

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 8.6% since 2010/11. Against this reduction in expenditure, councils are facing challenges in maintaining or improving performance levels in relation to recycling, street cleanliness, roads condition and satisfaction.

Waste Management

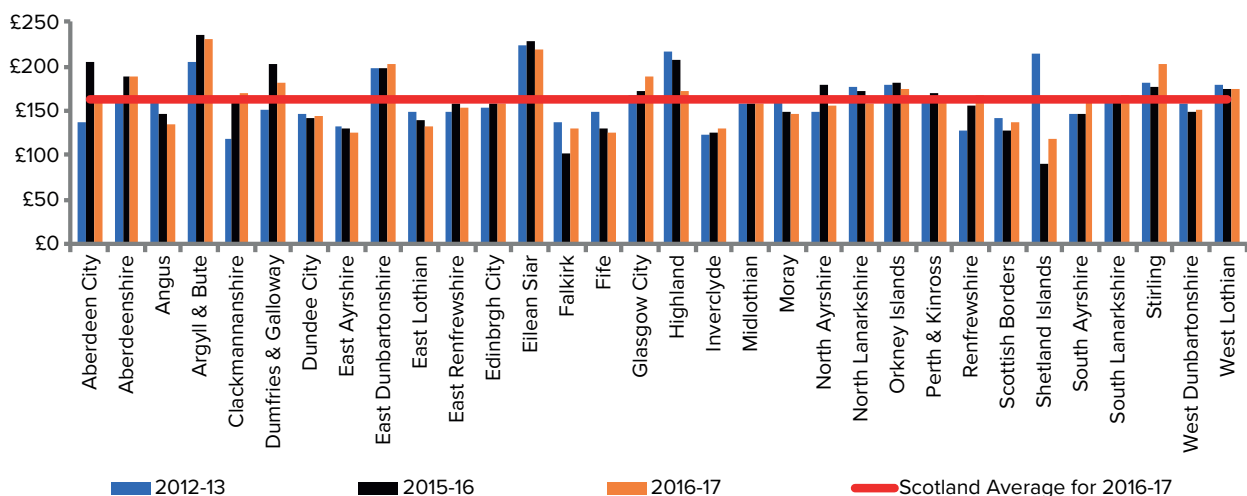
In examining the cost of waste management services across councils we use a measure on the net cost of waste collection and disposal per premise. This move to a net measure was in recognition of the increased efforts of councils to recycle waste which generates additional costs to the service but also an additional revenue stream as recycled waste is sold by councils into recycling markets. We moved to this new measure in 2012/13, and therefore only 5 years of data is presented here.

In 2016/17, the combined net cost of waste disposal and collection per premise is £160.30, a 1.5% increase from 2012/13. After remaining constant during the first three years, the combined cost increased in 2015/16 by 2.9% due to a significant increase in disposal costs, before falling again in 2016/17 by 1.2%. The range across Scotland in 2016/17 was £117 to £232.

Net Cost of Waste Collection and Disposal per Premise (in real terms)

Year	Collection	Disposal	Total
2012/13	62.80	98.03	160.83
2013/14	64.04	96.26	160.30
2014/15	66.74	93.89	160.64
2015/16	65.69	99.63	165.32
2016/17	64.46	98.84	163.30
% Change	2.6%	0.8%	1.5%

Net Cost of Waste Collection and Disposal per Premise



Source: Council supplied expenditure and visitor figures

Waste Collection

Over the five-year period from 2012/13 to 2016/17 the Scottish average cost per premise for waste collection increased from £62.80 to £64.46 representing a real terms percentage increase of 2.6%. While the number of premises increased by 3.4% during this period, the total spend increased by 5.2%.

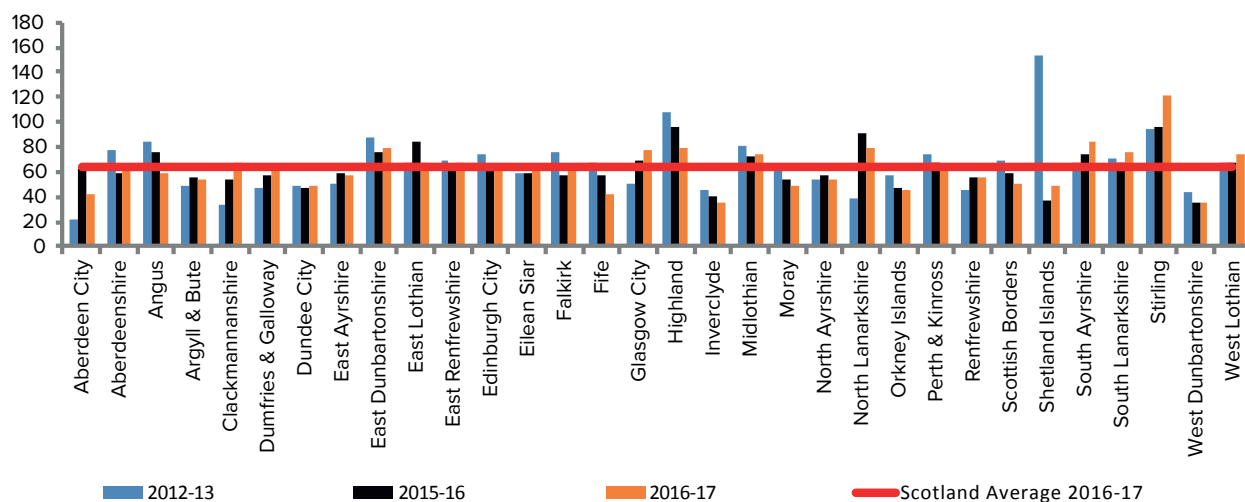
However, there has been a reduction of 1.9% in waste collection costs in the past 12 months. This reflects a reduction of 1.3% in net expenditure and an increase of 0.6% in premises served.

Net Cost of Waste Collection

% Change	Cash	Real
2012/13 - 2016/17	9.0	2.6
2012/13 - 2013/14	3.7	2.0
2013/14 - 2014/15	5.7	4.2
2014/15 - 2015/16	-0.9	-1.6
2015/16 - 2016/17	0.3	-1.9

There is considerable variation between councils in waste collection, with costs in 2016/17 ranging from £34.91 to £120.97. After narrowing year-on-year since 2012/13, variation across councils has widened in the past 12 months reflecting an increase in costs at the higher cost end. Analysis indicates that costs vary systematically with deprivation levels, with significantly lower average costs for areas with lower deprivation (£55.25) compared to areas with the highest levels of deprivation (£60.12).

