



Environmental Services

Environmental services are an area of significant spend for local authorities, and include waste management, street cleansing, roads services, and trading standards and environmental health. These areas have seen some of the largest budget reductions in recent years, with overall gross spend reducing by 9.6% since 2010/11. Against this reduction in expenditure, councils face growing challenges in maintaining or improving performance levels in relation to recycling, street cleanliness, roads condition and satisfaction.

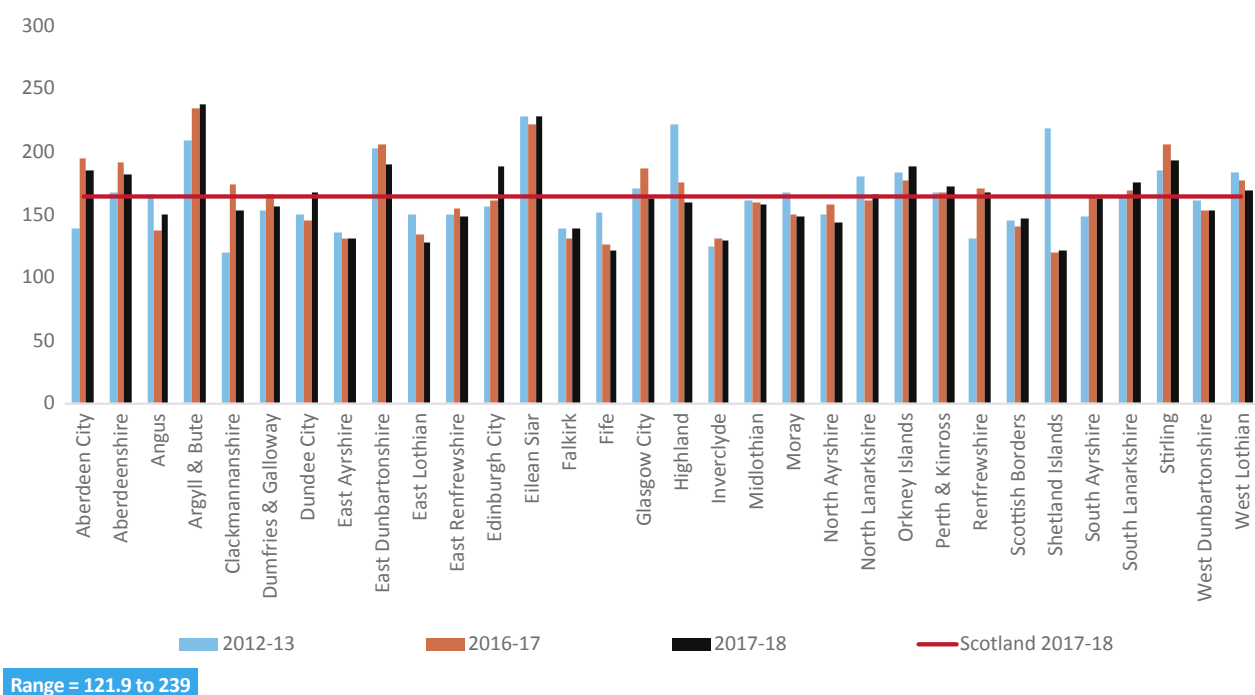
Waste management

In examining the cost of waste management services across councils we use a measure of the net cost of waste collection and disposal per premise. Net costs are used in recognition of the increased efforts of councils to recycle waste which generates additional costs to the service but also an additional revenue stream as recycled waste is sold by councils into recycling markets. It is worth noting that the price for recyclate is volatile and influenced by global economic conditions. As this measure was introduced in 2012/13, only six years of data is presented here.

In 2017/18, the combined net cost of waste disposal and collection per premise is £164.40, a 0.3% increase from 2012/13. After remaining constant during the first three years, the combined cost increased in 2015/16 by 2.8% due to a significant increase in disposal costs, before falling again in 2016/17. The range across Scotland in 2017/18 was £121 to £239.

Net cost of waste collection and disposal per premise (£)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2012-13 to 2017-18
Collection	£64.02	£65.20	£68.07	£66.91	£65.77	£65.98	0.3%	3.1%
Disposal	£99.94	£98.01	£95.76	£101.49	£100.64	£98.42	-2.2%	-1.5%
Total	£163.96	£163.21	£163.83	£168.4	£166.41	£164.40	-1.2%	0.3%



Source: Council supplied expenditure and visitor figures



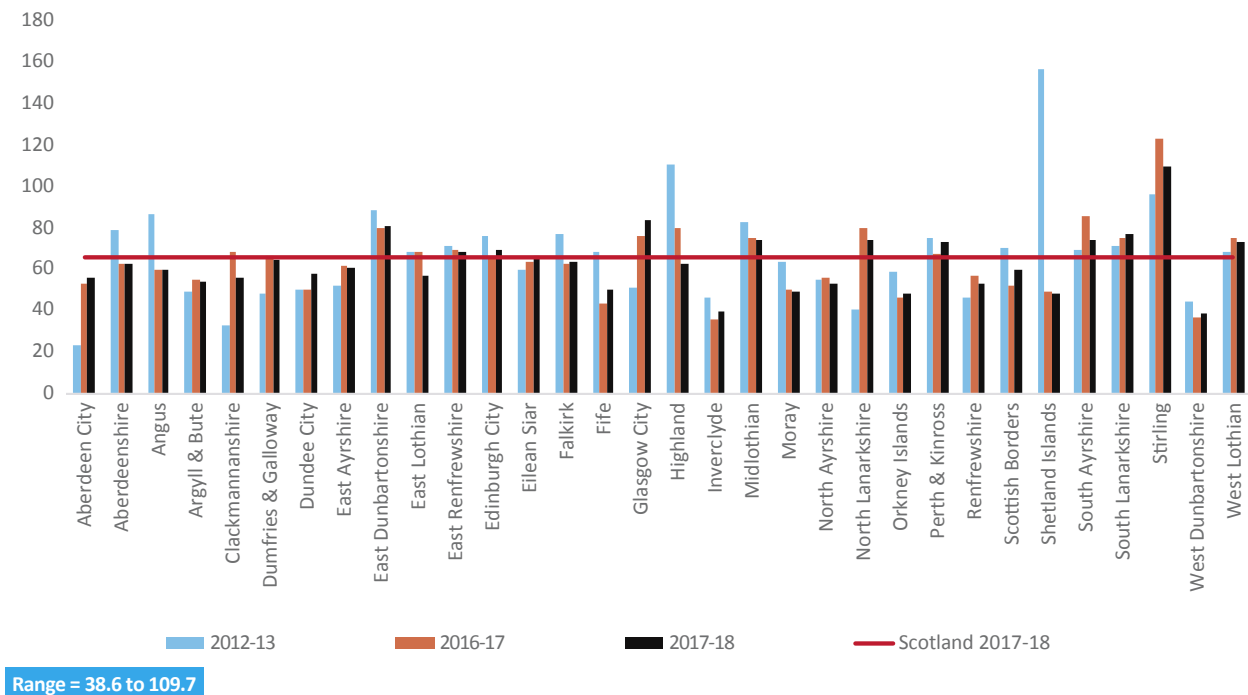
Waste collection

Over the six-year period from 2012/13 to 2017/18 the Scottish average cost per premise for waste collection increased from £64.02 to £65.98, representing a real terms percentage increase of 3.1%. While the number of premises increased by 3.9% during this period, total spend increased by 6.2%.

There has been little change in the past 12 months, with costs increasing by 0.3%. This reflects small increases in both net expenditure (0.9%) and premises served (0.5%).

There is considerable although narrowing variation between councils in relation to waste collection costs, ranging from £38.63 to £109.67. In the past, waste collection costs varied systematically with deprivation, with areas of higher deprivation spending more. The data no longer reveals this pattern.

