

Transport and Environment Committee

10.00am, Tuesday, 27 October 2015

Carriageway and Footway Investment Strategy

Item number	7.8
Report number	
Executive/routine	Executive
Wards	All

Executive summary

This report seeks approval for a new strategic approach to capital investment in the City's roads and footways. The approach involves moving away from targeting investment on resurfacing works, primarily on the roads in the very worst condition, to a more preventative approach using a range of less expensive treatments. This approach over time will lead to a more sustained level of improvement in the condition of Edinburgh's roads network as measured by the Road Condition Index.

A further report will be presented to this Committee on January 2016, detailing the full investment strategy and carriageways and footways capital programme for 2016/17.

Links

Coalition pledges	P29 , P33 , P44 , P45
Council outcomes	CO8 , CO19 , CO21 , CO22 , CO23 , CO24 , CO25 , CO26 , CO27
Single Outcome Agreement	SO4

Carriageway and Footway Investment Strategy

Recommendations

- 1.1 It is recommended that the Committee:
 - 1.1.1 approves the new approach to carriageway and footway investment; and
 - 1.1.2 notes that a further report, detailing the full investment strategy for carriageways and footways, will be presented to this Committee on 12 January 2016.

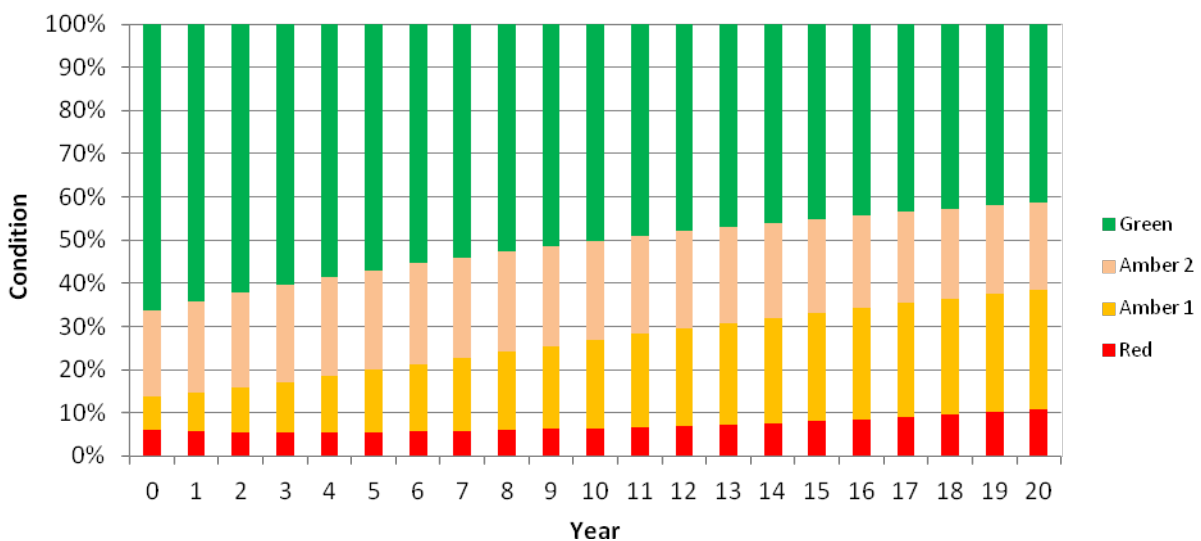
Background

- 2.1 The roads capital programme is based on a two stage prioritisation process. The first stage is based on a visual assessment by Roads staff of the condition of carriageways and footways using various engineering criteria. This process identifies the carriageways and footways that are in the worst condition.
- 2.2 A further set of criteria and weightings are then applied to determine which of these roads and footways should be included in the capital programme. The criteria and weightings are broader and aligned to the Local Transport Strategy and Active Travel Plan, with particular priority given to bus routes, arterial and other heavily trafficked roads.
- 2.3 As it is the carriageways and footways in the worst condition that are prioritised for inclusion in the capital programme, the works required tend to be the more expensive resurfacing or strengthening treatments.
- 2.4 The condition of Edinburgh's roads is assessed annually as part of the Scottish Roads Maintenance Condition Survey (SRMCS), an independent survey of road conditions in all 32 Scottish local authorities. The survey provides each local authority with a Road Condition Index (RCI) which identifies the percentage of roads in need of maintenance. Edinburgh's most recent RCI is 35.1%, based on the SRMCS from 2013/14, placing Edinburgh 16th out of the 32 Scottish local authorities.

