
Report To	Environment & Regeneration Committee	Date:	16 January 2014
Report By:	Acting Corporate Director Environment, Regeneration & Resources	Report No:	ERC/ENV/IM/13.181
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Subject:	Environmental and Commercial Services (Roads) Roads Defects – Proposals		

1.0 PURPOSE

- 1.1 The purpose of this report is to present proposals to Committee to improve the effectiveness of defect management, and in particular the issue of potholes and to seek approval for increased funding for the period 2014/16.

2.0 SUMMARY

- 2.1 It has been well publicised that the underinvestment in the national roads network has led to a network that is fragile and lacks resilience to respond to environmental and climate changes such as severe winter weather, including prolonged wet weather. This has manifested itself in a significant increase in the number of pothole defects. A 2011 report by Audit Scotland on Maintaining Scotland's roads estimated that it would cost £1.54 billion to fix all roads related defects.
- 2.2 A report to the Environment & Regeneration Committee of 5 September 2013, advised members that Inverclyde Council has responded positively to the Audit Scotland report, making a significant investment to improve the standard of the roads network throughout Inverclyde. However this investment, based on the evidence above, has been weighted to making long term structural repairs through the capital programme. This is not dissimilar to other authorities where structural carriageway treatments currently absorb the majority of available funds.
- 2.3 The Roads Asset Management Plan (RAMP) approved on 30 August 2012 acknowledged the need for further investment in the revenue budget for routine reactive and cyclic maintenance to run in tandem with the capital programme works. It was highlighted in the RAMP that spend on reactive maintenance would only fall once the condition of the network improved substantially.
- 2.4 The Council's current procedures for road safety inspections are broken down into three categories of pothole defects with targeted response times to repair. The categories and response times listed below are based on guidance contained within the Code of Practice for Highways Maintenance Management "Well-Maintained Highways".
- Category 1 defects: Emergency defects should be corrected or made safe at the time of inspection where this is practicable; where this is not possible such defects should be repaired, or a temporary or permanent basis, within 48 hours.
 - Category 2 defects: Repair within 5 working days.
 - Category 3 defects: Repair within 28 days.
- 2.5 Currently there are no National performance indicators that cover the above three categories and with defect response times varying between Councils, benchmarking of performance is difficult.

However the Council participates in the SCOTS RAMP Performance Management and Improvement Focus Group, where the percentage of Category 1 defects made safe within response times are measured within family groups. Inverclyde Council falls within the urban family group alongside another seven authorities. The average scoring between the eight authorities for 2012/13 was 84.5% with Inverclyde scoring 81.2%. As not all authorities input to this indicator there is no recorded national average.

- 2.6 Under the key objectives as set out in the Environmental, Regeneration & Resources Corporate Directorate Improvement Plan (CDIP) Roads Services has set key performance measures against internal target repair times for the three categories of defects listed above. The service is performing above target for category 1 but is failing to hit the targets set for category two and three.
- 2.7 There are several factors that influence the performance against the internal targets; the number of employee working days available throughout year, current progress in capital works programme, accuracy of current systems available for recording defects and other duties, such as winter maintenance, kerbing, sign work and severe weather emergency work, which all affect available resources.
- 2.8 Notwithstanding the above it is clear that the numbers of untreated potholes are increasing and that without further revenue maintenance investment over the next 2 years then this situation will get worse until the impact of the major carriage way investment begins to have a material impact on the Council's overall road network condition.
- 2.9 As such it is proposed that the Committee approve a request for an additional one-off sum of £500,000 to be invested over 2014/16 to address roads defects and increase drainage works (one of the major causes of roads defects being drainage problems).
- 2.10 Over the same timescale officers need to greatly improve the quality of management information available to enable all those involved in managing and maintaining the roads network to manage limited resources effectively and give members and the public confidence that investment is being appropriately targeted.
- 2.11 Proposals in this regard are outlined in paragraphs 7.2 and 7.3 and it is proposed that half yearly updates will be provided to Committee on progress against the specific actions.

3.0 RECOMMENDATIONS

- 3.1 That the Committee note the various challenges faced by the Council in terms of managing Road Defects.
- 3.2 That the Committee endorse the Short & Medium term actions outlined in section 7 of the report and note that updates on progress will be reported to Committee twice per year.
- 3.3 That the Committee remit a request for £500,000 to increase maintenance expenditure on Roads Defects and Drainage to the 2014/16 budget process.

