

MIDDLESBROUGH COUNCIL

AGENDA ITEM 5

OVERVIEW AND SCRUTINY BOARD

17 JANUARY 2017

<p>FINAL REPORT OF ECONOMIC REGENERATION AND TRANSPORT SCRUTINY PANEL – POTHOLE REPAIRS</p>

AIMS OF THE INVESTIGATION

1. The aim of the investigation was to examine pothole repair in Middlesbrough and ascertain whether the purchase of a Jet Patcher machine would provide a more cost effective and appropriate method of repair than current methods.

INFORMATION REQUESTED

2. Prior to the Panel meeting, information was requested from the Service Area on the following items:
 - Cost of repairs and maintenance to potholes/roads in Middlesbrough over the last 3 years.
 - Details of any Government funding available to the Council for the above.
 - Current methods of repair/maintenance.
 - Any legislation relating to responsibility for road repair.
 - Information/expenditure on compensation claims for damage to vehicles caused by potholes.
 - How Middlesbrough compared with other Tees Valley Authorities in terms of expenditure on potholes/state of the roads.
 - The Jet Patcher machine - how it worked - pros and cons.
 - The Jet Patcher- how much it cost to buy, how much it cost to use, whether any savings could be made.
 - Which other Local Authorities were using the Jet Patcher.
 - Whether there was any interest from other Tees Valley Authorities in purchasing a Jet Patcher.

BACKGROUND INFORMATION

3. Legislation relating to responsibility for road repairs falls within Section 41 of the Highways

Act 1980 which imposes a duty of care for Local Authorities to maintain those highways which are maintainable at public expense.

4. The cost to Middlesbrough Council of repairs and maintenance to potholes specifically, for the last three financial years is as follows:

2013/2014 - £132,676 (This figure includes £120,000 Central Government funding for Pothole Purge)

2014/2015 - £61,447

2015/2016 - £93,626

5. Information provided in relation to annual expenditure for responsive and reactive maintenance from other Tees Valley Authorities for the last three financial years is as follows:

	<u>2013/2014</u>	<u>2014/2015</u>	<u>2015/2016</u>
Middlesbrough	£129,898	£147,274	£217,296
Stockton	£646,801	£559,695	£559,944
Hartlepool	£281,750	£330,295	£206,868
Redcar and Cleveland	no data	£301,000	£121,000

6. Funding of £71,000 awarded by Central Government from the Pothole Action Fund for 2016/2017 has been allocated to the following highways for resurfacing and patching: Dales Park Road, Canton Gardens, Earlsdon Road, Tollesby Road, Keith Road, Heywood Street, A66 Middlesbrough Bypass.

7. Expenditure on compensation claims for damage to vehicles caused by potholes is as follows:

2013/2014 – 21 claims. Compensation paid £85.00

2014/2015 – 19 claims. Compensation paid £259.04

2015/2016 – 25 claims. 17 closed. Compensation paid £361.50.

8. Results of the recent National Highways (NHT) Public Satisfaction Survey showed that Middlesbrough is rated above the national average for both highways and pavement condition. The Council's adopted highway is currently rated within the top quartile for country.
9. The Velocity Jet Patcher involved a three-step process to provide a temporary pothole repair. The capital cost to purchase a Jet Patcher machine was currently approximately £150,000 and there were various specifications. The machine could repair between 50 and 60 potholes per day and was mainly used by Authorities with a predominantly rural highway network.
10. For further information in respect of the scrutiny panel's investigations and findings, please see the attached Appendix 1 – extract from minutes of the Economic Development and Regeneration Transport Scrutiny Panel held on 16 November 2016.

CONCLUSIONS

11. The scrutiny panel reached the following conclusions in respect of its investigation:
- a) Middlesbrough Council places an emphasis on maintenance of roads, footways and verges through a capital investment programme with the focus on prevention of deterioration via a focused asset management based approach.
 - b) Whilst it is acknowledged that there will always be a need for responsive maintenance to small areas of highway, the best approach is to focus on planing and patching rather than pothole repair. This approach enables a permanent repair which is more cost effective and aesthetically pleasing.
 - c) The jet patching repair method has advantages over conventional pothole repair methods, particularly in rural areas. However, Middlesbrough does not have the quantity of potholes required to make a machine purchase an efficient use of resource. In addition, the hire costs are prohibitive when considering that the repair is only temporary.
 - d) Initial enquiries made at a meeting of the Tees Valley Combined Authority Highways Maintenance Engineers on 8 August 2016, regarding the possible joint purchase of a Jet Patcher has not produced any interest to date.
 - e) Middlesbrough Council currently hires in planing machines for capital project schemes and the purchase of a planer, and either a bobcat, or JCB 3CX attachment for use in responsive maintenance is considered a cost effective repair solution.

RECOMMENDATIONS

12. The Economic Regeneration and Transport Scrutiny Panel recommends to the Executive:
- a) That a planer, and either bobcat or JCB 3CX attachment is purchased from the capital expenditure programme.
 - b) That Middlesbrough's Executive Director of Economic Development and Communities makes a formal enquiry to the Tees Valley Combined Authority regarding the joint purchase of a Jet Patcher machine.