Net cost of waste collection per premise (£)



Source: Council supplied expenditure and visitor figures

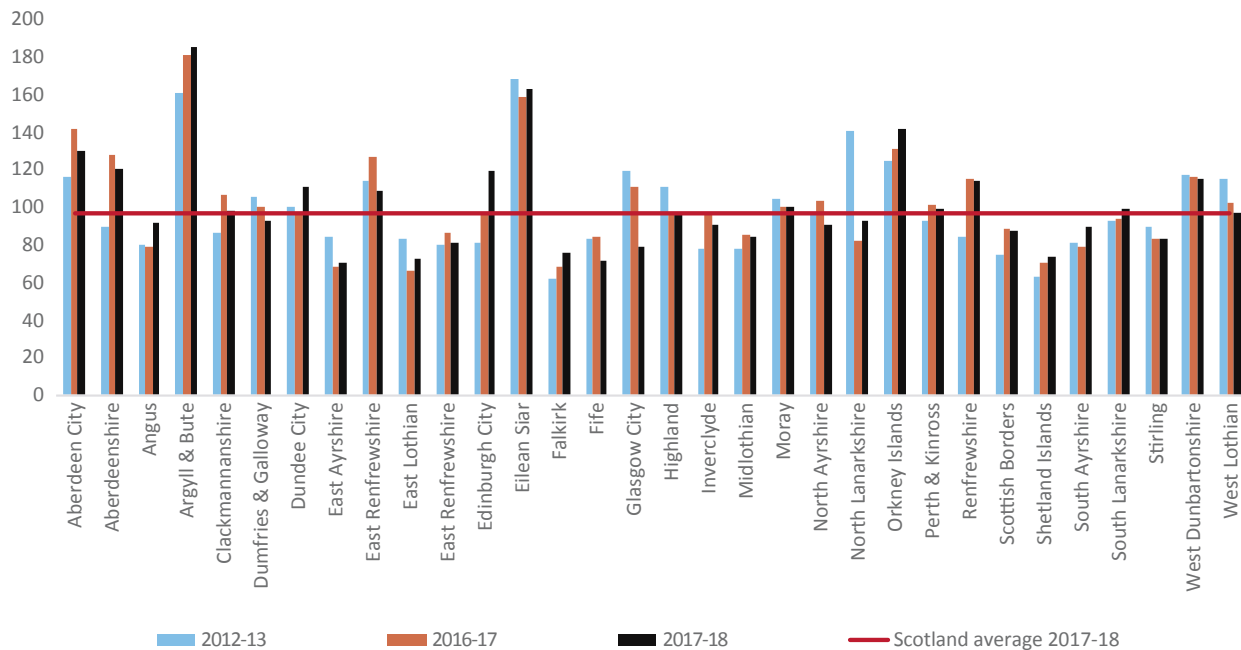
Waste disposal

Over the six-year period from 2012/13 to 2017/18 the Scottish average net cost of waste disposal has reduced by 1.5%, from £99.94 to £98.42 per premise. Across this period, there has been a 3.9% increase in the number of premises served accompanied by a smaller 1.5% increase in net expenditure.

In the last 12 months, disposal costs per premise reduced by 2.2%. This reflects a 1.7% reduction in net expenditure and 0.5% increase in the number of premises. The range in disposal costs across councils was £70.81 to £185.28 in 2017/18. Variation has narrowed in recent years, with analysis revealing no clear relationships to rurality, deprivation or demography.



Net cost of waste disposal per premise (£)



Range = 70.8 to 185.3

Source: Council supplied expenditure and visitor figures

Recycling

Over recent years councils have put greater emphasis on the recycling of waste in compliance with Scotland’s Zero Waste Plan.³¹ There has also been raised awareness of environmental factors from both producers and consumers, including a greater focus on reducing unnecessary waste packaging which has resulted in less waste in the system overall.

Recycling rates continue to improve across Scotland from 40.1% in 2011/12 to 45.6% in 2017/18 as efforts are made to achieve Scotland’s 60% household waste recycling target by 2020. From 2014/15, the recycling rate used a new calculation from that used in previous years and so is not directly comparable. It might also be useful to note that for individual authorities, the new SEPA recycling definition may result in a slightly lower recycling rate than the previous definition. Prior to 2014, household waste composted that did not reach the quality standards set by PAS 100/110 was included in the recycling figures. If such waste was included, as in the previous method, the overall recycling rate in 2017 would have been 46.1% an increase of 6.0 percentage points from the 40.1% achieved in 2011.

Percentage of household waste that is recycled

2011-12*	2012-13*	2013-14*	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2011-12 to 2017-18
40.1	41.1	42.2	42.8	44.2	45.2	45.6	0.4%	5.5%

*Note: Figures from 2010/11 – 2013/14 use the old recycling definition, while figures from 2014/15 to 2017/18 are calculated using the new definition.

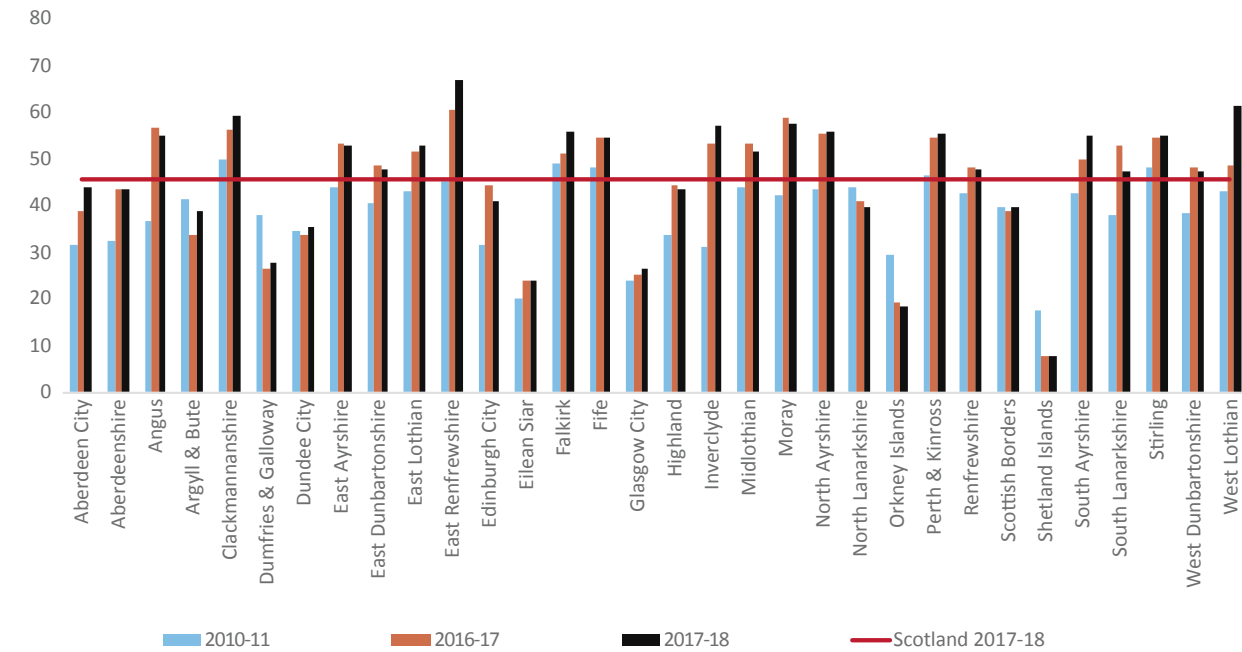
There is significant and widening variation in recycling rates across Scotland, with Island councils reporting significantly lower rates than other areas. Excluding islands, the range across Scotland in

³¹ Source: Scotland’s Zero Waste Plan, Scottish Government, <http://www.scotland.gov.uk/Publications/2010/06/08092645/0>



2017/18 is 26.7% to 67.1% in 2017/18.

