**The Highland Council**

**Community Services Committee – 21 August 2014**

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| Agenda Item | 16 |
| Report No | COM/ 24/14 |

**Roads Innovation Fund – Action Plan**

**Report by Director of Community Services**


**Summary**

This report invites the Committee to note progress against the Action Plan and to homologate the decision to reallocate some funding between actions.


## 1. Background

1.1 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".

1.2 At its meeting on 15 May 2014 the Committee agreed the Action Plan presented in Report COM/07/14 and noted that progress reports are to be brought to every Community Services Committee during 2014/15 for scrutiny. The Committee also delegated changes to the Action Plan required between Committee meetings to the Director of Community Services, in consultation with the Chairman and Vice Chairman of the Committee.

1.3 This report provides a progress report with an updated Action Plan.

## 2. Action Plan

2.1 The updated Roads Innovation Fund Action Plan is included with this report in **Appendix A**.

2.2 Contact has been made with Moray, Argyll & Bute and Perth & Kinross Councils to establish opportunities for shared use of their plant. Director level contact took place with Argyll & Bute Council, followed by ongoing officer discussions.

2.2 ***Item 1 - Techniques for permanent patching.***
Argyll & Bute and Moray Councils have indicated willingness to enter into arrangements to make their Jetpatcher equipment available as part of the trial with details to be agreed. Three commercial operators are currently delivering works, with a fourth contacted to discuss undertaking a specific late season/winter trial.

2.3 ***Item 4 – Recycling Pilot***
Programme developed using four specialist contractors and in-house teams using hired and trailed specialist equipment.

2.4 The Council has secured the first UK trial of specialist recycling equipment by in-house teams. Initial assessments are showing a significant saving against conventional techniques and indicate this process may offer a lower cost solution when working with the private sector to enable timber extraction over weak roads.

2.5 To ensure there are sufficient sites to allow all the techniques to be assessed the funding allocations between Techniques for Permanent Patching and the Recycling Pilot – Structural Maintenance have been adjusted. The revised figures are shown in **Appendix A**.

2.6 ***Item 6 – Communities***
Meetings have been held with representatives of the Black Isle Machinery Ring and discussions are ongoing to agree works that could be delivered.

## 3. Implications

3.1 As yet no resource; legal; equalities; climate change/carbon clever; risk, Gaelic or rural implications have been identified arising directly from this report.

3.2 However it can be expected that there will be carbon savings arising from the recycling pilot that will be evaluated in the end of pilot business case analysis.

**Recommendation**

The Committee is invited to:

i. Note progress against the Action Plan; and to

ii. Homologate reallocation of the fund between actions as mentioned in paragraph 1.2 and detailed in **Appendix A** to the report.

Designation: Director Community Services

Date: 8th August 2014

Author: Robin Pope

Background Papers:

**APPENDIX A**

## Roads Innovation Fund Action Plan

| Item | Description | 2014/15 Amount (original) | Comment | Lead |
|---|---|---|---|---|
| **1.** | **Techniques for Permanent Patching** | | | |
| 1.a | Plan A. 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.<br>Plan B. Hire JetPatcher type equipment from the market. | £237,000<br>(£300,000) | Discussions in progress with Argyll & Bute and Moray Councils for use of their Jetpatchers. Three commercial operators are undertaking assessment trials. Discussions with fourth specialist for undertaking a specific winter trial.<br>Programme value including materials and any specialist plant/labour.<br>Completion by November 2014 | Area CS Manager NBSL |
| 1.b | 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.<br>The option to procure and run equipment on a shared basis with the aforementioned neighbouring Councils will be pursued. | £5,000 | Preliminary report to Committee in early 2015. | R&CW Manager HQ |

**APPENDIX A**

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| 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. | £204,000<br>(£300,000) | Commercial operators in progress, hire and lease arrangements being agreed and training of in-house staff being arranged. Complete 80% by November 2014.<br>Remaining 20% over the winter to specifically trial the equipment in cold conditions. | Area CS Manager Inv. |
| 1.d | 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.<br>The option to procure and run equipment on a shared basis with the aforementioned neighbouring Councils and BEAR Scotland will be pursued. | £5,000 | Preliminary report to Committee in early 2015. | R&CW Manager HQ |

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| **2.** | **GPS and Data Logging** | | | |
| 2.a | 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.<br>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.<br>These pilots are coming to a close and need investment to enable savings to be achieved.<br>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:<br>Installation on 91 HGV and 55 dedicated winter gritters @ £400<br>Annual running costs of data collection @ £100 | £58,400<br>£14,600 | 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.<br>Procurement under way.<br>Installation complete by December 2014. | Fleet and Workshop Manager (installation)<br>and<br>Area CS Managers (operation) |
| **3.** | **Drainage** | | | |
| 3.1 | 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. | £50,000 | Surveys in progress with Graduate intern employed to use the equipment that was mounted on a van last year. | R&CW Manager HQ |
| 3.2 | 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. | £100,000 | Completion by November 2014 | Area CS Manager<br>NBSL |

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| **4.** | **Recycling Pilot – Structural Maintenance** | | | |
| 4.a | Trials of both surface and deep recycling of road construction including associated surface dressing and drainage works – aiming to reduce cost.<br>For example:<br>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.<br>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.<br>iii. Hot recycled milled surfaces – normally urban locations to match existing levels.<br>iv. Deep recycling of the road base and surface layers with added bitumen to replace oxidised material | £509,000<br>(£250,000) | Target cost including Surface dressing of £10/sqm.<br>Increase in allocation to allow assessed of trials of different processes and hire of specialist equipment to allow in-house delivery.<br>Various sites identified with mixture of in-house and specialist contractors. Works in progress so that they may be surface dressed this summer – by September.<br>Inform these techniques with the knowledge published by our ROADEX partners and also the TRL and others.<br>Substantial completion by December 2014 | 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** | | | |
| | 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.<br>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. | £10,000 | 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.<br>Completion by November 2014. | Area CS Manager SRC |
| **6.** | **Communities** | | | |
| | Engagement / Resilience / Participation<br>For example with farmers on the Black Isle<br>• Winter – schools care homes etc.<br>• Drainage<br>• Use of Community Challenge Fund | £50,000 | Discussion in progress with Black Isle Machinery Ring<br>Funding to enable the Pilot and identify potential future savings.<br>Pilot will identify H&S, Insurance and other issues for communities.<br>Measures in place for Winter and then on-going. | Area CS Manager SRC |
| | **TOTAL (allocated)** | **£ 1,208,000**<br>(£1,148,000) | | |
| | **Remaining to be allocated** | **£ 52,000** | Contingency and for new ideas. | HoR&T |
| | **TOTAL FUND** | **£1,250,000** | | |