Road Condition Index

- 3.1 In 2005/06, Edinburgh had an RCI of 42.3% but in the same year capital investment in roads increased from just over £3m per annum to over £16m increasing to £20m in 2008/09 and to 24.5m in 2013/14. Although the initial increase in the capital budget saw a significant improvement in the condition of Edinburgh’s roads with the RCI reducing to 35% on 2006/7 performance has remained fairly static since then, despite sustained levels of investment.
- 3.2 The RCI consists of three categories of deterioration: Red, Amber 1 and Amber 2, with roads in the red category being in the worst condition. Currently the majority of carriageways prioritised for investment fall within the red category. Treating the Red category roads only results in a small number of carriageway resurfacing or strengthening schemes being carried out each year, due to the cost of these treatments.
- 3.3 As part of the development of the Roads Asset Management Plan (RAMP), analysis has been carried out on the impact on Edinburgh’s RCI if the Council continues with the existing approach to roads capital investment. The chart below shows the effect of the current investment strategy on the percentage of Edinburgh roads falling into the red and amber categories of deterioration (ie in need of maintenance investment), over a 20 year period, assuming that capital investment remains at current levels. By year 20, the percentage of roads requiring maintenance increase from just under 35% to nearly 60% while the percentage that fall into the red category rises from 5% to over 10%.

**Current Investment Strategy
Condition Profile - All Roads**

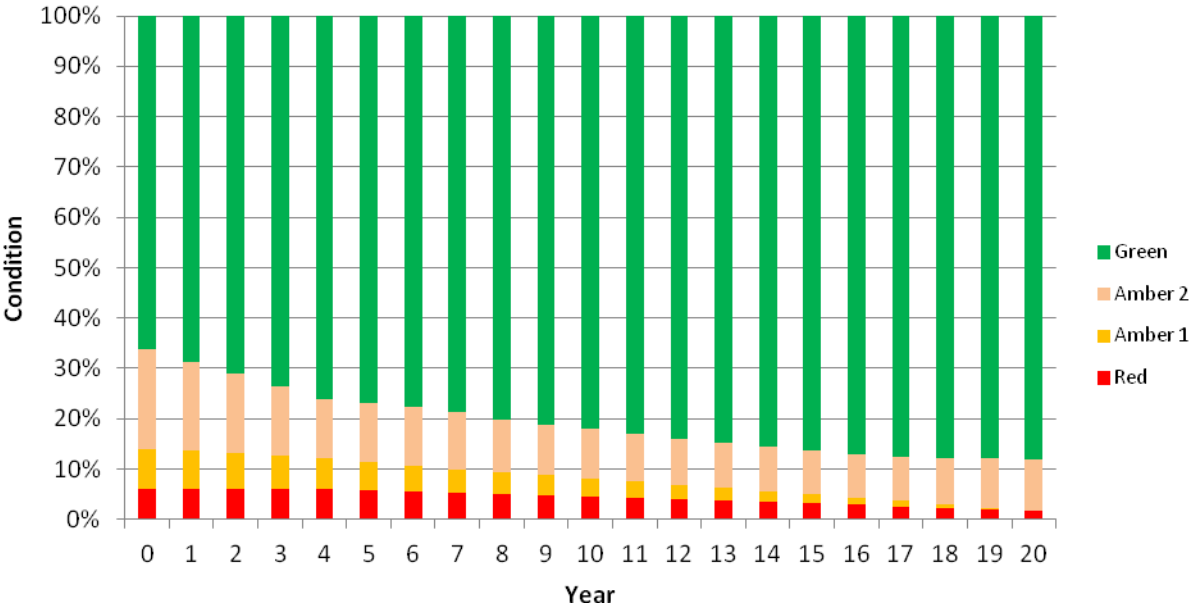


3.4 At the current time, despite high levels of capital investment, there is insufficient resource to treat all the roads in the red category. Furthermore, because investment is targeted almost exclusively on roads in the red category (with the possible exception of Neighbourhood ‘Right First Time’ works) there is no investment going into treating roads in the amber categories, which over time will continue to deteriorate and eventually slip into the red condition category.

3.5 As part of the modelling work for the RAMP, alternative scenarios for capital investment have been developed. These scenarios are predicated on a more preventative approach aimed at roads that are in the amber condition categories. Investment interventions on these roads would require less expensive treatments (eg surface dressing, slurry sealing) which would improve the condition of the carriageway or footway and delay the need for resurfacing or strengthening work. Due to the cheaper cost of the treatments required on amber condition roads, more could be treated each year. The chart below illustrates the impact of this preventative approach over 20 years, assuming levels of capital investment remain at current levels, with the percentage of roads requiring maintenance reducing to 12%.