Percentage of total household waste that is recycled



Source: WasteDataFlow, Scottish Environment Protection Agency (SEPA). Data is calendar year.

Percentage of adults satisfied with waste collection

Satisfaction levels for waste collection remain high at 75% although, as with other services, there has been a reduction in the past 12 months. Satisfaction levels are 5.9 percentage points lower in 2017/18 than they were in 2010/11. There is widening variation across councils, with rates ranging from 63% to 92% across Scotland. Variation is not systematically related to deprivation, rurality or size of council

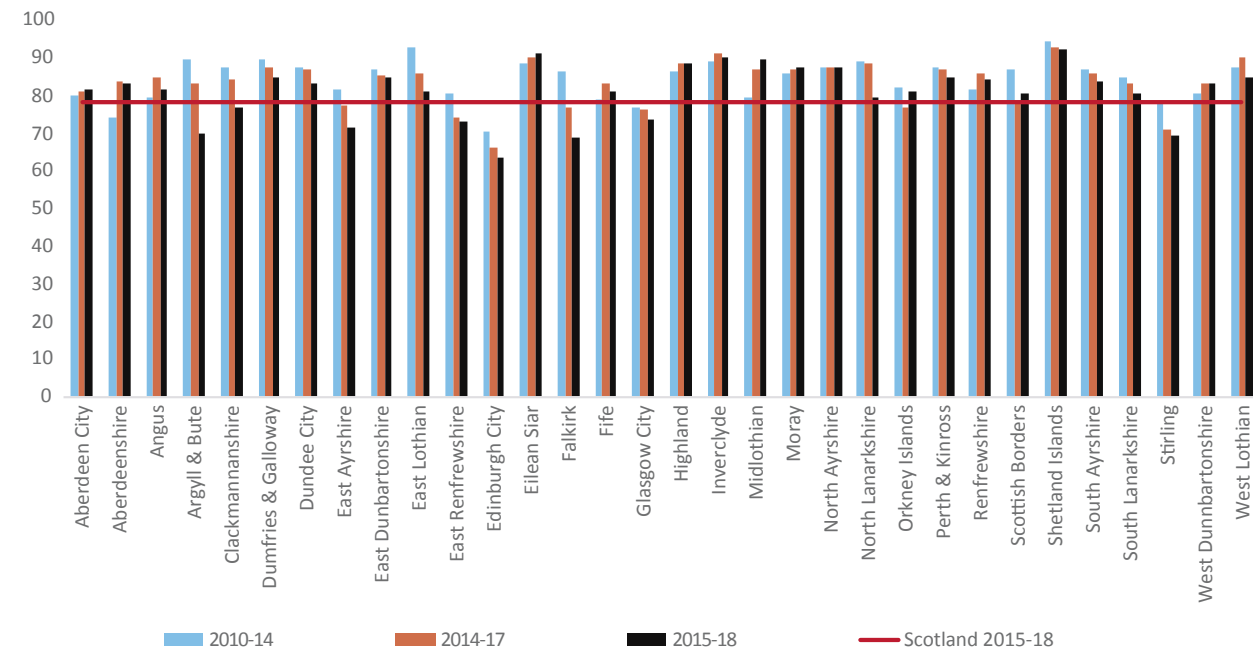
Percentage of adults satisfied with waste collection

2010-11	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2010-11 to 2017-18
80.9	83.0	83.0	84.0	82.0	79.0	75.0	-4.0%	-5.9%

As noted previously, the satisfaction data is drawn from the Scottish Household Survey (SHS) and while proportionate at Scotland level, there are limitations at local authority level in relation to the very small sample sizes and low confidence levels. To boost sample sizes 3-year rolled averages have been used to ensure the required level of precision at local levels.



Percentage of adults satisfied with refuse collection



Source: Scottish Household Survey

Street cleaning

The cleanliness of Scotland’s streets remains a priority for councils both in terms of improving the appearance of our streetscapes but also in terms of environmental improvements in the quality of people’s lives. The revised Code of Practice on Litter and Refuse (Scotland) came into force in 2018 and may affect both costs and standards going forward.

Street cleanliness is presented using the Street Cleanliness Score, which is produced by Keep Scotland Beautiful.³² This measures the percentage of areas assessed as ‘clean’ rather than completely litter free sites (considered impractical in areas of high footfall) and allows authorities to tackle litter problem areas to achieve better results.

The Scottish average for the cleanliness score has remained above 90% since the base year, although scores have shown a reducing trend since 2013/154. In 2017/18, 92.2% of streets were assessed as ‘clean’, compared to 95.4% in 2010/11, a reduction of 3.2 percentage points.

Percentage of clean streets

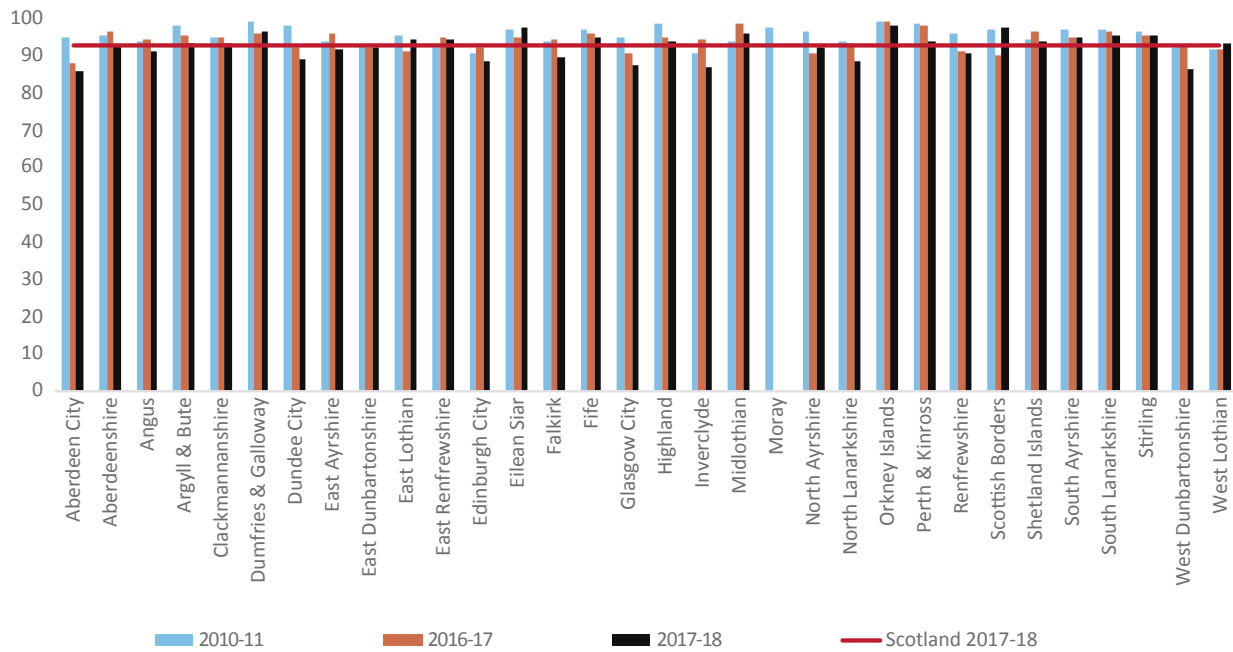
2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2010-11 to 2017-18
95.4	96.1	95.8	96.1	93.9	93.4	93.9	92.2	-1.7%	-3.2%

There is a relatively narrow range of cleanliness scores across Scotland. The level of variation widened between 2013/14 and 2015/16 but narrowed in recent years. In 2017/18, scores ranged from 85.8% to 98.2%, with urban and deprived areas reporting significantly lower scores (e.g. 88% for urban or deprived areas compared to 94% for rural or affluent areas).

