

The Highland Council
Community Services Committee
15 May 2014

Agenda Item	8(iii)
Report No	COM/07/14

Additional Road Maintenance Funding – 2014/15
“Roads Innovation Fund”

Report by Director of Community Services

Summary

This report introduces the Roads Innovation Fund whose objective it is to explore ways to make more effective use of road maintenance budgets. Approval of the associated Roads Innovation Fund Action Plan is sought and progress reports will be provided for the scrutiny of Members at each Community Services Committee during 2014/15.

1. Background

- 1.1. The Highland Council has a statutory obligation under the Roads (Scotland) Act 1984 to manage and maintain the local public road network.
- 1.2. As highlighted in the previous item on the Agenda for this meeting, national surveys have confirmed that the road condition is deteriorating in a number of areas. In successive financial years both the Scottish Government and The Highland Council has provided additional one-off funding in an effort to address the maintenance backlog issue.
- 1.3. At its meeting on 13 March 2014 the Council allocated £1.25m additional budget to Community Services as part of what is being called the “Roads Innovation Fund”. This fund will be used to produce detailed option appraisal of different and innovative methods for delivering road maintenance activity. (Report No. HC-65-13 and paragraph 3.2 refers.)
- 1.4. The intention is to explore methods of delivering road maintenance that have potential for more cost effective and efficient use of the Council’s limited resources going forward.
- 1.5. The Council wants to involve communities and to build better overall engagement, participation and co-operation with the Council.

2. Action Plan

- 2.1. The Roads Innovation Fund Action Plan is included with this report in **Appendix A**. The Plan document will be used to track progress and updates to the plan when reporting to future Community Services Committees.

2.2. The plan describes proposals for implementing and testing innovative techniques:

- Permanent Patching Techniques
- GPS and Data Logging
- Drainage
- Structural Maintenance Recycling Pilot

2.3. These initiatives will not on their own redress the Structural Maintenance backlog concerns, however they should free up resource and Proposals will be presented to Members for use of this resource in future budgets.

3. **Action Plan Monitoring**

3.1. The action plan will be updated with progress and brought to every Community Services Committee this year for scrutiny by Members.

4. **Implications**

4.1. There are no financial, legal, climate change, carbon clever, risk, Gaelic or equality implications arising directly from this report.

Recommendations

Members are invited to:

- I. Agree to welcome the funding of a Roads Innovation Fund while acknowledging the objective to drive down unit costs;
- II. Agree the Action Plan presented in **Appendix A**;
- III. Delegate changes to the Action Plan required between Community Services Committee meetings to the Director of Community Services, in consultation with the Chairman and Vice Chairman of the Committee; and
- IV. Note that Action Plan progress reports will be brought to every Community Services Committee during 2014/15 for scrutiny.

Designation: Director of Community Services

Date: 27th April 2014

Author: Richard Evans, Head of Roads and Transport

Documents: Report No. HC-65-13 - paragraph 3.2

APPENDIX A

Roads Innovation Fund Action Plan

Item	Description	2014/15 Amount	Comment	Lead
1.	Techniques for Permanent Patching			
1.a	<p><u>Plan A.</u> Pursue shared use of JetPatcher type equipment owned by neighbouring authorities to maximise utilisation for the owning authority. Moray Council and Argyll & Bute Council own such equipment and we will also contact Perth and Kinross Council.</p> <p><u>Plan B.</u> Hire JetPatcher type equipment from the market.</p>	£300,000	<p>Indicative programme value including materials and any specialist plant/labour.</p> <p>Completion by November 2014</p>	Area CS Manager NBSL
1.b	<p>For future years and based on the outcomes of 1.a develop a business case for leasing or owning JetPatcher type equipment to be shared between Council Areas for future use.</p> <p>The option to procure and run equipment on a shared basis with the aforementioned neighbouring Councils will be pursued.</p>	£5,000	Preliminary report to Committee in early 2015.	R&CW Manager HQ
1.c	For urban roads undertake a 6-9 month lease/hire of radiant heat equipment (reheat, add material and roll) for a large scale pilot programme of patching in Inverness and other main towns.	£300,000	<p>Complete 80% by November 2014.</p> <p>Remaining 20% over the winter to specifically trial the equipment in cold conditions.</p>	Area CS Manager Inv.
1.d	<p>For future years and based on the outcomes of 1.c develop a business case for leasing or owning JetPatcher type equipment to be shared between Council Areas for future use.</p> <p>The option to procure and run equipment on a shared basis with the aforementioned neighbouring Councils and BEAR Scotland will be pursued.</p>	£5,000	Preliminary report to Committee in early 2015.	R&CW Manager HQ