Ian Moffat
Head of Environmental and Commercial Services

4.0 BACKGROUND

- 4.1 The local roads network, unlike many of the major trunk roads and motorways, has evolved over a very long period of time and much of it was not designed or constructed to the standards that would be expected of a newly constructed road today. As a consequence, local roads are less resilient to changing environments and adapt poorly to severe weather events, giving rise to defects such as potholes.
- 4.2 Inverclyde's carriageway network has a relatively high percentage of unclassified roads; these have evolved over time, and often being built up with successive treatments. Consequently, their irregular construction and the increased volume of heavier traffic puts these roads at a greater risk of occurrence of potholes. The unclassified roads also experience significant excavations from Utility companies and this can and does undermine the longer term durability of the roads where such excavation and reinstatement has taken place.
- 4.3 Potholes are highly visible roads and footway defects, often attracting media attention and concerns from local residents. The main contributors to the formation of potholes include severe weather, including the ingress of water, winter freeze-thaw cycles and inadequate drainage.
- 4.4 The public do not necessarily discern between different surface defects. Minor defects may be perceived as potholes, even if they do not meet the authority's definition. Perception of the number of potholes may therefore exceed the actual number. Other concerns include poor quality patching of utility reinstatements, unevenness and raised or lowered ironwork, especially at the edge of the road or in cycle lanes.
- 4.5 Across Scotland, local authority payments to compensate drivers for pothole damage have risen, from around £340,000 in 2007/08 to £1.2 million in 2011/12. Currently councils do not capture public perception of roads condition on a consistent basis however this is an area being taken forward as part of the National Roads Maintenance Review. A number of roads user surveys, although limited in scope, indicate that the public has concerns about the condition of Scotland's roads.
- 4.6 Inverclyde has published its Roads Asset Investment Strategy and in February 2013 the Council approved a three year budget which included £17m capital investment for carriageways, footways, street lighting and structures, with a stated intention of increasing this to a total value of £29m for the period 2013/18.
- 4.7 Inverclyde Council has an approved procedure for road safety inspections and which specifies intervention levels and response times for various categories of road defects. These are based on the guidance in *Well maintained Highways* as highlighted in Para 2.4.
- 4.8 With the growing increase of road defects caused by severe weather some local authorities have increased the response period for safety defects from 24 hours to five days, with most defects repaired on a semi-permanent basis. The period for other defects, Category 2 & 3 be as high as six months.
- 4.9 With the lack of National benchmarking information available across all defect categories, Environmental & Commercial Services have adopted the guidance in *Well Maintained Highways* to set internal performance targets as set in the Environmental, Regeneration & Resources Directorate Improvement Plan (CDIP). At present there is only one National performance measure, where the percentage of Category 1 defects made safe with response times are measured within family groups.
- 4.10 The Roads Service continues to report on performance in line with the Council's Strategic Planning and Performance Management Network, and this will include the new SOLACE indicators affecting roads, and contributes to benchmarking via the SCOTS and APSE Groups. The Council continues to build on existing collaborative arrangements via the following;
 - Joint procurement;

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- Development/sharing of best practise via roads working groups;
 - Inverclyde has been working closely with East Renfrewshire and Renfrewshire Councils, and the Improvement Service, regarding the potential for collaborative working.

4.11 Good routine maintenance of the network includes drainage work; including ditches and gullies clearing which if done on a planned basis will contribute to prolonging the life of a carriageway by keeping water out of the structure. Where roads are of evolved construction this is of particular importance as they are unlikely to incorporate designed drainage systems to remove ground and surface water from the highway structure.

5.0 INVERCLYDE'S PERFORMANCE MANAGEMENT FRAMEWORK

5.1 Inverclyde Council has an approved procedure for road safety inspections and which specifies intervention levels and response times for various categories of road defects; these are as follows:

- Category 1 defects: Emergency defects should be corrected or made safe at the time of inspection where this is practicable; where this is not possible such defects should be repaired, or a temporary or permanent basis, within 48 hours.
- Category 2 defects: Repair within 5 working days.
- Category 3 defects: Repair within 28 days.

5.2 Some local authorities have increased the response period for safety defects from 24 hours to five days, with most defects repaired on a semi-permanent basis. The period for other defects can be as high as six months.

5.3 Inverclyde Council participates in the SCOTS RAMP Performance Management and Improvement Focus Group, where the percentage of Category 1 defects made safe within response times are measured within family groups. Inverclyde Council falls within the urban family group alongside another seven authorities. The average scoring between the eight authorities for 2012/13 was 84.5% with Inverclyde scoring 81.2%. Not all authorities submit figures, so there are again no National figures to benchmark against.

5.4 Under the key objectives as set out in the Environmental, Regeneration & Resources Corporate Directorate Improvement Plan (CDIP) Roads Services has set key performance measures against the targeted repair times for the three categories of defects listed above. The service is performing above target for category 1 but is failing to hit the targets set for category two and three.

5.5 There are several factors that influence the performance against the internal targets; the number of employee working days available throughout year, current progress in capital works programme, accuracy of current systems available for recording defects and other duties, such as winter maintenance, kerbing, sign work and severe weather emergency work which all affect available resources.

5.6 It is clear to management that there are questions around the accuracy of the information produced in respect of roads defects both in terms of absolute numbers of defects recorded and addressed but also the number outstanding at any point in time. This makes the targeting of the Council's limited resources difficult and whilst there is no doubt that a high level of defects are being addressed what is less certain is whether they are the correct ones and whether there is a consistency of performance throughout the Council area.

5.7 Environmental & Commercial Services (Roads) operates an electronic database in respect of defect management, and this system was developed in-house approximately 10 years ago. The system is beyond its useful life as it does not provide the level of management information expected in terms of being able to fully analyse the defect management process and assist with the delivery of future efficiencies. It also relies on a significant manual input of data which is time consuming and inefficient.