32 Source: Keep Scotland Beautiful, <http://www.keepsotlandbeautiful.org/>



Cleanliness score (percentage acceptable)



Range = 85.8 to 98.2

Source: Local Environmental Audit and Management System (LEAMS), Keep Scotland Beautiful

Note: Missing values reflect no data returned for that year

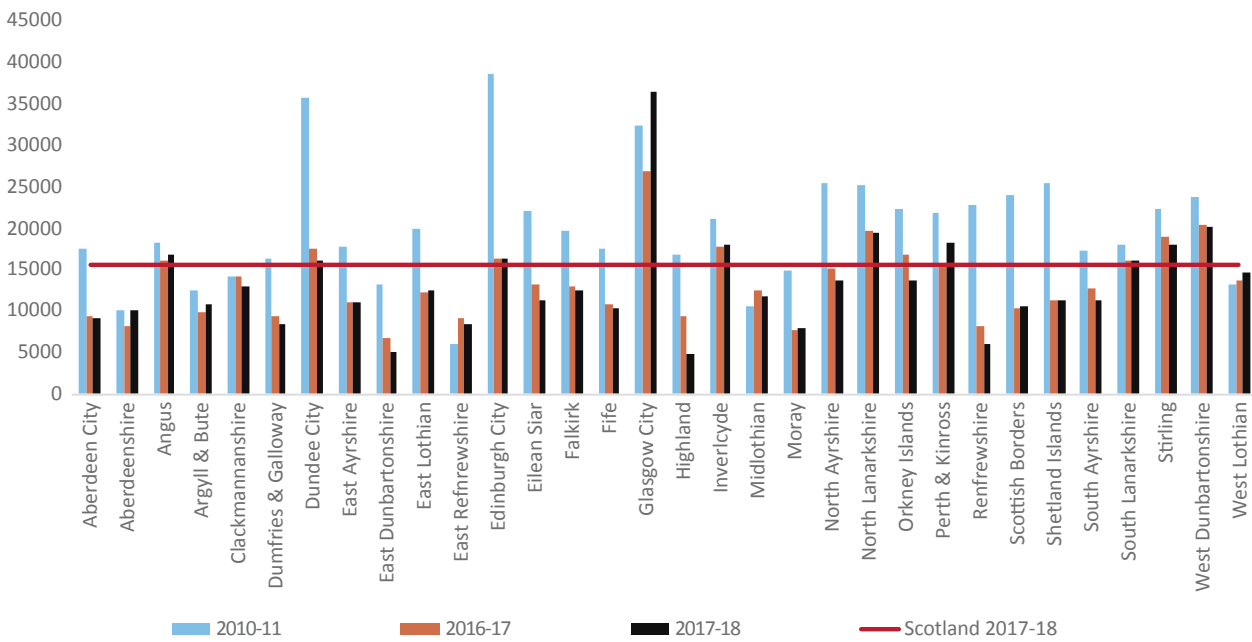
Over the same eight-year period the Scottish average for net cost of street cleaning has reduced by 30%, from £22,218 per 1,000 population in 2010/11 to £15,551 in 2017/18. This rate of reduction reflects a year on year reduction in costs until the past 12 months, where costs have increased by 5.3%. Glasgow is a significant outlier here reporting a significant increase in expenditure on cleansing and enforcement. When removed from the calculation, average costs across Scotland have reduced by 2.8% in line with previous trends.

Net cost of street cleaning per 1,000 population

2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2010-11 to 2017-18
£22,218	£21,409	£18,988	£17,271	£16,606	£16,086	£14,764	£15,551	5.3%	-30.0%



Net cost of street cleaning per 1,000 population (£)



Range = 4915.4 to 36496.4

Source: Mid-year population estimates, National Records Scotland (NRO); council supplied figures

The range across councils varies significantly, from £4,915 to £36,496 (or £4,915 to £20,131 excluding outliers). The variation has widened in the last 12 months, after narrowing in previous years. Street cleaning costs vary systematically with deprivation, with higher costs in authorities with higher levels of deprivation (£17,044 for areas with the highest level of deprivation compared to £11,371 for councils with the lowest levels).

Percentage of adults satisfied with street cleaning

As with other services, satisfaction levels for street collection have experienced a downward trend, reducing from 73.3% to 66% between 2010/11 and 2017/18. In the past 12 months, the rate of reduction has accelerated with satisfaction levels reducing by four percentage points. Until 2015-16, it appeared that the substantial efficiencies that have been introduced in delivering this service did not appear to have had a significantly detrimental impact on public satisfaction, indicating the care taken to protect key areas of public concern. The recent reduction in satisfaction however indicates a shift in public perceptions in the context of continuing significant reductions in budgets.

Percentage of adults satisfied with street cleaning

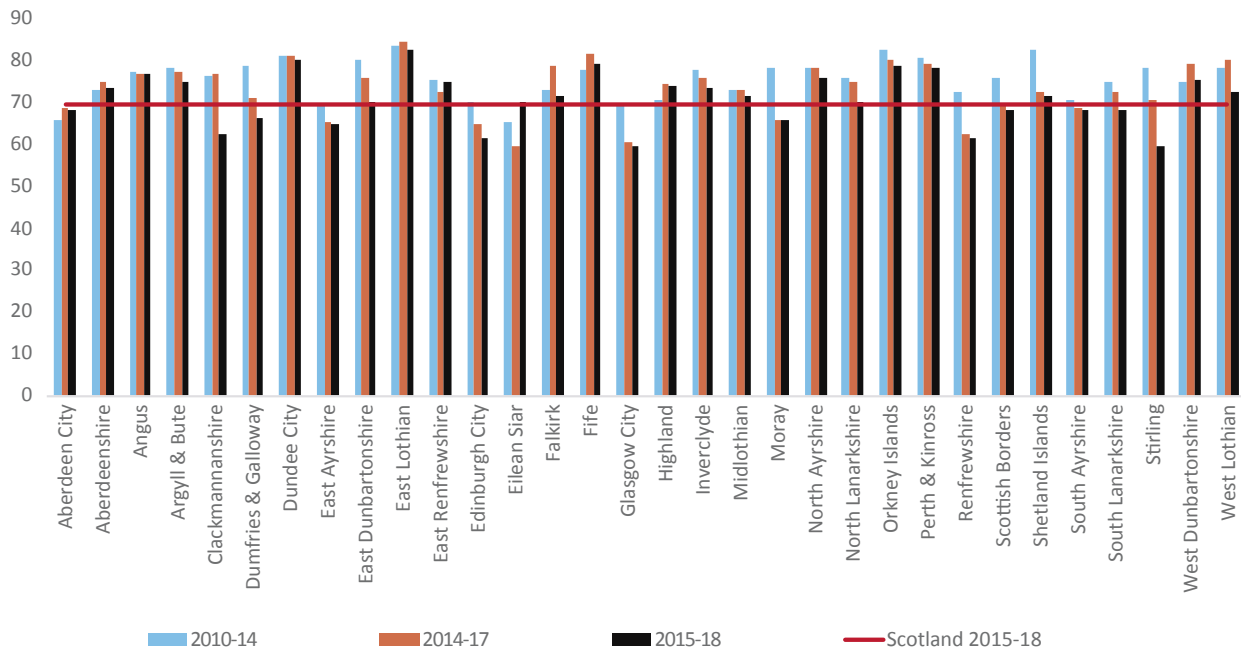
2010-11	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2010-11 to 2017-18
73.3	75.0	74.0	74.0	73.0	70.0	66.0	-4.0%	-7.3%

As noted previously, the satisfaction data is drawn from the Scottish Household Survey (SHS) and while proportionate at Scotland level, there are limitations at local authority level in relation to the small sample sizes and low confidence levels. To boost sample sizes, 3-year rolled averages have been used to ensure the required level of precision at local levels.

