

**Report of the Assistant Director (Highways, Waste and Fleet)**

**Annual Highway Maintenance Report**

**Summary**

1. This report provides a review of the service performance in highway maintenance over the last year. The report examines issues arising and proposes programmes of work to be undertaken in the financial year 2014/15.

**Background**

2. The highway maintenance service covers a wide range of activities. It is delivered by a number of in-house teams, working in conjunction with external service providers. The Highway Maintenance Services (HMS) team in City and Environmental Services (CES) has overall management responsibilities for the highway assets. The team determines works programmes for members to consider and arranges for smaller scale routine maintenance works to be carried out on a priority basis. The Civils team in HMS carries out most of the work activities with the exception of street lighting which is provided by a separate in-house team in the same service group.
3. Larger LTP/CYC capital and revenue schemes are designed and managed by the design team in HMS. Works are procured through the Specialist Surfacing Framework Agreement in conjunction with other authorities in the Tees Valley Alliance. Minor works are carried out by the Civils team within HMS and through 2013/14 the team also acted as Principal Contractor on all larger schemes. This arrangement was found to be a success and has been adopted for future years.
4. Communities and Neighbourhoods Services, Public Realm team act as the corporate manager for grass cutting and for amenity and landscaped areas requiring maintenance.

## **Review of 2013/14 and Proposals for 2014/15**

### Adoptions

5. Over the past year the highway network has increased by 4.2 kilometres of carriageway and 6.0 kilometres of footway due to adoptions and new development.

### Drainage

6. Members allocated £200k for high priority drainage works in 2013/14. Working with the Flood Risk Management team a number of areas were identified for investigation and remedial works, prioritised in accordance with the criteria previously approved by members (City Strategy EMAP 2 June 2008) as detailed below:
  - Locations where flooding affects, or is quite likely to affect, property
  - Locations adjacent to well used footways
  - Locations adjacent to footways near elderly person's homes
  - Locations where standing water are at a critical location for vehicle braking or turning
  - Locations where flooding problems are frequent and have been persistent for some years
  - Locations where flooding is particularly extensive
7. These include several of the locations previously identified as suffering persistent ponding problems, together with other new locations where problems occurred as a result of heavy rainfall events. Many of the flooding areas require joint investigation with other Risk Management Authorities, mainly the Internal Drainage Boards and Yorkshire Water Services, to establish ownership and liabilities.
8. The proposed drainage allocation of £200k in 2014/15 will enable this maintenance of drainage assets to continue, assisting in the management of surface water flood risk, as recommended in the Surface Water Management Plan approved by Cabinet in 2012. The allocation is part of 5 year capital rolling programme totalling £1m.

9. The customised drainage network developed within the Exor Highway Management System is enabling highway drainage assets to be recorded electronically, and increase the efficiency of investigation and maintenance works in the future. Future development will look to include the use of mobile GIS enabled devices to record on-site investigations directly to the system, which could also be used during flood emergency situations for live updates to Silver Command.
10. Once the main areas of recurring flooding are addressed, the drainage serving the main spinal road networks into the City will be systematically surveyed (as the vast majority of the existing gullies on these roads have no recorded pipe networks serving them).

#### Street Lighting

11. The Amey SL maintenance contract came to an end on 30 September 2013 and the service was transferred in-house and all staff was TUPE to the Council. A consultation is ongoing with staff to restructure the team to eliminate duplication and create efficiencies.
12. The current energy supply contract is procured through arrangements with YPO. The consortium procures energy on behalf of a number of authorities from greener more environmentally friendly sources whilst reducing the financial impact from a fluctuating market. The current arrangement expires in April 2015 and the Council will be assessing the market to determine the most cost effective energy procurement for future years.
13. It is proposed to undertake steel structural testing in 2014/15 of those columns previously identified as 'Fair' with a 3 year inspection period. There are approximately 2300 columns to test and a £170k CRAM bid for 2014/15 has been approved to replace those identified as either 'Bad' or in need of immediate action.
14. The target response time for the repair of street lighting faults from the time of notification is two working days. The existing work

practices of attending faults “after hours” are continuing to deliver times well below this, thus providing a good level of service.