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Item	Description	2014/15 Amount	Comment	Lead
2.	GPS and Data Logging			
2.a	<p>Following an audit of fuel management the Council's Head of Internal Audit and Risk Management has strongly recommended that we use GPS and data logging to enable better management of the use of fuel.</p> <p>We have successfully trialled GPS and data logging on 3 Gully Emptiers and 6 Winter Maintenance vehicles and shown that there are efficiencies to be gained in distances travelled and productivity. Fuel can be saved and more units of work delivered for the same cost; for example the gully emptying rate more than doubled in some cases.</p> <p>These pilots are coming to a close and need investment to enable savings to be achieved.</p> <p>It is proposed that during 2014/15 GPS and relevant data logging be installed on all heavy vehicles involved in Road Maintenance by the Area Community Services Managers. The costs are estimated to be:</p> <p>Installation on 91 HGV and 55 dedicated winter gritters @ £400</p> <p>Annual running costs of data collection @ £100</p>	£58,400 £14,600	<p>A follow up audit should be undertaken in the future (beyond 2014/15) to assess whether the management of fuel has improved and whether any efficiencies have been achieved.</p> <p>Installation complete by December 2014.</p>	<p>Fleet and Workshop Manager (installation) and Area CS Managers (operation)</p>
3.	Drainage			
3.1	<p>Continue the ROADEX Drainage survey of road-side ditches and watercourses near the road with feedback into maintenance programmes to help prioritise maintenance work. Initial survey runs have shown that a dedicated staff resource is required to ensure consistency of survey. Locally based staff will be allocated to the work of driving the survey vehicle.</p>	£50,000	<p>Graduate intern has been employed to use the equipment that was mounted on a van last year.</p>	<p>R&CW Manager HQ</p>
3.2	<p>Identify best practice in improving drainage maintenance methods including for cutting offlets and re-shaping ditches. This may identify the need for specialist plant and training for operatives.</p>	£100,000	<p>Completion by November 2014</p>	<p>Area CS Manager NBSL</p>

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4.	Recycling Pilot – Structural Maintenance			
4.a	<p>Trials of both surface and deep recycling of road construction including associated surface dressing and drainage works – aiming to reduce cost.</p> <p>For example:</p> <ul style="list-style-type: none">i. Re-compaction of a milled surface treated with emulsion such as K1-60. Crudely trialled on the Moll road (Skye) over a 100m section, the road is low volume but has held soundly for 2 years. More extensive and controlled testing required.ii. Re-compaction of a milled surface by treating with a proprietary bitumen rejuvenating product. – again which we have trialled with 2 varying application rates on the Moll road. Both sections compacted well and have survived 2 years defect free without further treatment, but would benefit from a surface dress.iii. Hot recycled milled surfaces – normally urban locations to match existing levels.iv. Deep recycling of the road base and surface layers with added bitumen to replace oxidised material	£250,000	<p>Target cost including Surface dressing of £10/sqm.</p> <p>Various sites being identified for early action so that they may be surface dressed this summer – by August.</p> <p>Inform these techniques with the knowledge published by our ROADEX partners and also the TRL and others.</p> <p>Substantial completion by December 2014</p>	Area CS Manager CS
4.b	For future years and based on the outcomes of 4.a develop guidance and indicative relative costs for using these techniques compared with conventional techniques in use by the Council.	£5,000	Preliminary report to Committee in early 2015.	R&CW Manager HQ

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5.	Sconser Quarry Promotion			
	<p>Transport Scotland's specification for Stone Mastic Asphalt requires a high grip and durability value for the aggregate used. The parameter concerned is the Polished Stone Value (PSV.) Transport Scotland need to be convinced that Sconser aggregate has a high enough PSV before they will allow materials from the quarry to be used in surfacing Trunk Roads.</p> <p>Undertake Grip Test surveys using the Sideway-force Coefficient Routine Investigation Machine (SCRIM) [possibly combined with laboratory PSV tests] to measure the Grip Test values (Grip Test Number) and correlate this with a PSV. The anticipated results should demonstrate similar properties to higher PSV aggregates and thus provide comfort to Transport Scotland.</p>	£10,000	<p>The use of Sconser aggregate would reduce the cost to the Trunk Road Authority by some £15 per tonne and assist in carbon savings too. With external income the Quarry operations will be more sustainable going forward.</p> <p>Completion by November 2014.</p>	Area CS Manager SRC
6.	Communities			
	<p>Engagement / Resilience / Participation</p> <p>For example with farmers on the Black Isle</p> <ul style="list-style-type: none"> • Winter – schools care homes etc. • Drainage • Use of Community Challenge Fund 	£50,000	<p>Funding to enable the Pilot and identify potential future savings.</p> <p>Pilot will identify H&S, Insurance and other issues for communities.</p> <p>Measures in place for Winter and then on-going.</p>	Area CS Manager SRC
	TOTAL (allocated)	£ 1,148,000		
	Remaining to be allocated	£ 102,000	Contingency and for new ideas.	HoR&T
	TOTAL FUND	£1,250,000		