There is significant and widening variation in satisfaction levels across Scotland, ranging from 59.3% to 82.7%. Variation is not systematically related to deprivation, rurality or size of council.



Percentage of adults satisfied with street cleaning



Range = 59.3 to 82.7

Source: Scottish Household Survey

Roads

Roads costs are represented in this framework using a cost of roads per kilometre measure. This measure includes both revenue and capital expenditure. The condition of the roads network is represented by the percentage of roads in various classes which require maintenance treatment.

For the eight years for which we have data, the Scottish average cost per kilometre has reduced by 16.0% from £12,556 to £10,547. After year on year reductions until 2014/15, costs have levelled out over the past two years.

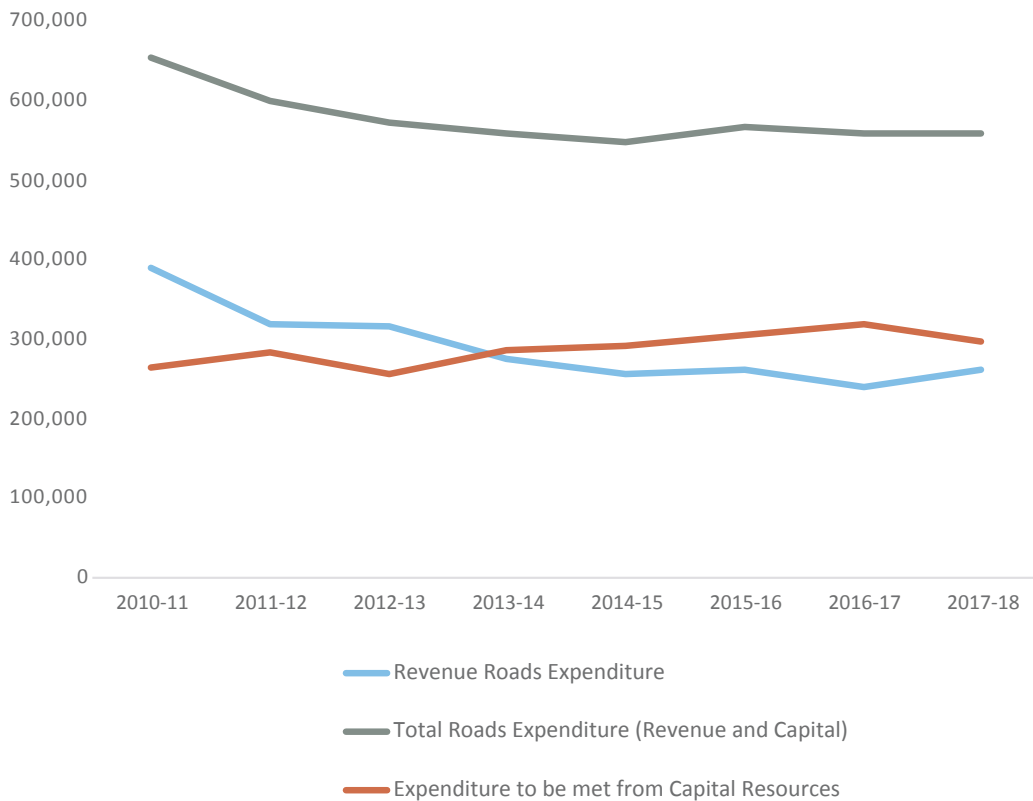
Cost of roads per kilometre

2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2010-11 to 2017-18
£12,556	£11,490	£10,935	£10,648	£10,392	£10,710	£10,535	£10,547	0.1%	-16.0%

As the graph below shows, overall revenue expenditure on roads has reduced significantly, by 32.8%, since 2010/11, while capital expenditure has increased by 12.3% across the period. The past 12 months however have shown a different trend, with revenue expenditure increasing by 9.8%, and capital falling by 7.2%. The increase in revenue expenditure may reflect increased expenditure due to the severe and prolonged winter weather experienced in 2017/18.

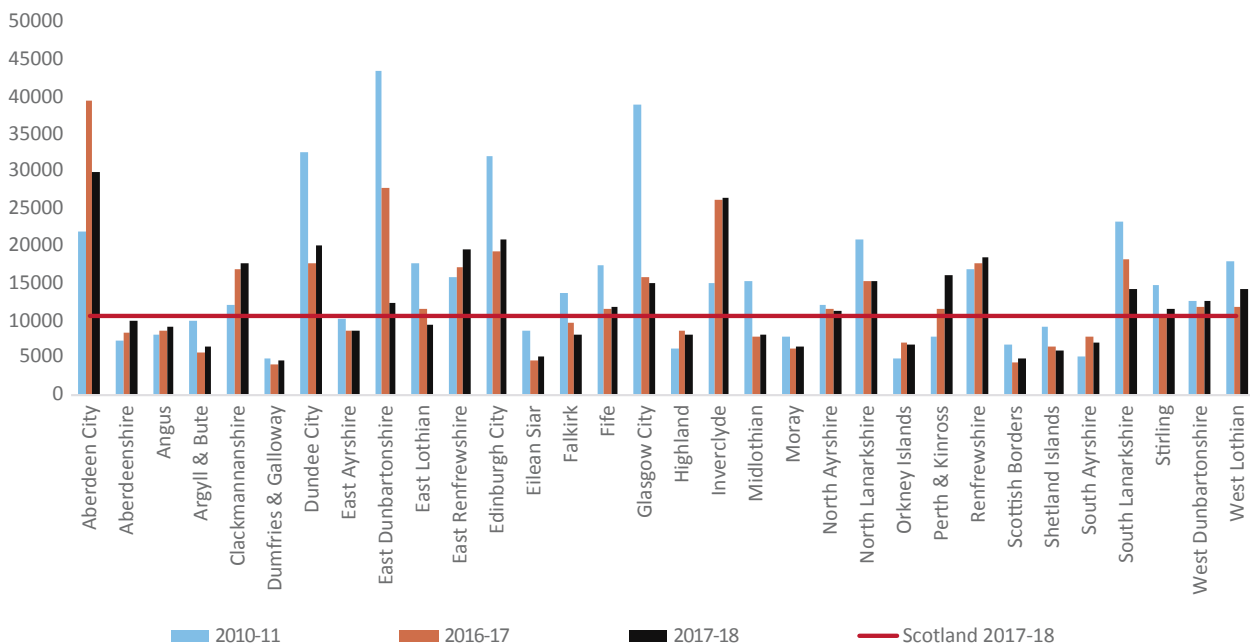


Roads expenditure - revenue and capital (£)



Over the past 12 months, the overall cost of roads per km has remained largely unchanged, increasing by 0.1% from £10,535 to £10,547 per km. While the variation across Scotland is still significant, this has narrowed substantially in the past 12 months. In 2017/18, costs ranged from £4,676 to £29,996. Variation across councils is systematically related to rurality, with significantly lower costs in rural areas (e.g. £6,541 in rural areas compared to £15,205 in urban areas and £11,411 in semi-rural areas).