3.6

**New Investment Strategy
Condition Profile - All Roads**



Roads Asset Management Plan

3.7 The Roads Asset Management Plan (RAMP) is an integral part of the new investment strategy for carriageways and footways. It will be used to balance the long-term needs for our network, with the short term need for road works in order to keep the city’s roads well maintained.

- 3.8 The RAMP will drive the improvement programme for all aspects of management of the carriageway and footway network including:
- Developing knowledge of new materials and maintenance techniques;
 - Suitability for use on Edinburgh's network;
 - Benchmarking against other local authorities in order to identify improvements to current practices;
 - Targeting investment to ensure best value and improved lifecycles; and
 - Critically reviewing the performance of current and future investment.
- 3.9 This preventative approach will treat more roads within the amber condition categories and less within the red, significantly slowing their deterioration and negating the need for more robust, expensive treatments.
- 3.10 More surfacing treatments will be introduced to treat roads in the amber categories. These treatments will be less expensive and will be applied to roads in order to stop their deterioration. Many of these treatments are currently used throughout Scotland. Surface dressing, micro treatments and slurry sealing are all examples of surfacing treatments that will be considered.

UKPMS

- 3.11 The UK Pavement Management System (UKPMS) is the national standard for management systems for assessing the condition of the local road network and planning the type of investment that is required.
- 3.12 A visual inspection is currently used to determine the condition of carriageways. The UKPMS will replace visual condition surveys and will be used for systematic collection and analysis of condition data, ie Scottish Road Maintenance Condition Survey. The UKPMS analyses specific types of defects ie cracking, texture, profile and rutting, to select which roads should be considered for preventative, resurfacing or strengthening treatments.
- 3.13 The UKMPS will be used to select carriageway schemes for 2016/17 Capital Investment Programme.

Prioritisation

- 3.14 The existing second stage of prioritisation, as outlined in section 2.2 of this report, would still be applied before arriving at a finalised capital programme. (Appendix B shows the proposed procedures to be used when selecting carriageway and footway schemes for investment.)
- 3.15 The investment strategy will be reviewed on an annual basis to ensure that continual improvement is being achieved and to make any adjustments to the Roads Asset Management Plan to ensure that the improvement in Edinburgh's roads network is being delivered.

- 3.16 A further report will be presented to this committee, on 12 January 2016, giving more detail and the full investment strategy, including the treatments that will be used, the future Roads Asset Management Plan and the proposed roads capital programme for 2016/17.

Measures of success

- 4.1 The assessment of the condition of the city's roads is measured annually by the Scottish Road Maintenance Condition Survey (SRMCS). This survey shows the percentage of roads that should be considered for maintenance intervention.
- 4.2 A continual gradual improvement in Edinburgh's RCI will be a measure of the success of the Capital Investment Strategy.

Financial impact

- 5.1 There are no financial implications with this update report.

Risk, policy, compliance and governance impact

- 6.1 There are no significant compliance, governance or regulatory implications expected as a result of approving the recommendations in this report.

Equalities impact

- 7.1 Investment in the city's roads, footways, gullies and street lighting improves the accessibility and safety of the road and footway network and therefore has a positive impact for all users, particularly older people and those with a disability. All footway reconstruction schemes incorporate new dropped crossings at all junction points, if not already existing.

Sustainability impact

- 8.1 There is potential for positive impact on the environment by improving vehicle and bicycle ride quality on carriageway surfacing works and improved pedestrian passage on footway reconstruction schemes.

Consultation and engagement

- 9.1 Consultation has been carried out on the Investment Strategy with several elected members as part of capital prioritisation workshops. Details of the Roads Asset management Plan have been presented to the Council's Transport Forum.
- 9.2 Further consultation will be carried out and detailed in an Investment Strategy Report which will be presented to this committee on 12 January 2016.