Net Cost of Waste Collection per Premise (£)



Source: Council supplied expenditure and visitor figures

Waste Disposal

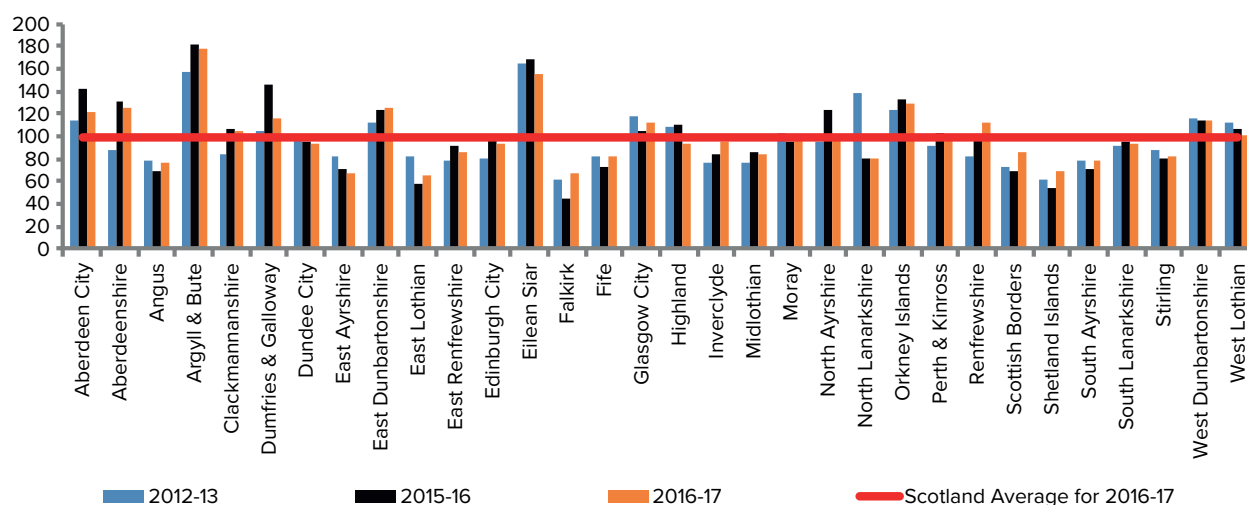
Over the five-year period from 2012/13 to 2016/17 the Scottish average net cost of waste disposal has increased by 0.8%, from £98.03 to £98.84. Across this period, there has been a 3.4% increase in the number of premises served accompanied by a similar 3.4% increase in net expenditure.

In the last 12 months, disposal costs per premise reduced by 0.8%. This reflects a 0.2% reduction in net expenditure and 0.6% increase in the number of premises. In 2016/17, the range in disposal costs across councils was £65.27 to £177.44. This reflects a narrowing in the variation between councils due to increases at the lower cost end. Variation in disposal costs is not systematically related to deprivation, rurality or size of council.

Net Cost of Waste Disposal

% Change	Cash	Real
2012/13 - 2016/17	7.1	0.8
2012/13 - 2013/14	-0.1	-1.8
2013/14 - 2014/15	-1.0	-2.5
2014/15 - 2015/16	6.8	6.1
2015/16 - 2016/17	1.4	-0.8

Net Cost of Waste Disposal per Premise (£)



Source: Council supplied expenditure and visitor figures

Recycling

Over recent years councils have put greater emphasis on the recycling of waste in compliance with the National Zero Waste Plan.²⁸ Recycling rates continue to improve across Scotland from 41% in 2011/12 to 45.2% in 2016/17 as efforts are made to achieve Scotland's Zero Waste 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 2016 would have been 45.5%, an increase of 5.4 percentage points from the 40.1% achieved in 2011.

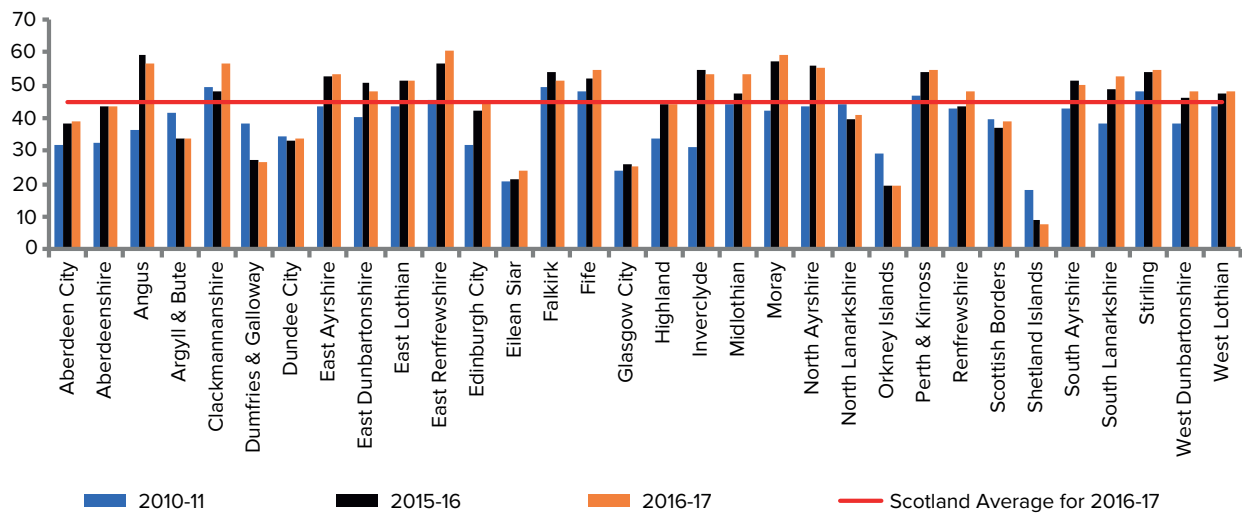
Percentage of Total Household Waste that is Recycled

Year	Percentage of waste recycled
2011/12	40.1*
2012/13	41.1*
2013/14	42.2*
2014/15	42.8
2015/16	44.2
2016/17	45.2

* Note: Figures until 2013/14 are based on the old recycling definition; figures from 2014/15 to 2016/17 are calculated using the new definition

There is significant and widening variation across Scotland in recycling rates, from 25.0% to 60.8% in 2016/17 (excluding Shetland as an outlier). Variation is not systematically related to deprivation, rurality or size of council.

