

- Parked cars obstructing the pavement (the most common issue).
- Obstructions on the pavement that the machine could not navigate around
- Overgrown hedges reducing available space.
- Pavements that were too narrow, steep gradients or curved pavements for safe operation.
- Lack of low-rise kerbs, preventing the machine from mounting the pavement safely.

3.15 These access limitations highlight the environmental and infrastructural challenges that affect the machine's ability to operate consistently across all streets. Also, could be factors in the outcomes for the dog fouling count.

3.16 Further feedback from service users highlighted several strengths and limitations of the sweeper:

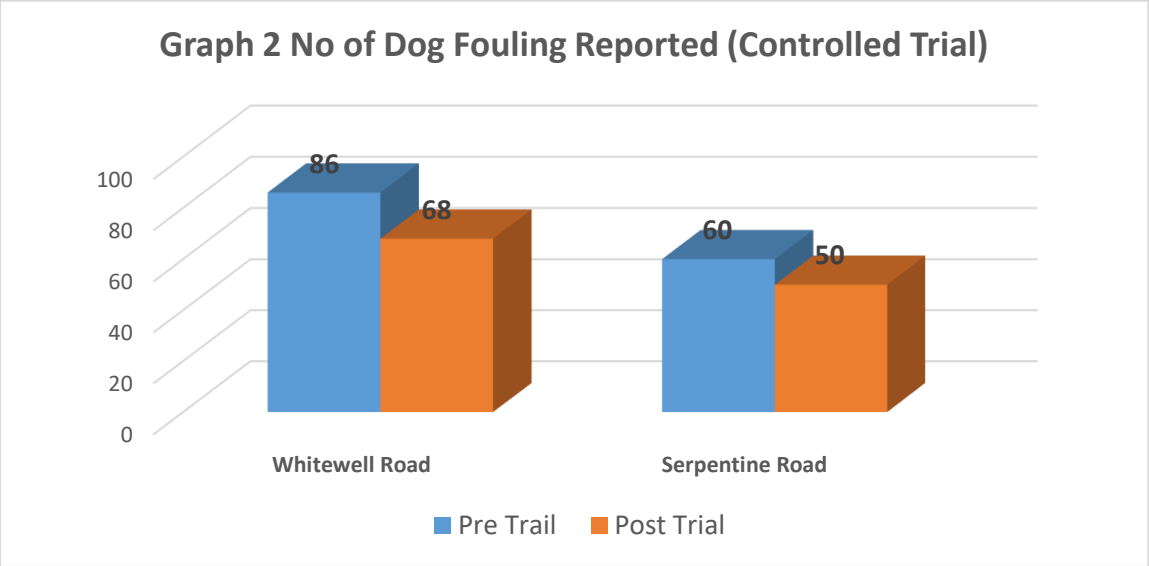
- The machine was generally considered very effective at cleansing, capable of picking up dog fouling, litter, and detritus across the pavement and at the backline, although it struggled with larger items of litter as it blocked the suction.
- Compared with the FIDO, the sweeper was easier to manoeuvre onto pavements, as the FIDO can only access a limited number of pavements due to its size and functionality for dog fouling only.
- The sweeping motion was effective at reaching difficult areas; however, depending on the dog fouling texture, this motion could sometimes cause dog fouling to smear. Although there is a water function to cleanse this when it happens.
- The machine's storage capacity is significantly smaller than that of standard sweepers, meaning it fills quickly in areas with high levels of dog fouling or litter.
- Once full, the machine must return to the depot to be emptied—sometimes up to 2 miles away—resulting in lost operational time, which can mount to significant time lost if it must return on numerous occasions.
- Due to its limited storage capacity, the machine is not effective at removing heavy leaf fall and if on the pavement will restrict the use of the machine, as it should generally be avoided.

3.17 Overall, service users felt that the sweeper was highly effective, but they also highlighted several operational limitations that would need to be addressed to ensure the machines deliver maximum value. These considerations combined with the environmental and infrastructural challenges identified during the trial would need to be factored into decisions about how and where the machines are deployed to achieve the greatest cleansing benefit.

Findings from the Controlled Trial

3.18 Graph 2 shows the difference in dog-fouling observations recorded during the pre- and post-intervention quality monitoring surveys for the controlled trial. Both trialled areas showed a positive change, with a reduction in the number of dog fouling incidents observed. However, the overall reductions were generally modest, with significant volumes remaining on the streets.

Graph 2



Impact	Whitewell Road	Serpentine Road
Difference	**- 18 (23%)**	**- 10 (18%)**

Operational Observations from the Controlled Trial

3.19 The controlled trial highlighted several environmental and infrastructural constraints that limited the machine's ability to operate effectively:

- **Obstructed pavements:** Parked vehicles blocked access to parts of the pavement, preventing the machine from cleansing entire sections of the street.
- **Kerb height issues:** Some areas lacked low-rise kerbs, restricting the machine's ability to mount the pavement safely.
- **Street structure**: Serpentine Road is narrow in places, with one side featuring a steep curve that the machine could not safely navigate.
- **Performance where access was possible**: In areas where the machine could operate, cleansing outcomes were excellent. The machine left surfaces very clean and removed detritus from the backline quickly—tasks that would otherwise require significantly more time from a manual operative.
- **Visibility to street limited** – Although the sweeper is equipped with a large front screen, visibility to the street surface is restricted. This makes it challenging for operators to accurately identify dog fouling and manoeuvre the machine into the correct position for effective collection.

3.20	As the controlled trial minimised external variables that might influence the wider Area Trial, the findings provide strong evidence that environmental and infrastructural challenges directly affect the machine's overall impact on dog-fouling removal.
	Other potential machinery options for neighbourhoods
3.21	Market research indicates that there are very few mechanical solutions available for the removal of dog fouling, and that sweeper trialled is one of the leading designs for cleansing in urban environments. The compact mechanical sweeper represents the most suitable option, as its size and manoeuvrability allow it to access pavements effectively and deliver a high standard of cleansing, safely on our streets. However, there is limitation due to its lightweight and limited storage capacity compared to the larger sweeper that we use on our roads.
	Conclusion
3.22	The trial of the compact mechanical sweeper produced mixed results. The machine demonstrated clear strengths in being able to lift dog fouling and general litter on our streets within neighbourhoods, showing that where it could operate effectively, it delivered a high standard of cleansing. In several areas, the sweeper was able to complete tasks that would otherwise require significantly more time from manual operatives.
3.23	However, the trial also highlighted several limitations. Due to the environmental and infrastructural constraints outlined in this report, the machine was not able to fully remove dog fouling from all streets. As a result, it could not be relied upon as the sole method for addressing this issue. Instead, it would serve best as a complementary resource, strengthening and enhancing our existing cleansing approaches.
3.24	Despite these limitations, the trial offered many positive insights. With careful planning around where and how the machines are deployed, there is potential to maximise their value and achieve the greatest operational benefit. This would need to be weighted up against the total cost, in terms of value for money.
3.25	<u>Financial and Resource Implications</u> Funding for additional vehicles to support the street cleansing operations is subject to a wider growth proposal relating to Dog Fouling, which is still under consideration.
3.26	<u>Equality or Good Relations Implications/Rural Needs Assessment</u> There are no equality, good relations or rural needs implications associated with this report.
4.0	**Appendices**