Cost of roads per kilometre (£)



Range = 4675.6 to 29995.6

Source: Society of Chief Officers of Transportation in Scotland (SCOTS) / Association for Public Service Excellence (APSE) returns; council supplied expenditure figures



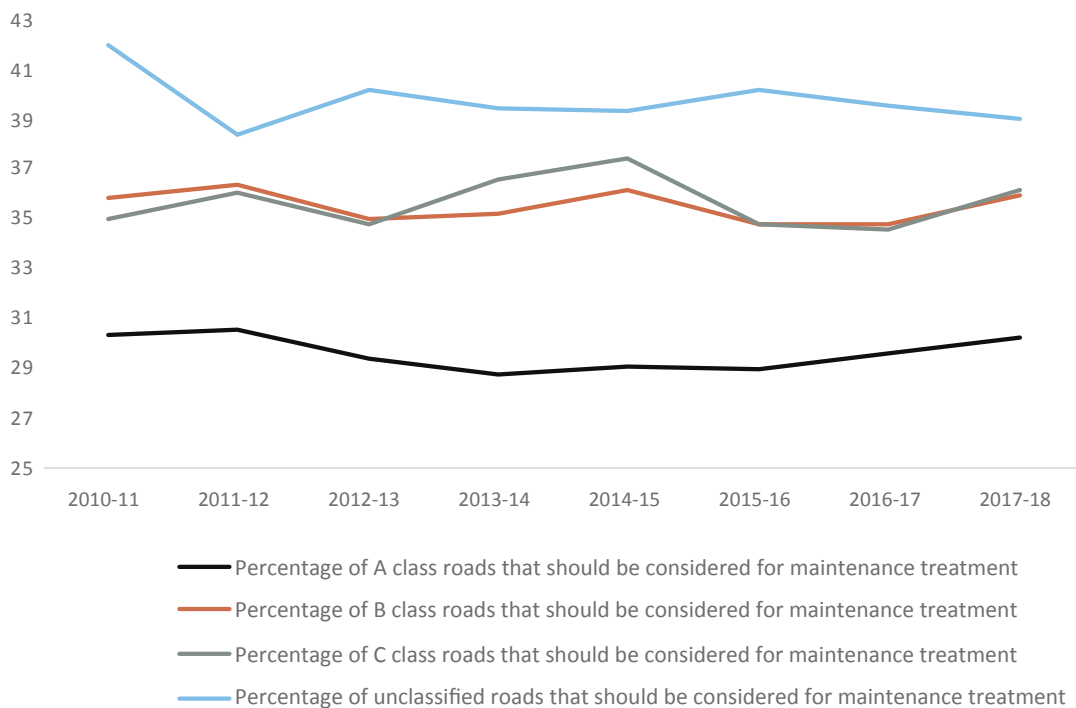
In terms of the condition of the road network, the eight-year period covered by this report has seen very little change in the A, B and C class road network overall, with around 30% to 35% of roads continuing to require maintenance. This indicates that despite the significant reductions on spending, the condition of key parts of the roads networks has been maintained.

Over the past 12 months, there has however been a small deterioration in A, B and C class roads, with only unclassified roads improving.

Percentage of A, B, C class and Unclassified roads that should be considered for maintenance

	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18	Change 2015-17 to 2016-18	Change 2009-11 to 2016-18
% A Class Roads	30.3	30.5	29.4	28.7	29.0	29.0	29.5	30.2	0.7%	-0.1%
% B Class Roads	35.8	36.3	35.0	35.2	36.1	34.8	34.8	35.9	1.1%	0.1%
% C Class Roads	35.0	36.0	34.8	36.6	37.4	34.7	34.6	36.2	1.6%	1.2%
% Unclassified Roads	41.9	38.3	40.1	39.4	39.3	40.1	39.5	39.0	-0.5%	-2.9%

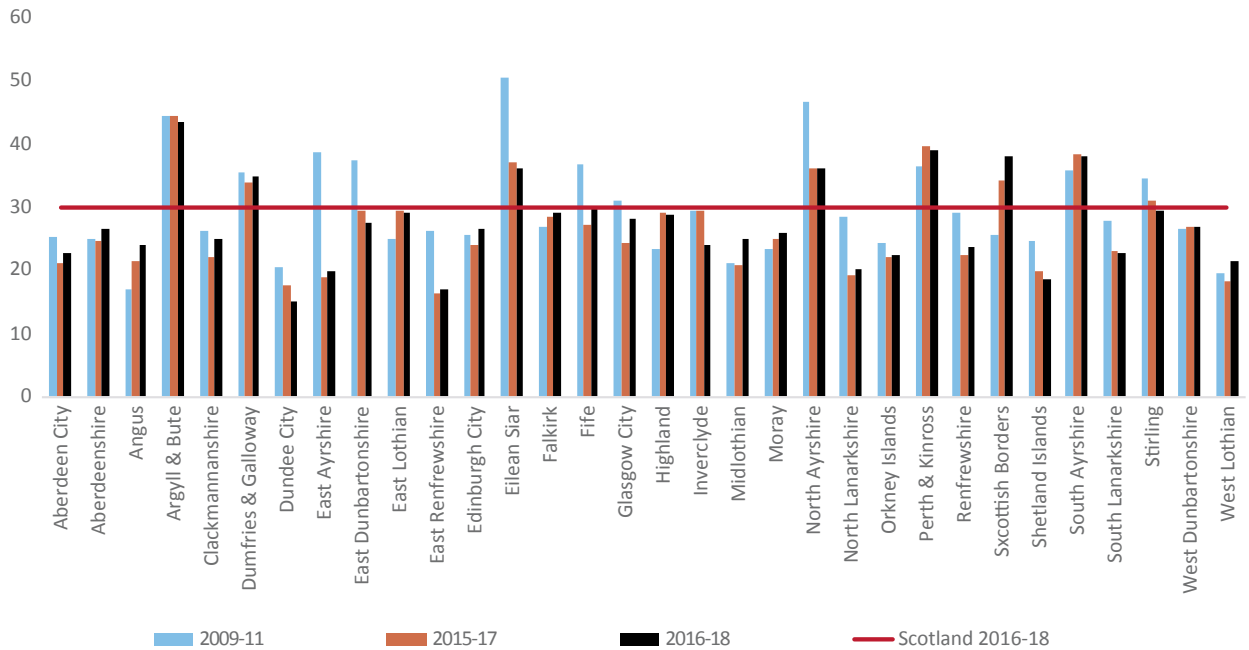
Source: Roads Asset Management Database, Society of Chief Officers of Transportation in Scotland (SCOTS)



The variation in condition varies significantly across Scotland for all classes of road, however this has narrowed since the base year. In 2016/18, the range for A class roads is 15% to 43%; B class roads is 17% to 64%; C class roads is 14% to 62%; and for unclassified roads the range is 20% to 57%.