The Percentage of Household Waste Arising that is Recycled



Source: WasteDataFlow, Scottish Environment Protection Agency (SEPA)

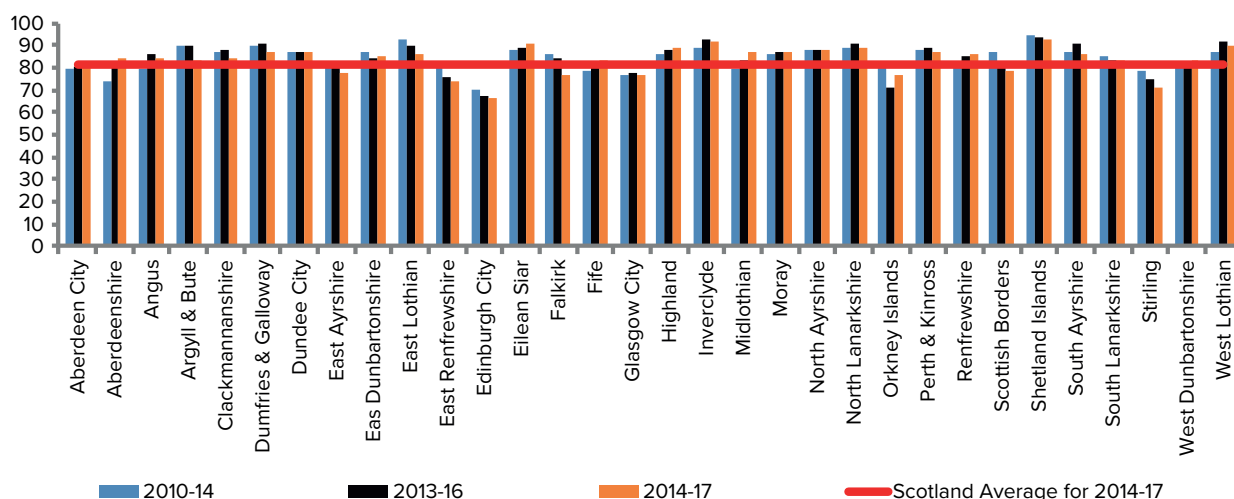
Percentage of Adults Satisfied with Waste Collection

Satisfaction levels for waste collection remain high, although as with other services, there has been a reduction in the past 12 months. This reduction means that satisfaction has dipped below the levels reported in the base year for the first time, reducing from 81% in 2010/11 to 79% in 2016/17. There is widening variation across councils, with rates ranging from 66% to 93% across Scotland. Variation is not systematically related to deprivation, rurality or size of council.

Year	Waste Collection % satisfied
2010/11	81
2012/13	83
2013/14	83
2014/15	84
2015/16	82
2016/17	79

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 three-year rolled averages have been used to ensure the required level of precision at local levels.

Percentage of Adults Satisfied with Refuse Collection



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.

Street cleanliness is presented using the Street Cleanliness Score, which is produced by Keep Scotland Beautiful.²⁹ 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 there has been a reduction in scores in last three years (from 96.1% in 2013/14 to 93.9% in 2016/17).

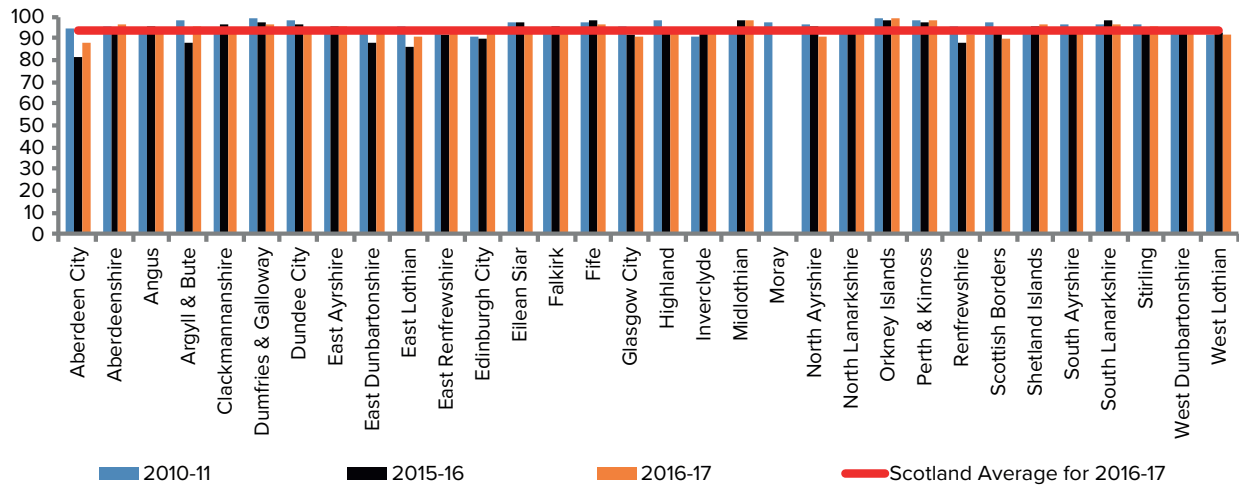
Percentage of Clean Streets

Year	% Clean streets
2010/11	95.4
2011/12	96.1
2012/13	95.8
2013/14	96.1
2014/15	93.9
2015/16	93.4
2016/17	93.9

Following several years of widening variation, the past 12 months has seen this variation narrow due to increasing scores at the lower end. In 2016/17, cleanliness scores ranged from 88.0% to 99.4%, with rural and smaller authorities reporting higher scores.