ACKNOWLEDGEMENTS

13. The Economic Regeneration and Transport Scrutiny Panel would like to thank the following Council officer for his assistance with its work:
- Chris Bates, Highways and Fleet Services Manager

BACKGROUND PAPERS

14. The following sources were consulted or referred to in preparing this report:

- Minutes of the Economic Regeneration and Transport Scrutiny Panel meeting held on 16 November 2016
- Potholes and Jet Patching - Report of the Assistant Director, Environment, Property and Commercial Services, 16 November 2016.
- Transport and Infrastructure Capital Funding Allocations 2016-2017 Executive Report.

COUNCILLOR T HIGGINS
- CHAIR OF ECONOMIC REGENERATION AND TRANSPORT SCRUTINY PANEL

The membership of the scrutiny panel is as follows: Councillors T Higgins (Chair), L Lewis (Vice-Chair) and R Arundale, J Blyth, R Brady, JG Cole, N Hussain, M Saunders and Z Uddin.

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**EXTRACT FROM MINUTES OF ECONOMIC REGENERATION
AND TRANSPORT SCRUTINY PANEL****16 NOVEMBER 2016**

The Council currently employed one full-time senior highways inspector and four full-time inspectors. Middlesbrough was divided into four geographical areas that were routinely inspected using a combination of walking and driving, depending on the type of road or footway. The information collected was collated and centralised so that there was an overall view. When carrying out footway inspections the inspectors would also pick up any carriageway defects at the same time. An inspection report would be completed and, if repairs were required, a works order would be raised on the management system which was then actioned by the reactive maintenance team. If the inspector considered that immediate repair was not needed but was likely to be required in future, they would add a note to that effect to the management system.

The inspectors currently worked to a Code of Practice which identified defect inspection criteria for each class of road or pathway. It was highlighted that a new Code of Practice was due to be implemented which was risk-based. By 2018 every road in Middlesbrough would have to be risk assessed to determine whether weekly, monthly or annual inspections were required.

Whilst reactive maintenance was carried out in-house, all planned works were contracted out. The Council's Strategic Highways Department managed the Highways Maintenance Plan. Although the reactive maintenance team had a machine that could do overlays, when inspectors identified a larger area that required repair, this work would be forwarded to the Strategic Highways Team and contracted out. The internal quality control system to check on the quality of repairs was currently being reviewed.

In 2016/2017 the Council received an additional £71,000 from the Government's Pothole Action Fund. The Executive had approved the allocation of this additional funding for pothole prevention and improving local roads, rather than pothole filling, to facilitate the delivery of the capital programme. This was based on the current asset management approach of dealing with maintenance repairs utilising the red, amber, green (RAG) priority system. The view was that strategic investment in the highway network was more advantageous than a reactive pothole filling approach. The programme aligned to the Council's Transport Asset Management Policy (TAMP) and Strategy which had recently been reviewed in line with current guidance and recommendations. Details of the proposed works were circulated to Panel members.

The current methods of repair and maintenance for potholes were described. Where multiple potholes or surface fretting was identified, the Council aimed to adopt a plane and patch approach which would afford the opportunity to carry out a permanent repair. This would involve the use of a planing machine which would plane off 20-30mm of carriageway surface and enable the use of a hot lay macadam surface course which could be levelled with a road roller. Currently planing machines were hired in for capital project schemes but the possibility of purchasing a planer, and either bobcat, or JCB 3CX attachment for use in responsive maintenance was being investigated. Details of all three machines were attached to the submitted report.

The Velocity Jet Patcher involved a three-step process to provide a temporary pothole repair. The advantages of the system were the speed at which a repair could be carried out, the

potential for less waste as the defect did not need to be cut out first, and possibly shorter traffic disruption due to the reduced repair time and the potential to re-open a road as soon as the repair was completed. The disadvantages were that in urban areas there could be difficulties using the machine due to its physical size, the potential for fine bitumen spray or aggregate damaging any nearby vehicles or property, and the noise of the machine which could limit operational time.

Middlesbrough, along with Stockton, Hartlepool and Redcar and Cleveland Councils had previously carried out trials with the Velocity Jet Patcher. Whilst the quality of repair was acceptable, the longevity of the repair was dependent on other factors including traffic levels and weather conditions. The Jet Patcher did not work well in low temperatures or wet weather. In addition, the Jet Patcher only provided a temporary repair until planned planing and patching works or total resurfacing could be carried out.

Middlesbrough Council had trialled the Jet Patcher in 2014/2015 at a cost of £18,126 for 6 days' work and 21m³ of material laid. The capital cost to purchase a Jet Patcher machine was currently approximately £150,000 and there were various specifications. The machine could repair between 50 and 60 potholes per day and was mainly used by Authorities with a predominantly rural highway network.

It was highly unlikely that the Jet Patcher would be in continuous use and its cost-effective use would necessitate a programme of works. Since highway inspections were carried out on a cyclic, daily basis, highways defects might be identified that required immediate response to make safe, or a permanent or temporary repair within twenty four hours, in accordance with the current Well Maintained Highways Code of Practice.

The Highways and Fleet Services Manager confirmed that at a meeting of the Tees Valley Combined Authority Highways Maintenance Engineers meeting on 8 August 2016, views had been sought as to whether there was any interest in a combined purchase of a Jet Patcher or combined works programme to provide the service. The consensus at that meeting was that due to the cost and suitability of the process there was no interest at the current time.

Whilst there would always be a need for responsive maintenance it was considered that the best approach was to focus on planing and patching rather than pothole repair where possible, to enable a permanent repair which was more cost effective.