Economy and Place Policy and Scrutiny Committee **10 December 2019**

Report of the Head of Highways

Highways Scrutiny Update

Summary

1. Funding for highway maintenance comes from central government funding and decisions made by full council in terms of the allocated budget. This report puts the maintenance and performance into context. The current back log of maintenance is approximately one hundred and twelve million based on the current condition and cost of repairs.

Background

2. Every year the Council carries out a detailed video condition survey of all the carriageways and footways within its geographical area. Each carriageway and footway is graded in blocks of 1 to 5 with 5 being very poor. Then a combination of areas of 4 and 5 (grades) are then analysed and ranked taking into account their condition, safety, location, usage, accidents, hierarchy, affordability, and a number of other influences, including other identified potential works on the same streets.
The ranking is required to prioritize maintenance works within budgets set by the Council. Final details as to extents and exact works requirements are further analysed and programmed based on engineering decisions and further site inspections.

3. In addition to the annual condition assessment and repair and renewal process we carry out frequent safety and reactive inspections. Reactive inspections are carried out following the report of defects.

4. Roads are categorised as grade 1 to grade 5.

Grade 1 - Free from defects

Grade 2 - Signs of surface wear

Grade 3 - Mid life

Grade 4 - functionally impaired

Grade 5 - structurally impaired

5. Annex 1, 2, 3, 4 and 5 show the direction of travel from 2016 to 2019 for each of the grades.

6. Pothole repair is just part of good asset management. From 1st April 2019 until 26th November 2019, the council has completed 16,646.3 m² of pothole repairs, this equates to 520 m² per week, this is 29.71 m² per day, per gang. This can be compared with the same period in 2018 when the council completed 7,586.4 m² of pothole repairs, this equates to 237 m² per week, with training etc. that was 18.9 m² per gang, per day.

7. Investment in the highway network needs to be both reactive and proactive in accordance with good asset management. Following the decision by Executive see Annex 6 and 7 which frame the councils approach to highway maintenance. Future Asset Inspection Programme, 15 March 2018. And Highway Infrastructure Asset Management Plan 24 March 2019 have been approved to categorise the highways in terms of maintenance. Work has commenced and will report next year.

8. The table below shows the current investment since 2015/16 to 2019/20

	Basic	Highway Structural Maintenance		
	Maintenance (Revenue)	CYC (Capital)	Govt Fund (Capital)	TOTAL
Budget Year	£'000	£'000	£'000	£'000
Budget 2019/20	559	5,350	2,201	8,110
Budget 2018/19	559	1,850	3,482	5,891
Budget 2017/18	559	1,850	2,372	4,781
Budget 2016/17	529	800	2,081	3,410
Budget 2015/16	529	1,300	2,270	4,099

9. The Council uses two frameworks for its contractors who complement the Councils own workforce. The council uses the North Yorkshire County Council Surfacing Framework Contract and the Yorkshire Alliance. Annex 8 is an example of the quality criteria used in the assessment of contractors to be placed on the framework.

10. Our current in house team is made up of 22 employees and 3 highway apprentices focusing on repairing highways and footway surfacing.

11. The Council is represented on a number of National groups supported by Department for Transport (DfT) groups who review investment and

innovation. York has been part of one of these projects to collect improved data on road condition using advanced camera technology.

12. In addition we are currently using polymer modified materials which are this improved binding compared with traditional pure bitumen improves the durability of the surface.

13. The Council also uses glasgrid, which is a layer of matting in road repair which adds additional strength to the road. GlasGrid pavement reinforcement geogrids are a high strength self-adhesive reinforcement grid designed to control reflective cracking in asphalt concrete overlays on roads

14. Micro Asphalt is applied to the road surface to prevent major road reconstruction. Micro Asphalt is a specialist mix of surface treatment consisting of aggregates and bitumen emulsions.

15. We have piloted the use of tech screed which is similar to micro asphalt but is a hot liquid surface treatment, this has an improved bond to the existing road and does not require excavations.

16. Some of the other trials that are taking part as part of the DfT innovations which City of York Council are keen to see the outcomes of are:

a. Ulitpave and Ultilow which are a low carbon footprint tarmac products.

b. A range of different materials such as plastic road and kerbs are being piloted in some places, the concern is micro plastics that may be released in the environment.

c. Graphite is being added to the bitumen to increase the strength of the road.

17. Where the road surface construction is different, the long term impacts on road life etc need to be monitored and proven as well as understanding the long term impacts e.g. disposal of materials.

18. In additional a number of innovations are emerging which have yet to be proven. For example solar roads are being trailed in Paris to generate electricity for street lighting. Micro generation of electricity for street lighting is also being explored using wind power. Some trials of induction charging for electric vehicles built into the road is also being explored.

19. Key to achieving the best from our resources is to ensure our own workforce have the information require and the autonomy to make decisions out on site. We are investing in technology to improve and aid their productivity in repairing the highway.

20. The focus of the service is to develop the Highways Asset Management Plan (HAMP/ TAMP) and updating the Winter Service Plan to meet the Authorities aspirations, these renewed plans will structure the way the City of York Council manages the council network, structures and assets within the public highway.

21. To complement the reactive highway repairs the council needs to develop a more structured coordination of the resurfacing schemes which includes an agreed three year programme. The structuring of these works would include coordinating all utilities works prior to surfacing works being carried out. The aim of this approach would ensure the surface remains resilient to defects.

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Report Approved ✓ **Date** 2/11/2019

Wards Affected: **All** ✓

For further information please contact the author of the report

Annexes:

- Annex 1 Direction of travel 2016 – 2019 Grade 1
- Annex 2 Direction of travel 2016 – 2019 Grade 2
- Annex 3 Direction of travel 2016 – 2019 Grade 3
- Annex 4 Direction of travel 2016 – 2019 Grade 4
- Annex 5 Direction of travel 2016 – 2019 Grade 5
- Annex 6 Report 15 March 2018 Future Asset Inspection Programme
- Annex 7 Report 24 October 2019 Highway Infrastructure Asset Management Plan
- Annex 8 Framework Quality Questions