

LEAMS Methodology

The methodology for the Local Environmental Audit and Management System (LEAMS) surveys reflects the Code of Practice for Litter and Refuse (COPLAR) 2007, which relates to Part IV of the Environmental Protection Act 1990.

Each survey covers a 6% sample of streets in each Local Authority and streets are selected at random from a full list of adopted highways provided by each authority. LEAMS assesses the quality of the local environment through a visual survey, which involves walking a 50m length of the street (i.e. a transect) while inspecting the pavement and 2ft of the gutter for litter and other indicators. The information recorded during surveys is explained below.

Overall Cleanliness Grade

The overall Cleanliness Grade is based on how much litter and dog fouling is present. The grading is completed by Keep Wales Tidy staff that have been trained to survey in the same way to ensure consistency across surveyors in different local authorities.

A Grade <ul style="list-style-type: none">• No litter or refuse	B+ Grade <ul style="list-style-type: none">• No more than 3 small items of litter	B Grade <ul style="list-style-type: none">• Predominantly free of litter and refuse apart from some small items	C Grade <ul style="list-style-type: none">• Widespread distribution of litter and/or refuse with minor accumulations	D Grade <ul style="list-style-type: none">• Heavily affected by litter and/or refuse with significant accumulations
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Zones

We categorise each street according to zones. These zones are defined in COPLAR and they correspond with response times for local authorities to return a street back to an acceptable cleanliness standard (B grade or above). The zones are as follows:

a) Land Use

- Zone 1: Town centres, shopping centres, major transport centres.
- Zone 2: High density residential areas, busy recreational areas.
- Zone 3: Low density residential areas, industrial estates.

b) Intensity of Use

- High Intensity of Use: Busy public areas.
- Medium Intensity of Use: Primarily housing areas.
- Low Intensity of Use: Lightly trafficked areas (including rural roads).

Litter Presence

We record whether specific litter types or sources (below) are present on each street.

Litter Types	Litter Sources
Smoking	Pedestrian
Drinks	Business
Alcoholic drinks	Domestic
Confectionery	Construction
Fast Food	Animal faeces
	Other
	Glass

We also collect data on drinks receptacles litter and single use items. For each category, the number of items present is counted. Drink receptacle items include plastic bottles, cans, glass bottles, cartons, fast food cups and foil pouches.

Single-use or miscellaneous item categories can change each year as we add or remove items depending on emerging issues or research interests. An example list of these items collected throughout the years can be viewed below.

Fast food polystyrene	Carrier bags
Other polystyrene	Balloons
Wet wipes	Elastic bands
Fast food drinks lids	Single use vapes
Fast food packaging	Personal protection equipment (PPE)
Drink stirrers	Batteries
Drink straws	Textiles
Single use cutlery	Drugs litter
Cotton buds	Biodegradable and non-biodegradable packaging

Adverse Environmental Quality Indicators (AEQIs)

Dog fouling, vandalism and weeds are graded as follows:

A Grade <ul style="list-style-type: none">• Not present	B Grade <ul style="list-style-type: none">• Small presence	C Grade <ul style="list-style-type: none">• Significant presence	D Grade <ul style="list-style-type: none">• Severe presence
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Dog fouling is the only issue which affects the overall cleanliness grade. Any dog fouling means the street cannot score higher than a B grade. A significant presence leads to a C grade, while a severe presence leads to a D grade.

Detritus is any natural material and broken-down organic matter. It is graded as follows:

A Grade	B+ Grade	B Grade	C Grade	D Grade
<ul style="list-style-type: none"> • No detritus 	<ul style="list-style-type: none"> • No more than 3 small items of detritus 	<ul style="list-style-type: none"> • Predominantly free of detritus except for some light scattering 	<ul style="list-style-type: none"> • Widespread distribution of detritus with minor accumulations 	<ul style="list-style-type: none"> • Heavily affected by detritus with significant accumulations

Graffiti is graded as follows:

A Grade	B+ Grade	B Grade	C Grade	D Grade
<ul style="list-style-type: none"> • No graffiti 	<ul style="list-style-type: none"> • No more than 1 very minor piece of graffiti - people passing wouldn't notice it 	<ul style="list-style-type: none"> • Some minor graffiti - many people passing wouldn't notice it 	<ul style="list-style-type: none"> • Graffiti is clearly visible from at least one end of the transect 	<ul style="list-style-type: none"> • Graffiti is clearly visible and obtrusive - it is extensive over a large part of the transect and visible from any point on the transect

Fly-posting is graded as follows:

A Grade	B+ Grade	B Grade	C Grade	D Grade
<ul style="list-style-type: none"> • No fly-posting 	<ul style="list-style-type: none"> • No more than 1 very minor piece of fly-posting - people passing wouldn't notice it 	<ul style="list-style-type: none"> • Some minor fly-posting - many people passing wouldn't notice it 	<ul style="list-style-type: none"> • Fly-posting is clearly visible from at least one end of the transect 	<ul style="list-style-type: none"> • Fly-posting is clearly visible and obtrusive - it is extensive over a large part of the transect and visible from any point on the transect

Indicators of Cleanliness

The overall cleanliness grade is used to calculate:

a) The Cleanliness Indicator

The Cleanliness Indicator is calculated from the street cleanliness grades (A-D) and ranges from 0 to 100. Each grade carries a weighting.

$$\text{Cleanliness Indicator} = \frac{\text{Actual Score}}{\text{Maximum Score}} \times 100$$

Example of calculating the Cleanliness Indicator using a sample of 30 streets:

	Number of Streets Awarded Grade	Weighting	Score
A Grade	2	3	6
B+ Grade	3	2.5	7.5
B Grade	22	2	44
C Grade	2	1	2
D Grade	1	0	0
Total	30		59.5

Maximum Score: 30 (total number of streets) x 3 (grade A weighting) = 90

$$\text{Cleanliness Indicator} = \frac{59.5}{90} \times 100 = 66.1$$

If all streets were awarded a B grade (an acceptable level of cleanliness), the Cleanliness Indicator would be 66.7.

b) The Percentage of Streets Awarded B Grade and Above

Keep Wales Tidy's independent data for each local authority on the percentage of streets awarded B grade and above is combined with the figures from surveys undertaken by local authorities by Data Unit Wales to calculate the Public Accountability Measure for Clean Streets (PAM/010). More information on this measure can be found at [here](#).

Please note that the Code of Practice for Litter and Refuse (COPLAR) 2007 is currently being reviewed by Keep Wales Tidy in partnership with Welsh Government, and changes may be implemented for future LEAMS methodologies.



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