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

Street Cleanliness Score (% Acceptable)



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

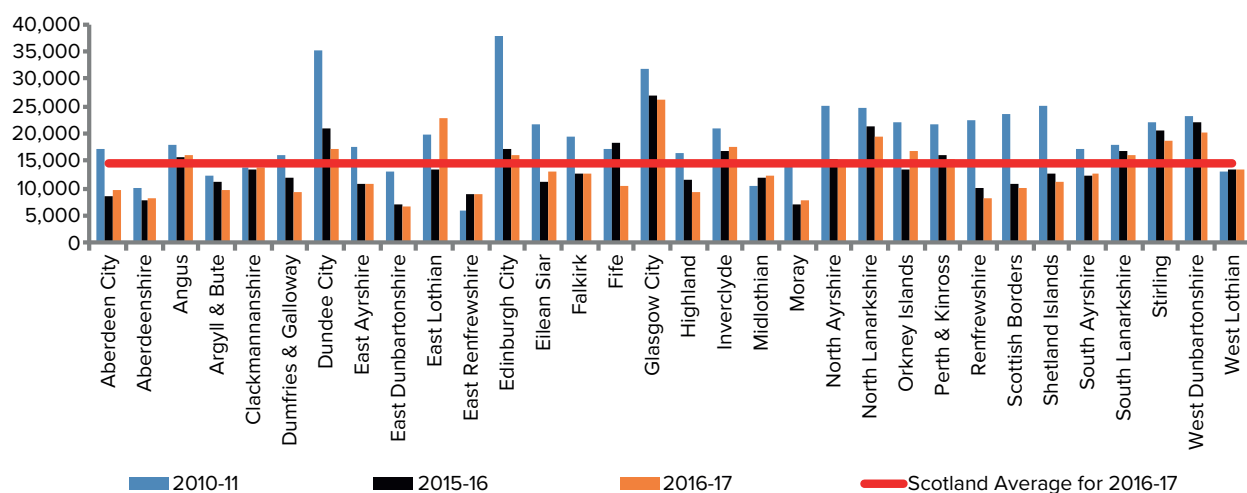
Note: Missing values reflect no data returned for that year

Over the same seven-year period the Scottish average for net cost of street cleaning per 1,000 population has reduced by 32.6%, from £21,835 in 2010/11 to £14,726 in 2016/17. This rate of reduction reflects a year-on-year reduction in costs.

Net Cost of Street Cleaning per 1,000 Population

% Change	Cash	Real
2010/11 - 2016/17	-25.8	-32.6
2010/11 - 2011/12	-2.4	-3.8
2011/12 - 2012/13	-9.5	-11.4
2012/13 - 2013/14	-7.4	-8.9
2013/14 - 2014/15	-2.6	-4.0
2014/15 - 2015/16	-2.4	-3.0
2015/16 - 2016/17	-4.6	-6.7

Net Cost of Street Cleaning per 1,000 Population (£)



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

The range across councils varies significantly, from £6,788 to £26,321, although this has narrowed over this period due to reductions at the higher cost end. Street cleaning costs vary systematically with deprivation and rurality, with higher costs in urban authorities and authorities with higher levels of deprivation (£15,967 in urban authorities compared to £10,163 in rural authorities, and £17,385 for areas with the highest level of deprivation compared to £12,130 for councils with the lowest levels).

Percentage of Adults Satisfied with Street Cleaning

Satisfaction levels for street cleaning remain high at above 70%, however rates have reduced since 2012/13 from 75% to 70%. The last 12 months have seen the largest reduction so far, with satisfaction rates reducing from 73% to 70% during this period. Until this point 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 possible shift in public perceptions in the context of continuing significant reductions in budgets.

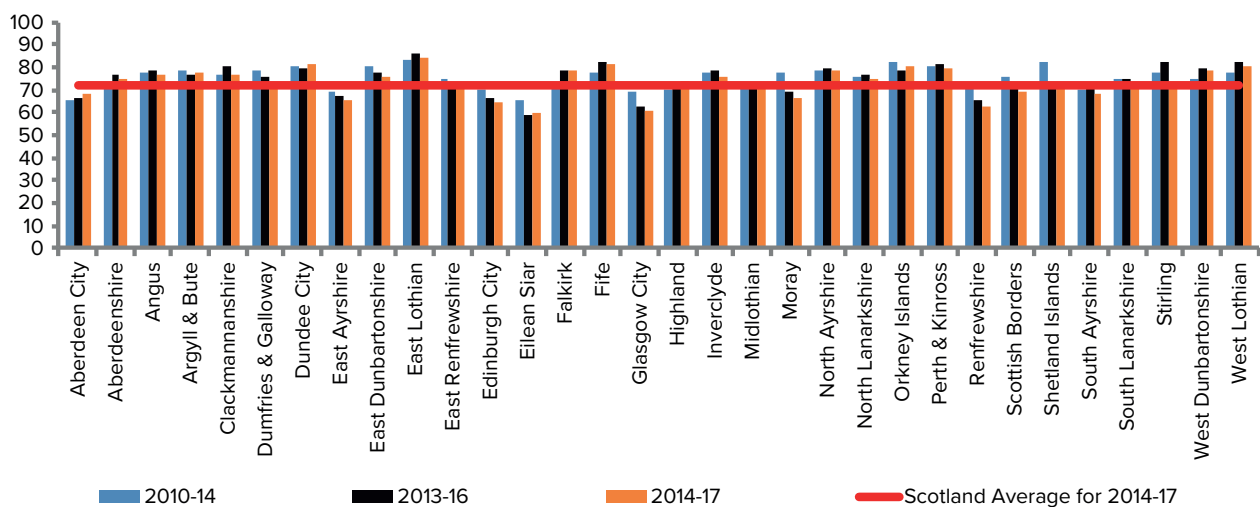
Percentage of Adults Satisfied with Street Cleaning

Year	Street Cleaning % satisfied
2010/11	73
2012/13	75
2013/14	74
2014/15	74
2015/16	73
2016/17	70

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, three-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 59.7% to 84.7%. Variation is not systematically related to deprivation, rurality or size of council.

Percentage of Adults Satisfied with Street Cleaning



Roads Maintenance

Roads maintenance costs are represented in this framework using a cost of roads maintenance 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.