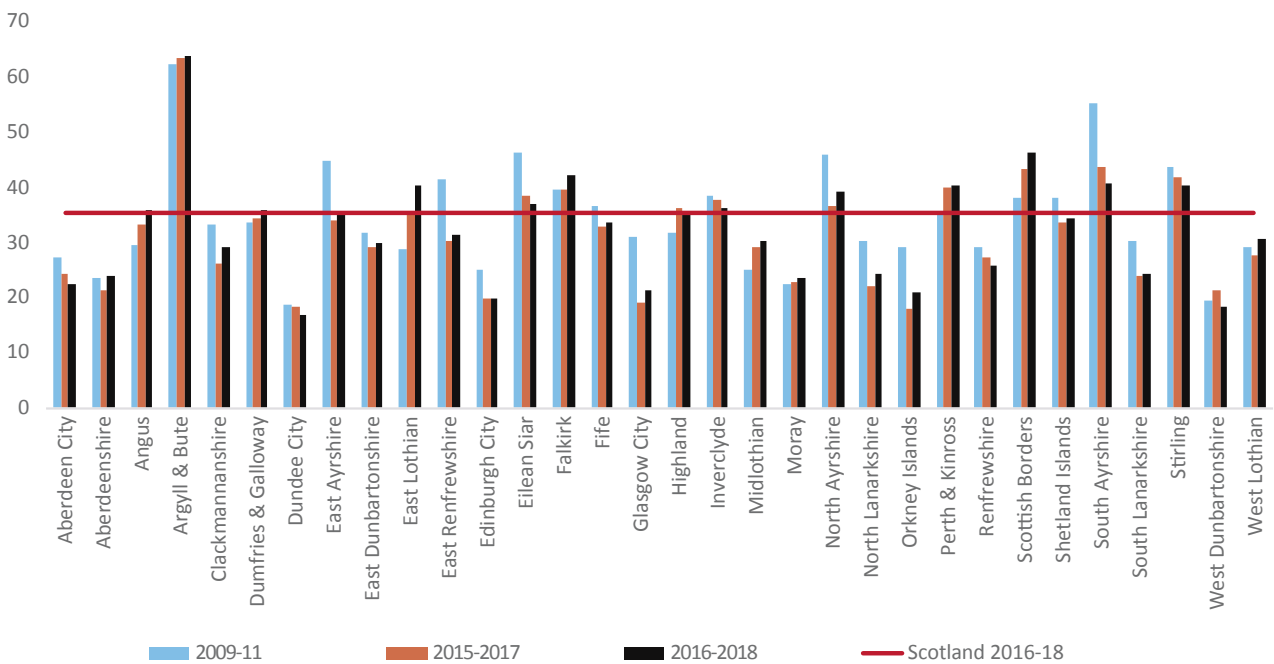


Percentage of A class roads that should be considered for maintenance treatment



Range = 15.2 to 43.5

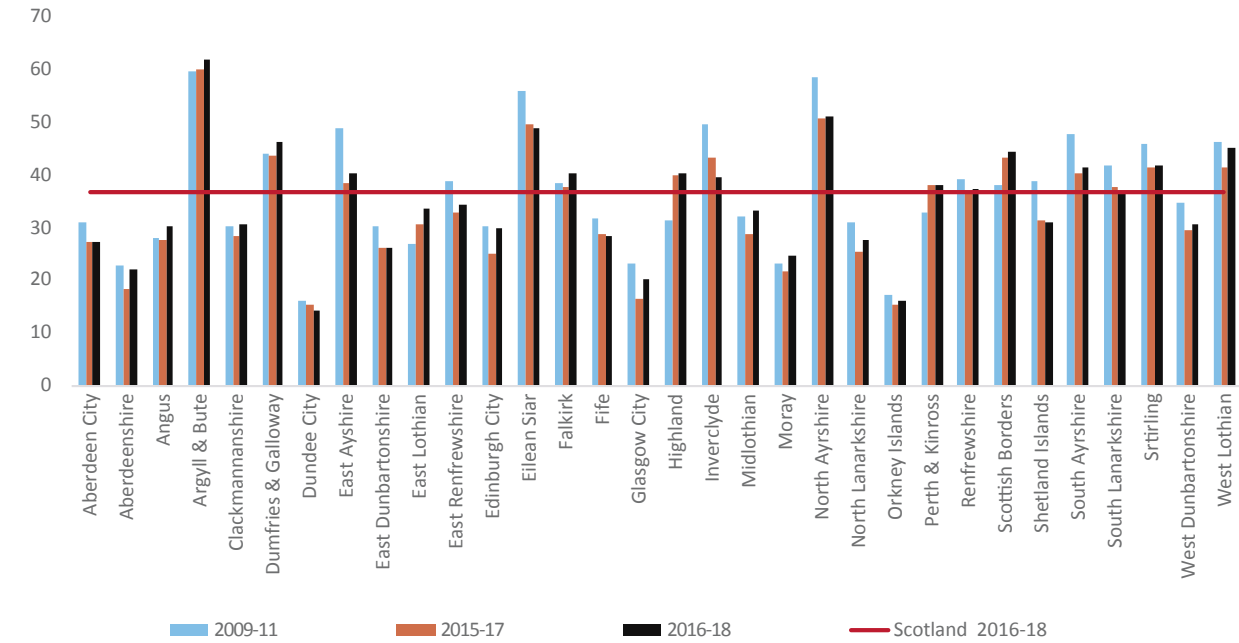
Percentage of B class roads that should be considered for maintenance treatment



Range = 16.9 to 63.9

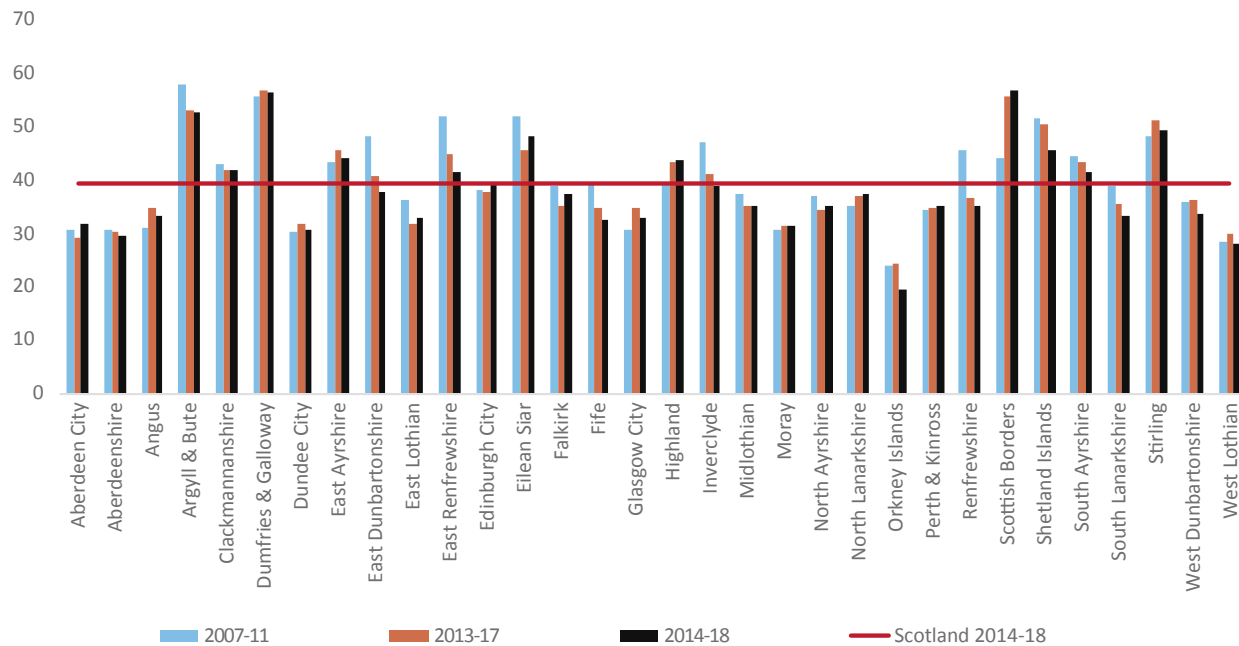


Percentage of C class roads that should be considered for maintenance treatment



Range = 14.4 to 62.1

Percentage of unclassified roads that should be considered for maintenance treatment



Range = 19.6 to 56.6

Source: Roads Asset Management Database, Society of Chief Officers of Transportation in Scotland (SCOTS)

Environmental health and trading standards

Since 2010/11, environmental health and trading standards costs have reduced by 21.5% from £27,237 to £21,385, with most of this reduction taking place between 2010/11 and 2011/12. In 2012/13, the framework split these measures to enable a better understanding of the trends in each of these services.



