

The Highland Council
Community Services Committee

4 February 2016

Agenda Item	9
Report No	COM 6/16

Roads Innovation Fund

Report by Director of Community Services

Summary

This report invites the Committee to note progress against the Action Plan; agree the recommendation to purchase a “Jetpatcher” and continue to develop partnership arrangements with neighbouring authorities.

1. Introduction

- 1.1 At its meeting on 4 June 2015 the Committee received the Roads Innovation Fund Action Plan Report Ref COM/21/15.
- 1.2 This report provides a progress report against the Action Plan and provides a recommendation to purchase a “Jetpatcher” vehicle.

2. Action Plan

- 2.1 The updated Roads Innovation Fund Action Plan is included with this report in **Appendix A** with the following updates which completes the trial.
- 2.2 Item 2 – GPS and Data Logging
Installation to the Council’s fleet of vehicles of 7.5tonnes and above is complete, which is providing information to aid delivery of savings through fuel economy, vehicle maintenance and improvements in operational efficiencies.
- 2.3 Item 3 – Drainage
Drainage ditching trials were undertaken in 2015 as a part of the Flow County STTS scheme in Sutherland, with ditch lining trialled on the Pollock STTS scheme in Lochaber. A final series of trials of low cost drainage and ditching techniques are being delivered to complete the trials.
- 2.4 Item 4 – Recycling Pilot
An additional road recycling technique was successfully trailed as part of an STTS funded scheme in Lochaber in summer 2015. The process will be used to deliver part of the programme of additional structural maintenance.
- 2.5 Item 5 Sconser Quarry.
The trial of materials from Sconser and three other quarries in partnership with Transport Scotland and their network operators BEAR is in progress.

2.6 Partnerships

Further joint working and cost sharing are being developed with Transport Scotland, their operator BEAR and local authorities in the north of Scotland.

3. **Assessment of purchase of a “Jetpatcher” vehicle**

3.1 The purchase cost of a “Jetpatcher” vehicle is £150,000 and this has been provided for within the capital programme under vehicle and plant purchases.

3.2 The allocation of additional funding to structural maintenance, as per report COM/5/16, provides a five year programme with funding for 9 years.

3.3 The average working life for a “Jetpatcher” vehicle is at least 10 years.

3.4 The unit rate to deliver in-house is estimated to be about £2 m² cheaper than contracting. The use of materials from Sconser will further increase savings for those areas within haulage distance.

3.5 With increasing demand from Roads authorities for “Jetpatching” it is anticipated that contracted unit rates will increase over forthcoming years.

3.6 Over a 10 year period the cost of purchase and in-house delivery will provide a saving against the contracted cost of “Jetpatching”.

3.7 An in-house facility will also enable a rapid reactive response to defect repairs.

3.8 It is recommended that, to enable delivery of the structural maintenance programme to be supported, a “Jetpatcher” vehicle is purchased.

4. **Implications**

4.1 Resource implications are covered in this report.

4.2 There are no know legal, equalities, climate change/carbon clever, Gaelic or rural implications arising directly from this report.

Recommendations

The Committee is invited to:

- i) **note** progress against the Action Pan; and
- ii) **approve** the purchase of a “Jetpatcher”.

Designation: Director of Community Services

Date: 25th January 2016

Author: Robin Pope

Background papers: Report COM/21/15 Community Services 4th June 2015

APPENDIX A

Roads Innovation Fund Action Plan

Item	Description	Budget 2015/16	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>		Completed	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	Completed	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.		Completed	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	Completed	R&CW Manager HQ

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Item	Description	Budget 2015/16	Comment	Lead
2. GPS and Data Logging				
2.a	Installation on 91 HGV and 55 dedicated winter gritters @ £400 completed August 2015. Annual running costs of data collection @ £100		Savings in fuel, vehicle maintenance and operational efficiency being secured. Completed	Fleet and Workshop Manager (installation)
3. Drainage				
3.1	Continue the ROADDEX 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.	£40,000	Surveys in progress, previously using Graduate intern. Area staff trained and provided with support to undertake surveys operating equipment installed in Q4 2013/14. Extended funding into 2015/16 to continue surveys.	R&CW Manager HQ
3.2	Identify best practice in improving drainage maintenance methods including for cutting offlets and re-shaping ditches. Some specialist equipment secured and training provided.	£120,000	Extended into 2015/16 in conjunction with STTS externally funded Flow County and Lochaber schemes. Programme of low cost drainage and ditching schemes in progress winter 2016. To be completed March 2016 with techniques used in future years.	Area CS Managers NBSL, CS Area CS Manager NBSL
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.		Completed Successful processes incorporated into 9 year structural maintain programme	Area CS Manager CS

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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	Completed	R&CW Manager HQ
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>Transport Scotland study in progress due for completion in summer 2016.</p> <p>Funding committed.</p> <p>Due for completion summer 2016.</p>	Area CS Manager SRC
6. Communities				
	<p>Engagement / Resilience / Participation</p> <p>For example</p> <ul style="list-style-type: none"> • Winter – schools care homes etc. • Drainage • Use of Community Challenge Fund 	£50,000	<p>Initial discussions with Black Isle machinery ring were not able to develop proposals that offer benefit to all parties.</p> <p>Alternatives being considered and discussions being reconvened to reassess financial implications.</p>	Area CS Manager SRC HoR&T

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7	Forestry Schemes road repair techniques. <ul style="list-style-type: none"> • use of gravel surfaces • road pavement reinforcement • alternative road recycling technique • Drainage and Ditching 	£53,000	Two public road schemes have secured STTS funding in 2015/16 in the Flow County and Lochaber. The Lochaber scheme trialed techniques additional to those being used in the Flow County. Completed Autumn 2015.	Area CS Manager LNBS
TOTAL (allocated)		£288,000		
Remaining to be allocated		£15,000	Completed hot boxes in operation in Sutherland and Ross-shire. Partnership working with Transport Scotland/BEAR – BEAR grit 3 remote winter gritting routes, joint usage of strategic salt facility and ordering in Inverness Harbour. Completed	HoR&T
TOTAL FUND		£303,000		