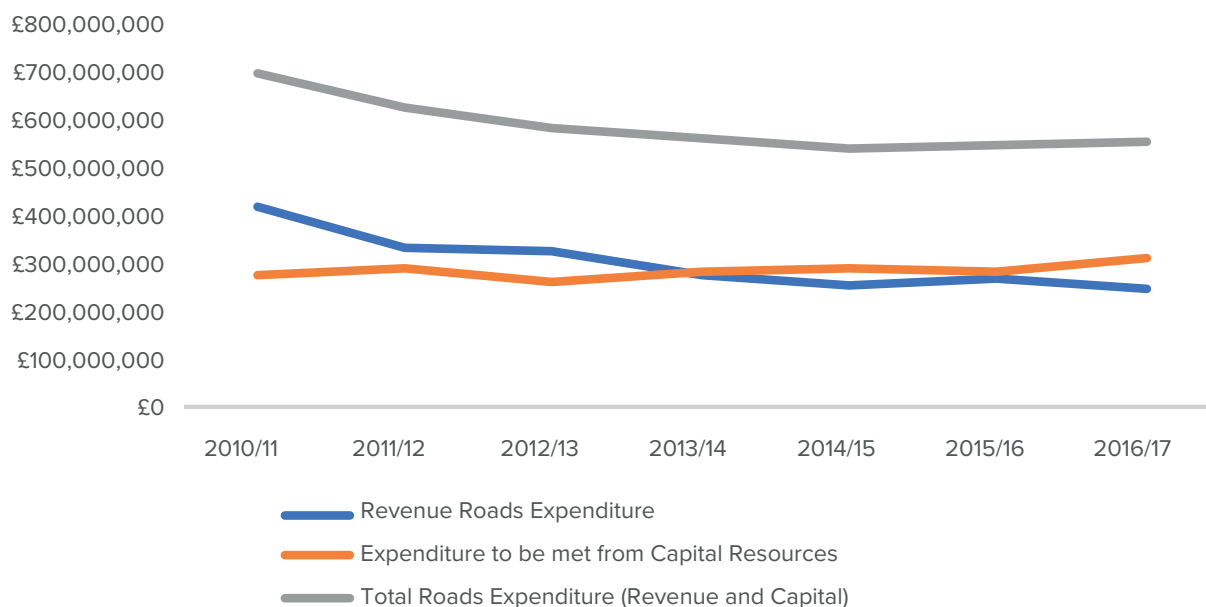
For the seven years for which we have data, the Scottish average cost per kilometre has reduced by 21.2% in real terms from £13,239 to £10,456. After reducing rapidly until 2014/15, costs have increased over the past two years, by 1.6% and 1.4%.

Cost of Maintenance per Kilometre of Road

% Change	Cash	Real
2010/11 - 2016/17	-13.3	-21.2
2010/11 - 2011/12	-9.2	-10.5
2011/12 - 2012/13	-4.4	-6.4
2012/13 - 2013/14	-3.2	-4.8
2013/14 - 2014/15	-2.7	-4.1
2014/15 - 2015/16	2.2	1.6
2015/16 - 2016/17	3.7	1.4

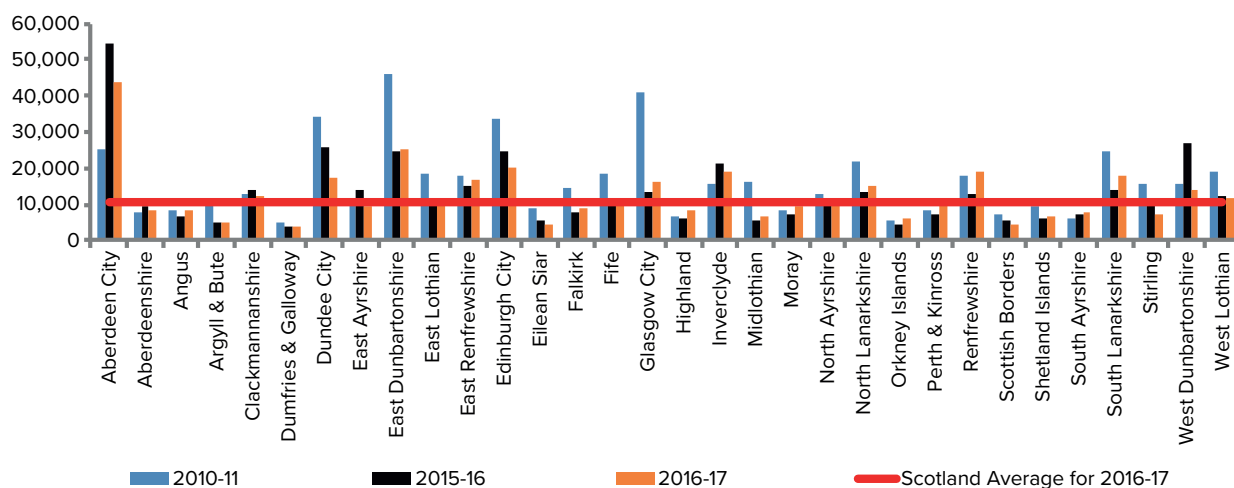
As the graph below shows, while revenue expenditure on roads maintenance has continued to reduce (-41% since the base year, and -7.6% in the last 12 months alone), the growth in capital expenditure has offset this trend to some extent. Capital expenditure has increased by 12% since the base year, and 9.8% in the last 12 months.

Roads Expenditure - Revenue and Capital



Over the past 12 months, the cost of roads maintenance increased by 1.4% from £10,310 to £10,456. There exists significant variation in the range of maintenance costs across councils, although this has narrowed since the base year. In 2016/17 costs ranged from £4,105 to £24,988 across councils (excluding Aberdeen which is an outlier at £43,869). Variation across councils is systematically related to rurality, with significantly higher costs in urban areas (e.g. £17,458 in urban areas, compared to £6,110 in rural areas, and £11,217 in semi-rural areas).