Trading standards costs include trading standards, money advice and citizen’s advice and have been standardised within the framework as costs per 1,000 population. Since 2012/13, the cost of these services per 1,000 population, while volatile, increased overall by 6.2%, from £5,544 to £5,890. This includes a 5.2% increase in costs in the past 12 months.

At the same time, trading standards services are seeing increasing demands for service in terms of reactive complaints and business support (e.g. export certificates). This workload is likely to increase, in part as a result of Brexit, and there is a need to ensure that there are appropriate regulatory arrangements in place.

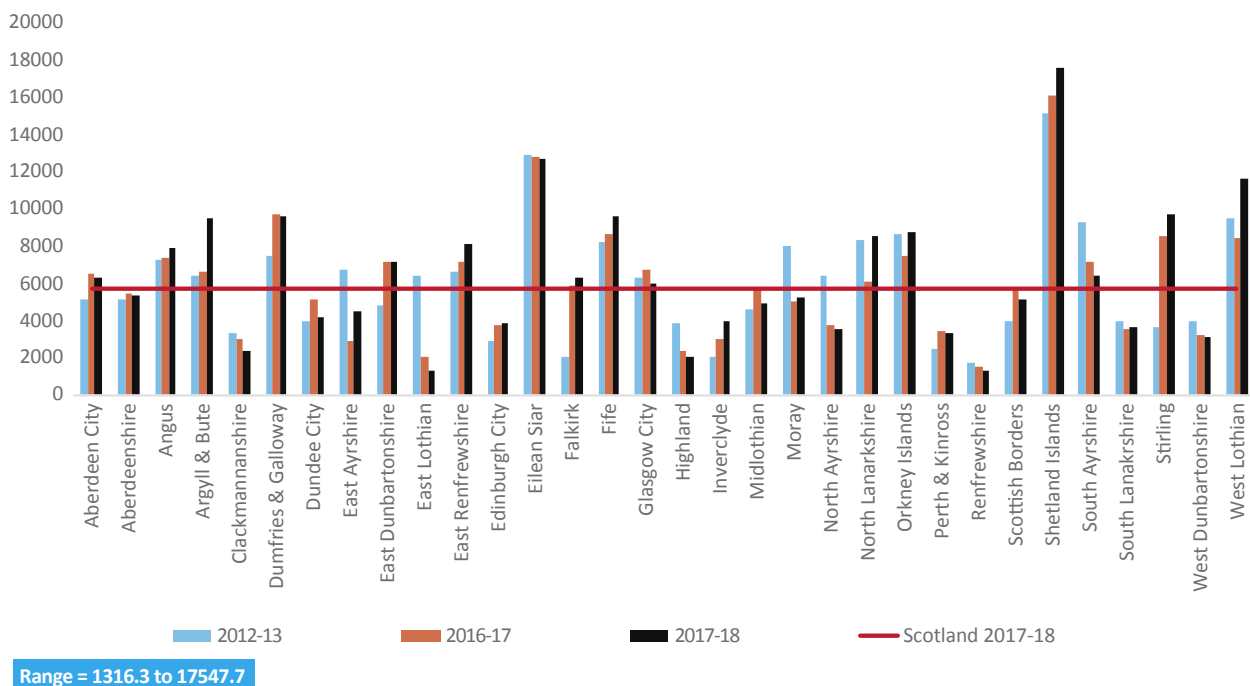
In 2017/18, costs ranged from £1,316 to £17,547 with variation systematically related to levels of deprivation within a council area. Trading standards costs are higher in councils with lower levels of deprivation (£7,547, compared £3,758 for councils with the highest level of deprivation).

Across this same period, there was a 11.9% reduction in the cost of environmental health services per 1,000 population, from £17,584 in 2012/13 to £15,496 in 2017/18. In the past 12 months, costs have fallen by 4.3% from £16,185 to £15,496. There is significant variation across councils which has widened in the past 12 months, with costs ranging from £6,849 to £35,441. Rurality has a systematic impact on the cost of environmental health, with rural councils reporting significantly higher costs than urban or semi-rural authorities (£20,033 compared to £15,309 and £12,357 respectively).

Cost of trading standards and environmental health per 1,000 population

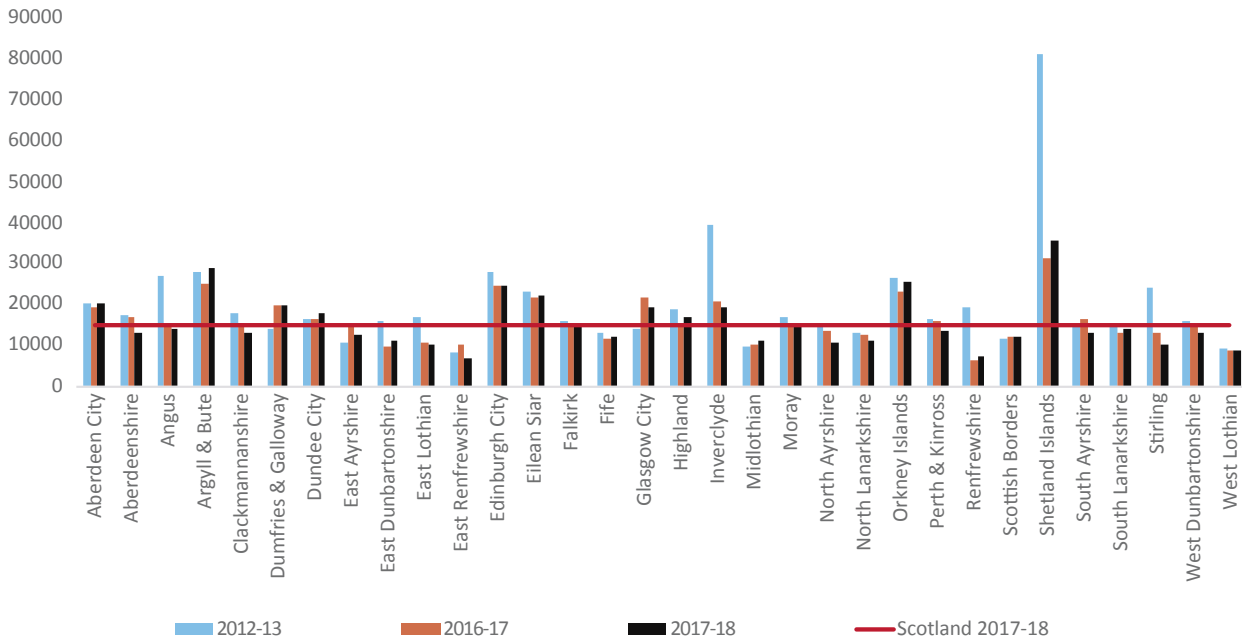
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Change 2016-17 to 2017-18	Change 2012-13 to 2017-18
Trading Standards, Money Advice & Citizens Advice	£5,544	£5,960	£5,872	£5,974	£5,599	£5,890	5.2%	6.2%
Environmental Health	£17,584	£18,374	£17,511	£17,296	£16,185	£15,496	-4.3%	-11.9%

Cost of trading standards per 1,000 population (£)





Cost of environmental health per 1,000 population (£)



Range = 6848.9 to 35441.9

Source: Council supplied figures

Work within Family Groups has identified the following factors as important in understanding the variation between authorities in environmental services:

- Local political/strategic priority given to the role of environmental services in supporting improvements in wider outcomes and tackling inequalities
- Workforce composition and demographic profile
- Working practices, e.g. shift patterns
- Service integration (e.g. waste management, roads, street cleaning, parks services)
- Collection programmes, frequencies and model of service
- Asset management approaches – e.g. super depots and leased vehicles
- Stage in investment cycle
- Whether councils have landfills in their authority area which will require investment up to and beyond their closure dates over the next five years.
- Contract and procurement costs
- Access to external funding streams