Background reading/external references

[Road and Footway Prioritisation Review 2014](#)

John Bury

Acting Director of Services for Communities

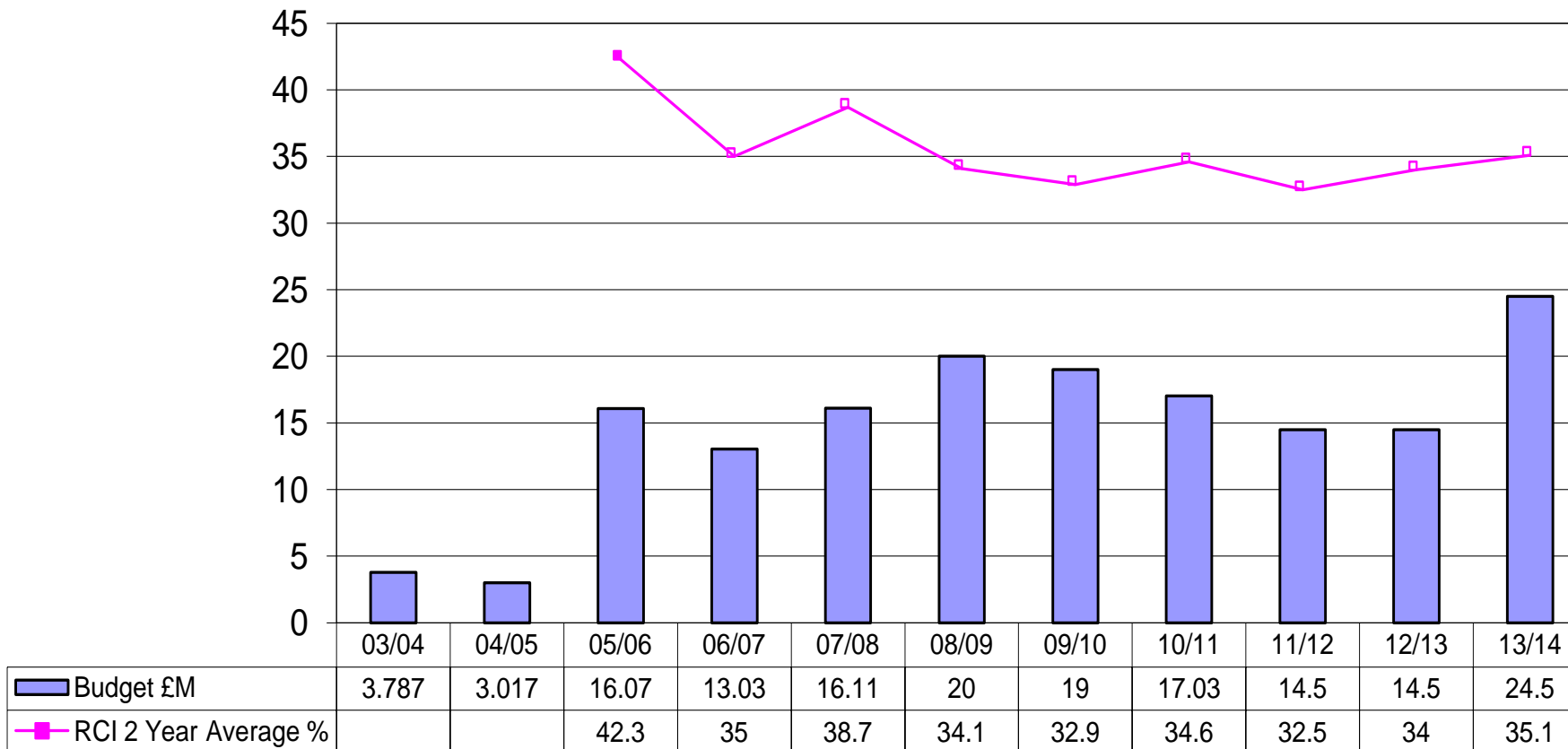
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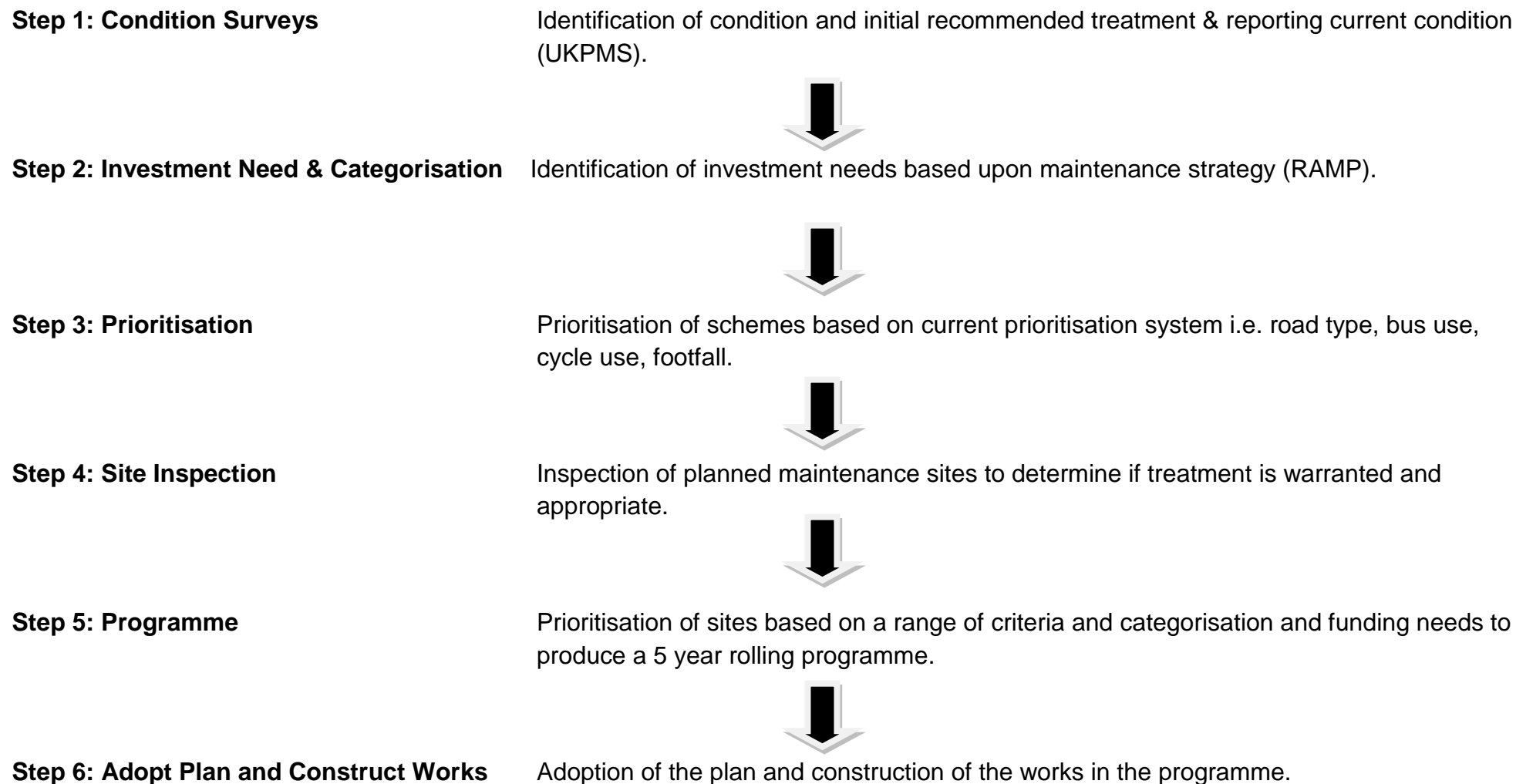
Links