Cost of Maintenance per Kilometre of Road (£)



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

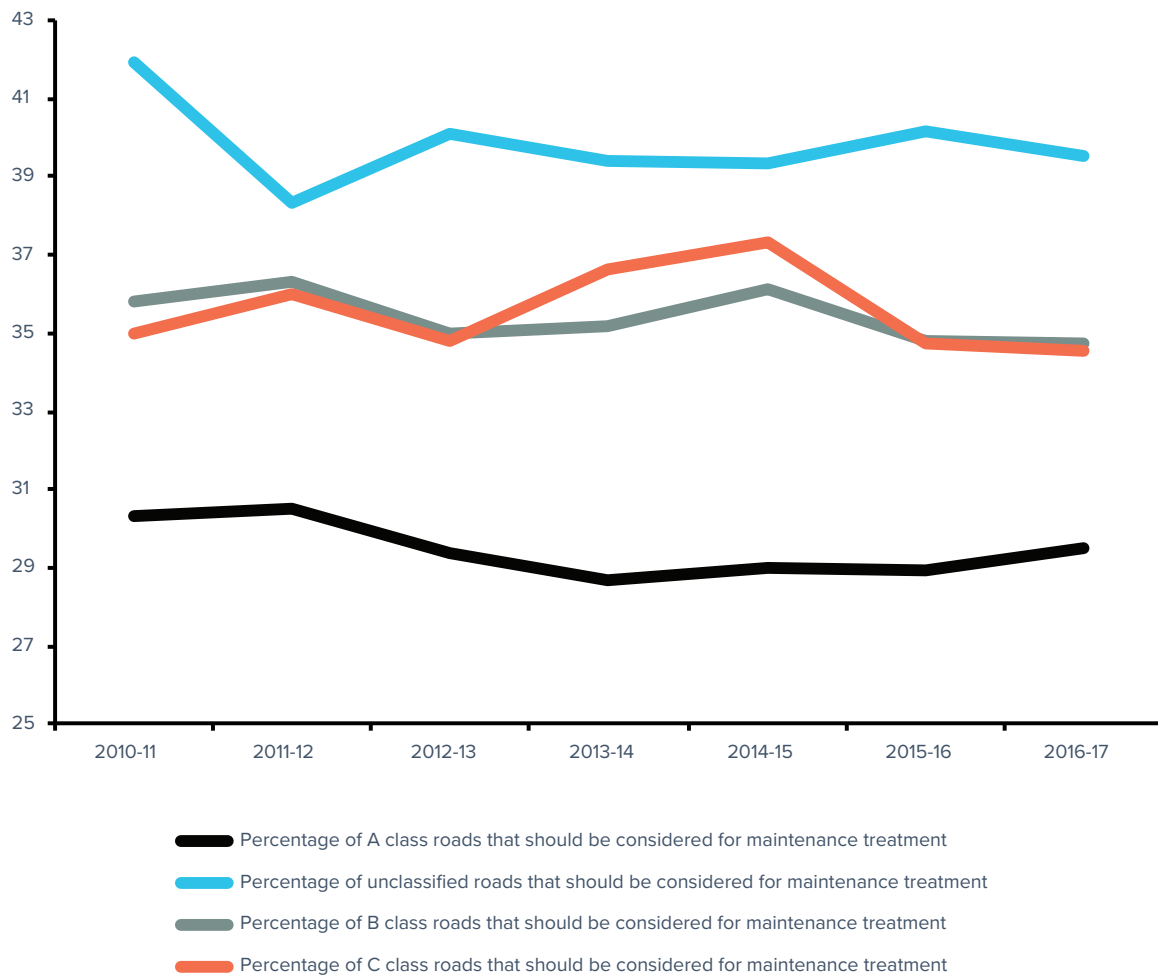
In terms of the condition of the road network, the seven-year period covered by this report has seen a slight improvement in the overall condition of all class of roads. Despite the significant reductions on spending therefore, the condition of key parts of the roads networks has improved.

Over the past 12 months, this picture becomes more mixed. While C class and unclassified roads have improved, B class roads have remained constant, and A class roads have shown a slight deterioration.

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

Year	% A class roads to be maintained	% B class roads to be maintained	% C class roads to be maintained	% unclassified class roads to be maintained
2009/11	30.3	35.8	35.0	41.9
2010/12	30.5	36.3	36.0	38.3
2011/13	29.4	35.0	34.8	40.1
2012/14	28.7	35.2	36.6	39.4
2013/15	29.0	36.1	37.3	39.3
2014/16	29.0	34.8	34.7	40.1
2015/17	29.5	34.8	34.6	39.5

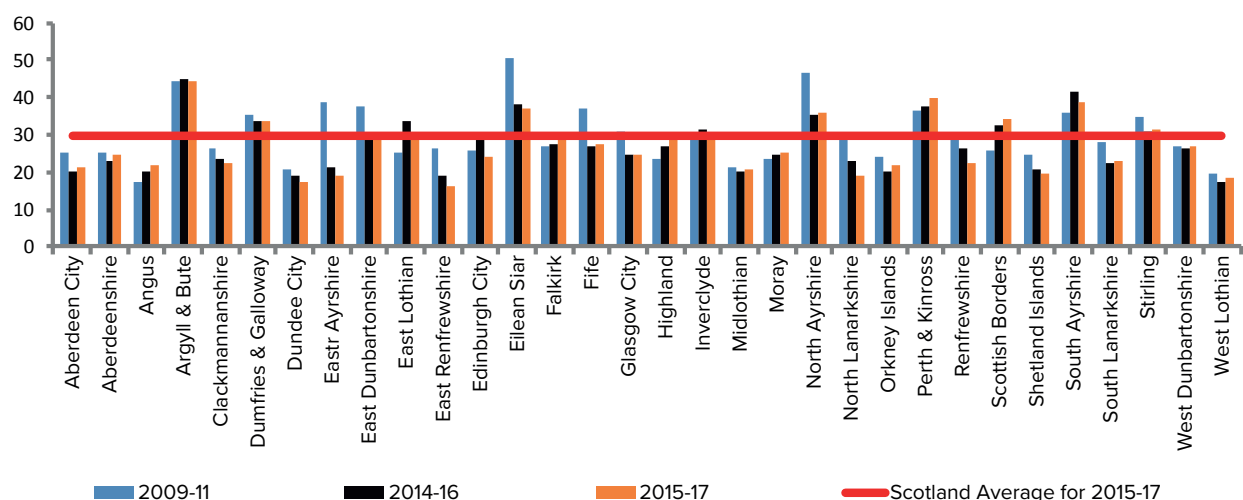
Percentage of A, B, C class and Unclassified roads that should be considered for maintenance