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- 5.8 A business case for replacement of this system and the use of mobile technologies is being developed with colleagues in ICT and Finance and subject to a robust business case will be able to access funding from the Modernisation Fund held by the Council.

6.0 PROPOSED INVESTMENT

- 6.1 It is clear that irrespective of the difficulties in getting accurate management information that the number of roads defects are increasing and until the significant RAMP investment begins to have a material effect then extra revenue funding will be required to avoid the roads network deteriorating significantly further. It is proposed therefore that Committee approve a request to be progressed as part of the budget process to allocate £300,000 (£150,000 / year) towards addressing the roads defects backlog. It is anticipated that the delivery of this extra investment will be through a combination of internal resources and external contractors.
- 6.2 Good routine maintenance of the network also requires drainage work; including ditches and gullies clearing which if done on a planned basis will contribute to prolonging the life of a carriageway by keeping water out of the structure. Where roads are of evolved construction this is of particular importance as they are unlikely to incorporate designed drainage systems to remove ground and surface water from the highway structure.
- 6.3 Clearly the recent wet weather is having a significantly adverse impact on the roads network and as such it is proposed to request a further £100,000 per year for the next 2 years to carry out essential drainage/ditches/gully work in relation to our roads network. Again this will be delivered through a combination of internal and external resources.

7.0 PROPOSED SUPPORTING ACTIONS

- 7.1 In tandem with the request for extra funding officers recognise the need to take action to improve the quality of information and performance in the area of roads defects management. Actions have been split over short, medium and long term and it is proposed that subject to Committee agreeing the proposals that progress against these be reported to Committee half yearly.
- 7.2 In the short term (for the period to the end of the current financial year), the following is proposed:
- Three number defect teams will operate at all times (weather permitting); this has the benefit of maintaining a presence in the each of the three operation areas (East, West and Central), with each team under the control of the local Area Roads Inspector.
 - Earmarked Reserves funding previously allocated to Roads will supplement the existing revenue allocation and will be targeted to defect repairs, especially potholes, with the emphasis on meeting the specified target time for repairs. Performance will be closely monitored and reported to senior management during this period.
 - A review of staffing arrangements within the Roads Trading Organisation with specific reference to the future utilisation of Future Jobs Fund staff and Modern Apprentices.
 - The establishment of a Drainage / ditching squad, made up of two operatives equipped with the appropriate plant.
 - Improve the quality of reporting and management information recording.
- 7.3 In the medium term (April 2014 to March 2016) the following is proposed:

A review of defect inspection and repair strategies, including:

- A review of the Roads maintenance hierarchy to determine the frequency and response times for pothole repairs.
- A review of pothole categorisation, repair type (temporary and permanent) and response times based on the above.
- Review of internal targets and improve Inverclyde's performance on the approved National indicator index.

- Defining a pothole in clear and concise terms, such as width and depth to provide clarity and transparency, both for the public and for the roads inspectors to record and assess defects.
- Developments of an inspection manual to assist the roads inspectors determine how defects are to be assessed and determine appropriate response times.
- A review of the use of internal labour v external contractors for all or part of defect repair management, with a view to determining the best value approach for Inverclyde Council.
- Increase revenue spends in line with recommendations made in the Roads Asset Management Strategy. It is proposed that an additional £500k over the period 2014/16 be submitted to the budget process. This would be allocated to dealing with pothole type defects via the use of proprietary defect repair materials and techniques, and conventional patching (£150k per annum), and for the maintenance of, and minor improvements to, existing drainage systems (£100k per annum).
- Preparation of an outline business case for the implementation of a dedicated electronic Roads Integrated Management System; this would include the use of handheld and other mobile technologies. The aim would be to improve the efficiency and effectiveness of the delivery of whole defect management from defect notification/identification through to implementation of a permanent repair. A Roads Integrated Management System would replace the existing management database which is beyond its useful life as noted above.
- Revise customer satisfaction survey and defect reporting mechanisms.

7.4 In the longer term (April 2016+) the following is proposed:

- Conclude Shared service review/Collaborative working with neighbouring authorities
- Improve the Inverclyde's position in the roads condition Index
- Reduce the number of roads related public liability claims
- Improve customer satisfaction ratings
- In line with the Roads asset Management Plan review future years funding requirements for defect management

8.0 IMPLICATIONS

Finance:

8.1	Cost Centre	Budget Heading	Budget Year	Proposed Spend this Report	Virements From (if applicable)	Other Comments
	Roads	Roads Defects / Drainage	2014/15 – 2015/16	£500,000	n/a	Additional funding, subject to 2014/16 budget process

Legal: Increased investment in roads defects should reduce the number of claims for damage caused by potholes being received by the Council.

Personnel: It is envisaged that any increased investment will increase employment opportunities with the Council and in particular build on the successful engagement with the Modern Apprenticeship and Future Jobs Fund programmes.

Equality: None.

Repopulation: The improvement of the roads infrastructure in Inverclyde will contribute to the Council's repopulation agenda.

9.0 CONSULTATION

9.1 Finance Services have been consulted on this report.