Coalition pledges	<p>P28 - Further strengthen links with the business community by developing and implementing strategies to promote and protect the economic well being of the City.</p> <p>P33 - Strengthen Neighbourhood Partnerships and further involve local people in decisions on how Council resources are used.</p> <p>P44 - Prioritise to keep our streets clean and attractive.</p> <p>P45 - Spend 5% of the transport budget on provision for cyclists.</p>
Council outcomes	<p>CO8 - Edinburgh's economy creates and sustains job opportunities.</p> <p>CO19 - Attractive Places and Well-Maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm.</p> <p>CO21 - Safe – Residents, visitors and businesses feel that Edinburgh is a safe city.</p> <p>CO22 - Moving Efficiently – Edinburgh has a transport system that improves connectivity and is green, healthy and accessible.</p> <p>CO23 - Well-Engaged and Well-Informed – Communities and individuals are empowered and supported to improve local outcomes and foster a sense of community.</p> <p>CO24 - The Council communicates effectively and internally and externally and has an excellent reputation for customer care.</p> <p>CO25 - The Council has efficient and effective services that deliver on objectives.</p> <p>CO26 - The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives.</p> <p>CO27 - The Council supports, invests in and develops our people.</p>
Single Outcome Agreement	<p>SO4 - Edinburgh's communities are safer and have improved physical and social fabric.</p>
Appendices	<p>A Road Condition Index – 2 Year Average</p> <p>B Planned Maintenance Procedures</p> <p>C Full Investment Strategy</p>

Road Condition Index – 2 Year Average



Planned Maintenance Procedures



Full Investment Strategy