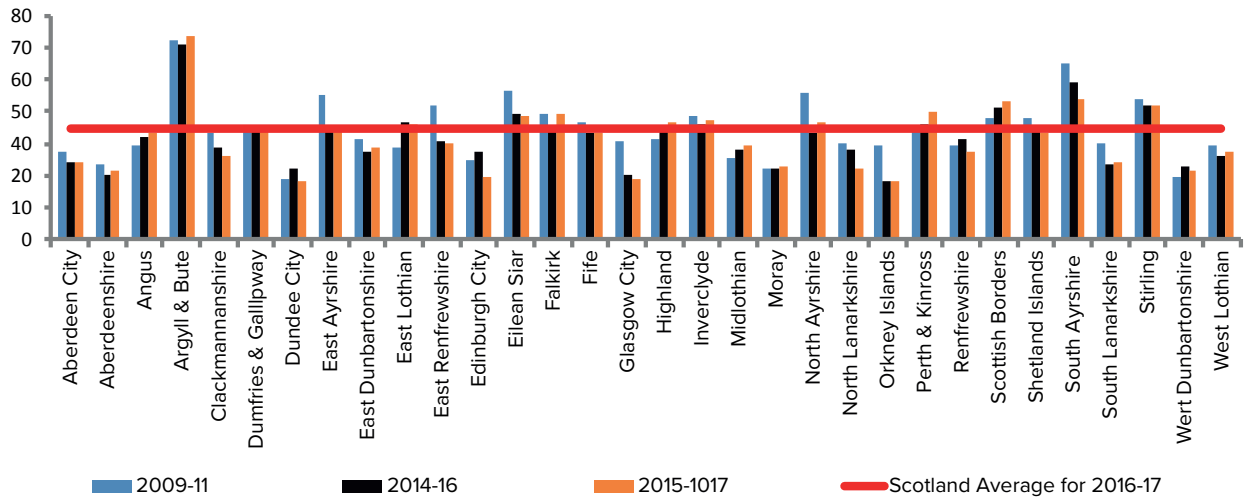
Source: Roads Asset Management Database, Society of Chief Officers of Transportation in Scotland (SCOTS)

The variation in condition varies significantly across Scotland for all classes of road, however this has narrowed since the base year. In 2016/17, the range for A class roads is 16% to 45%; B class roads is 18% to 63%; C class roads is 15% to 60%; and for unclassified roads the range is 24% to 57%.

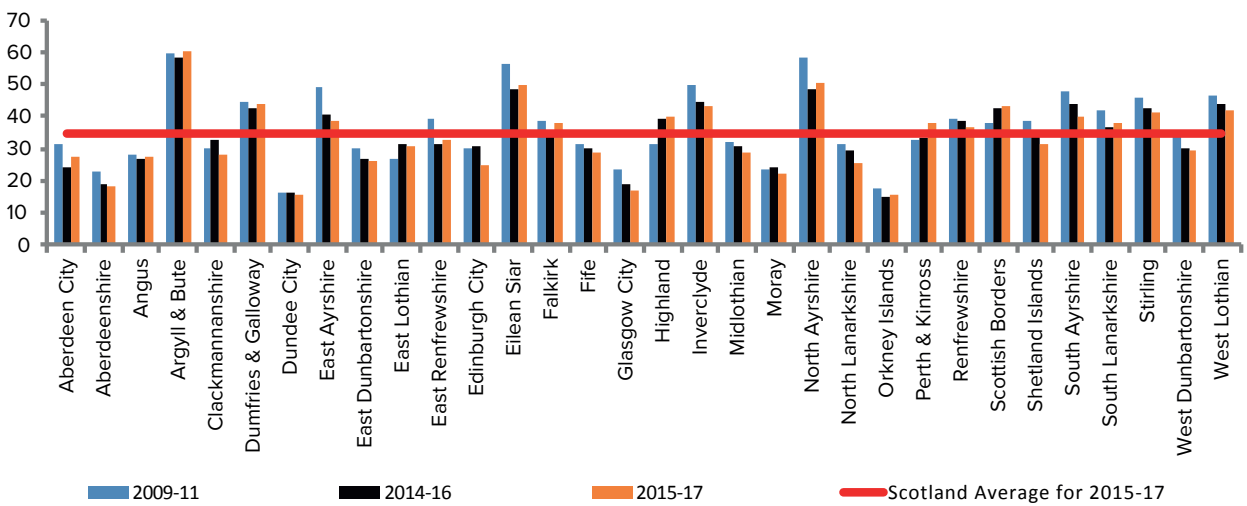
Percentage of A Class Roads That Should be Considered for Maintenance Treatment



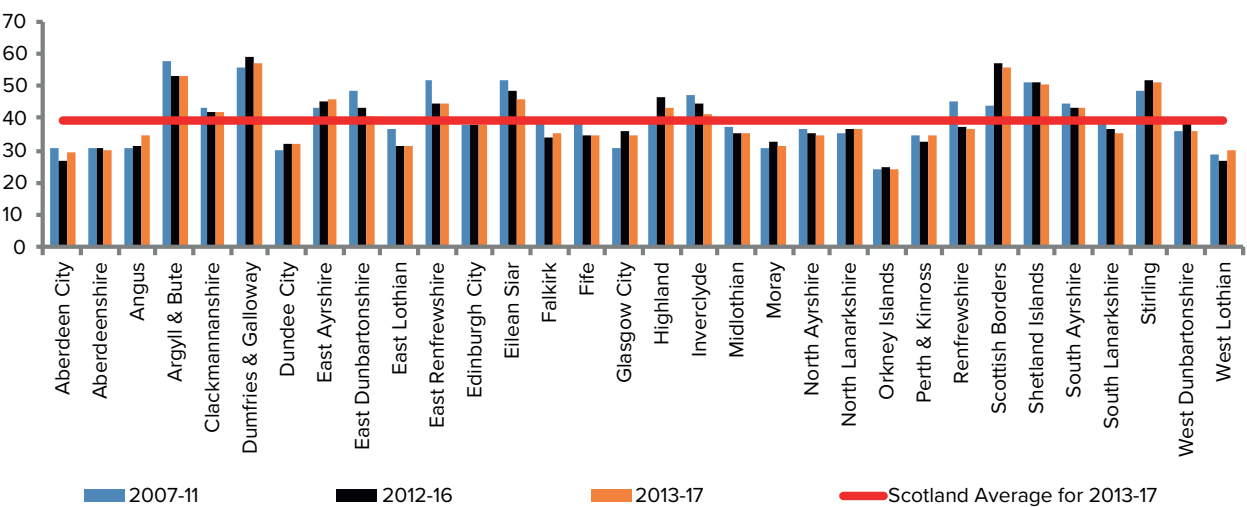
Percentage of B Class Roads That Should be Considered for Maintenance Treatment



Percentage of C Class Roads That Should be Considered for Maintenance Treatment



Percentage of Unclassified Roads That Should be Considered for Maintenance Treatment



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 19.5% from £26,766 to £21,555, 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 have been standardised within the framework to include expenditure on trading standards, money advice and citizen's advice per 1000 population. Since 2012/13, the cost of trading standards, money advice and citizen's advice services has fluctuated, with costs in 2016/17 now at the same level they were in 2012/13 (£5,438). In the last 12 months, costs have reduced by 7.3%. 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 this is likely to create further pressures on existing regulatory arrangements.

