



Litter Data Actions – Year 3

Data Management Group

Build on work in Year 1 and 2, continue to support litter and flytipping data actions, recognising that the group provides an important resource for the development and delivery of these actions

Developing litter data

Finalise the indicator framework for litter, develop the administrative process for consolidating datasets and work with all stakeholders to encourage consistent approaches that support best practice in data collection methods, tools, analysis, and reporting. Continue to engage with academia to identify research opportunities to improve understanding of the cause and effect of litter.

Improving consistency of litter data

Actively promote and improve quality and consistency of citizen science to support litter data collection and complement existing programmes. Facilitating ongoing discussions with, and action by group of citizen science coordinators established in Year 2 to encourage and promote collaborative approaches to consistent data collection and use, and connection with policy.







Litter Monitoring System

The **Litter Monitoring System** was instigated by Zero Waste Scotland as a result of the changes in the Code of Practice on Litter and Refuse (Scotland) 2018, developed by IDOX released under Open Government License.

Supports Action 16 of the National Litter and Flytipping Strategy in driving improvements in the quality, consistency and usability of litter data across Scotland.

Developed for all **Duty Bodies and Statutory Undertakers** in relation to relevant land under duties 1 and 2, Section 89 of the Environmental Protection Act 1990.

Software for collecting mobile data infield (via use of iOS/Android app), syncing via cloud services and analysis within web interface.



User Experience and Review

Over the years, **technical glitches** have provided **inconsistent user experience** with the system, predominately through mobile data collection.

Letter from Scottish Government sent out to all local authority Chief Executives outlining intention to review the Litter Monitoring System.

In the current financial year, preparatory work is underway to **explore alternative methods** of litter data collection to support Action 16 and statutory reporting requirements under LEAMS.

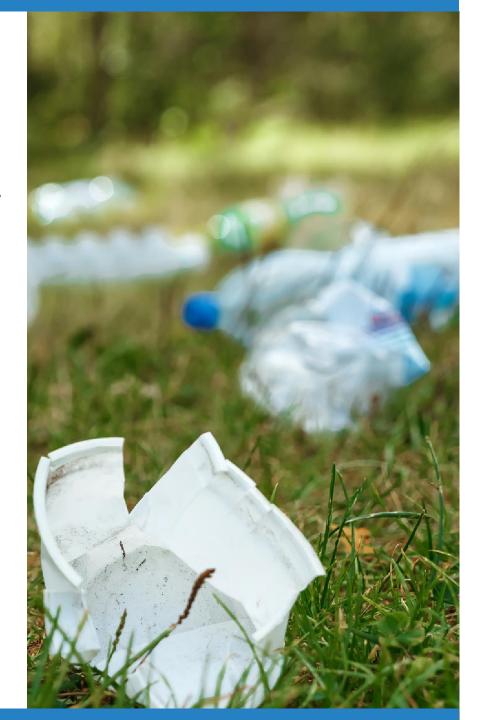
Pilots are underway, **report and findings** to be presented widely, including at the October LEQ seminar and within this forum.

Consultation and decision on future of the Litter Monitoring System to be considered based on outcomes of pilot work.



New Approach Specification

- Align with the forthcoming proposed requirements under Extended Producer Responsibility (EPR) regulations, particularly around ground and binned litter reporting;
- Meet the data collection and reporting needs of local councils and other statutory duty bodies;
- Be flexible, future-proofed, and costeffective, avoiding dependency on a single contractor;
- Be compatible with approaches being developed in other UK nations;
- Low resource burden to adopt.



ESRI ArcGIS

- Custom forms and is widely used across local authorities in Scotland;
- Requires a license(s) to collaborate;
- Has its own dashboard capabilities or plugin to connect to a PowerBI dashboard;
- Resource requirements low;
- Cost per license.



Internal Systems

- Using already integrated systems;
- Potential high cost and resource;
- Creation of API or export field data;



EpiCollect5

- Ability to create custom forms;
- Tried and tested;
- Can be connected to a PowerBI dashboard;
- Resource requirements low;
- Free;
- Review by internal data managers.



Open Source

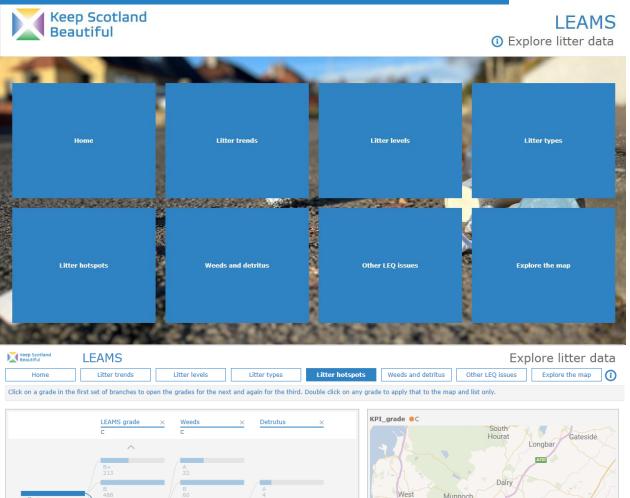
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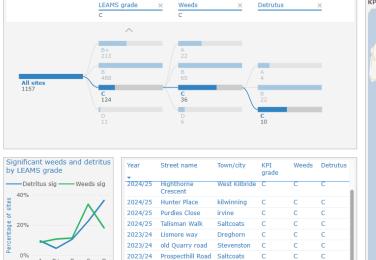


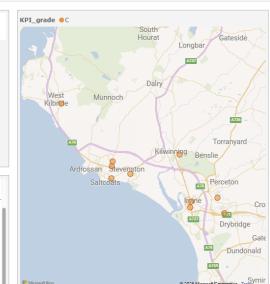
Data Analysis/Reporting

PowerBI

- Interactive dashboard;
- Requirements for a Pro License;
- Can be tailored and integrated;
- Standard and widely used;
- More than half of local authorities in process of being setup with LEAMS results dashboard;
- Automated process.





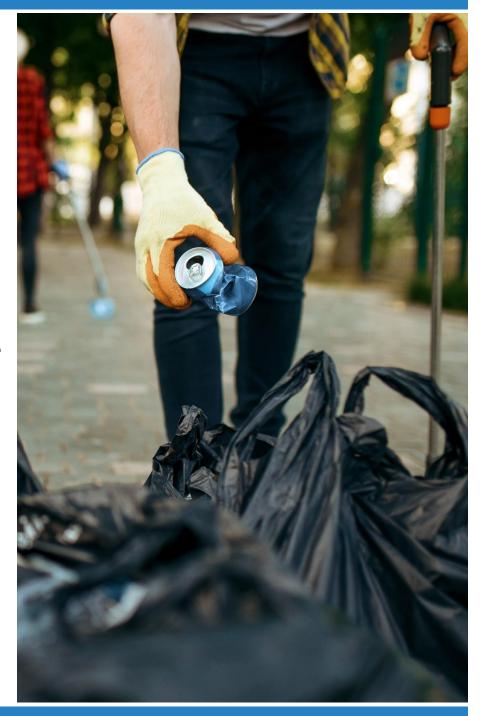


Next steps

- Pilot with ~six local authorities/statutory duty bodies by end of September;
- Report of key findings and recommendations by end of October;
- Consultation and decision on next steps by end of November;
- Litter Monitoring System continues to be available.

Challenges

- Timescales;
- Resources;
- Diversity of requirements across all local authorities.





Thank you

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