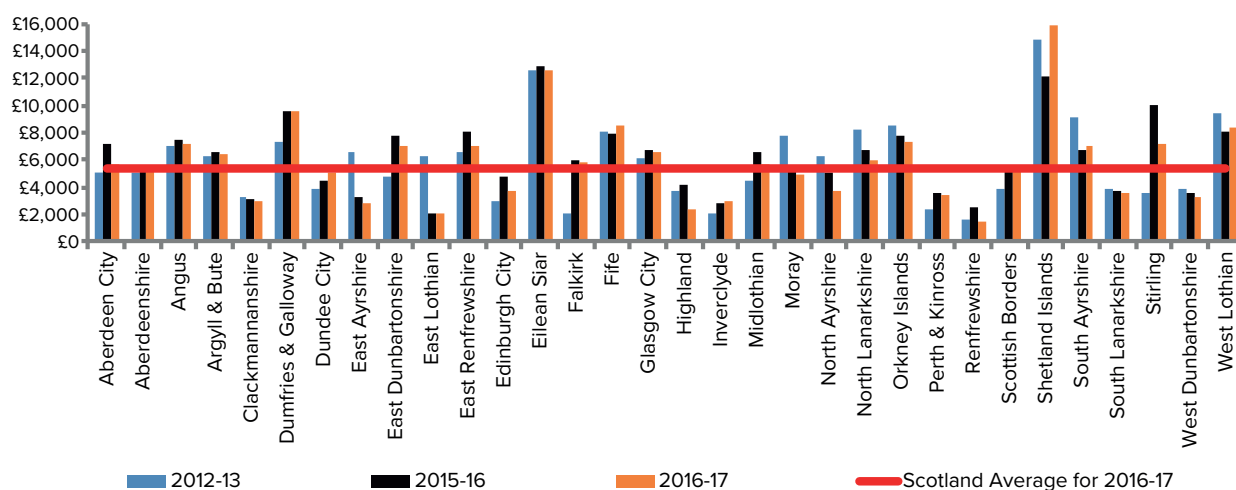
In 2016/17, costs ranged from £1,466 to £15,819 with variation systematically related to levels of deprivation within a council area. Trading standards costs are higher in councils with lower levels of deprivation (£7,151, compared £3,471 for councils with the highest level of deprivation).

Across this same period, there was a 6.6% reduction in the cost of environmental health services per 1,000 population, from £17,248 in 2012/13 to £16,117 in 2016/17. In the past 12 months, costs have fallen by 5.1% from £16,980 to £16,117. There is significant variation across councils, with costs ranging from £6,377 to £30,776. Rurality has a systematic impact on the cost of environmental health, with rural councils reporting significantly higher costs than urban or semi-rural authorities (£19,428 compared to £15,309 and £12,788 respectively). Rural authorities also tend to have higher trading standards costs (£6484) compared to £5,607 in urban authorities, although this difference is not statistically significant.

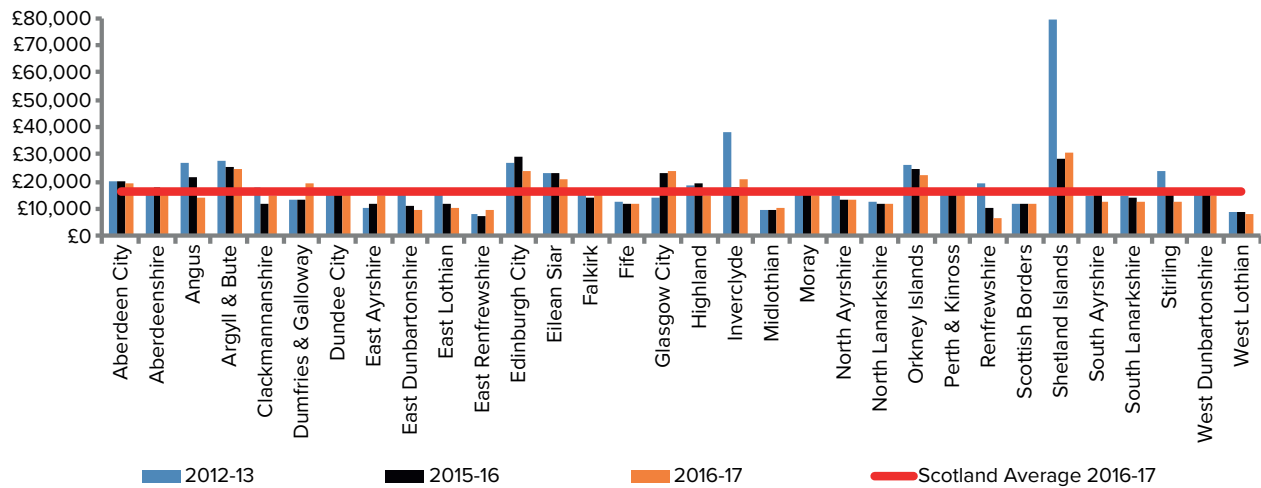
Cost of Trading Standards and Environmental Health per 1,000 Population

% Change	Trading Standards, Money Advice & Citizen's Advice		Environmental Health	
	Cash	Real	Cash	Real
2012/13 - 2015/16	6.2	0.0	-0.7	-6.6
2012/13 - 2013/14	9.5	7.6	6.4	4.6
2013/14 - 2014/15	-0.2	-1.6	-3.5	-4.9
2014/15 - 2015/16	2.5	1.9	-0.4	-1.1
2015/16 – 2016/17	-5.2	-7.3	-2.9	-5.1

Cost of Trading Standards, Money Advice and Citizen's Advice per 1,000 Population (£)



Cost of Environmental Health per 1,000 Population (£)



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*