15. Street Lighting is currently continuing to trial new technologies and techniques in order to reduce energy usage and carbon emissions. A successful trial of LED lighting has been carried out this year on four streets within the Council area. As a result of the trial a tender through the YPO arrangement has been invited to supply LED lanterns to replace the current 35 watt sox lighting stock.

#### Resurfacing and Reconstruction Works (R&R)

16. The Low Ousegate footway scheme has been delayed due to the works in the area by British Gas to refurbish their gas network and will therefore be carried over into 2014/15. It is anticipated that the remainder of the footway schemes in the 2013/14 programme will be completed this year.
17. The Surface Dressing and Micro Asphalt programme in 2013/14 will be completed this financial year and the current works are performing well with no failures being observed.
18. The two trials of alternative surfacing materials for use on concrete carriageways are both continuing to perform well. The preferred option for future concrete carriageway overlays is a grouted macadam option which performed better of the two materials in the trial sites.
19. The carriageway resurfacing programme is on target with the majority of schemes already completed. Due to the Tour de France event it was necessary to bring forward the Goodramgate carriageway scheme as this was on the parade route. Also due to the Kings Square reinvigorate York programme it will be necessary to carry over the Colliergate carriageway and footway schemes into 2014/15.
20. On 6th July 2014, York hosts Stage 2 of The Tour de France Grand Départ. Additional funds have been made available to make good any defects to accommodate the requirements of the parade and race route within the Council area.

## Basic Maintenance (BM)

21. The previous severe winter weather conditions and the hydraulic pressure of recent heavy rainfall have had a detrimental effect on the condition of the highway. The resulting potholes and surface deterioration have been repaired with materials and resources that were available at the time.
22. The More for York process introduced a computerised works system that interfaces the call centre with the inspectors and the BM gangs. This includes the use of mobile devices by both the inspectors and BM gangs. Although the process was introduced in 2010 there are problems with the software and the perceived savings have not materialised. There has been a corporate decision to replace the software and tenders were invited and an evaluation progress has been completed with a preferred bidder recommended. It is anticipated that the rollout of the new software will start early in 2014/15 and will be an opportunity to incorporate an end to end analysis of the basic maintenance business process.
23. The 'area working' system operates well to ensure that there is greater coordination of work instructions. The highway inspectors work closely with the supervisors to manage the BM gangs in each area leading to a more efficient service. Due to efficiencies and previous budget restraints the BM operations operate with 2 highway inspectors with a bituminous gang allocated to both of them. In addition there is a mason gang that predominately operate in the city centre repairing defects of paving slabs, setts and kerbs.
24. Routine and ad-hoc inspections and the 'area working' system has again demonstrated the effectiveness of this service through the continued high repudiation rate with regard to third party public liability claims. Information over the last 11 years is shown in the table below.

<b>Year</b>	<b>Total number of claims</b>	<b>Claims closed</b>	<b>Claims settled at zero cost</b>	<b>Claims open</b>	<b>Repudiation rate</b>
<b>2002-03</b>	258	258	215	0	83%
<b>2003-04</b>	198	198	168	0	85%
<b>2004-05</b>	198	198	168	0	85%
<b>2005-06</b>	158	157	135	1	86%
<b>2006-07</b>	137	137	118	0	86%

<b>Year</b>	<b>Total number of claims</b>	<b>Claims closed</b>	<b>Claims settled at zero cost</b>	<b>Claims open</b>	<b>Repudiation rate</b>
<b>2007-08</b>	126	126	110	0	87%
<b>2008-09</b>	143	141	129	2	91%
<b>2009-10</b>	237	230	219	7	95%
<b>2010-11</b>	208	199	182	9	91%
<b>2011-12</b>	123	112	106	11	95%
<b>2012-13</b>	201	154	139	47	90%

25. The bus shelter maintenance service for 2014/15 will be provided in-house by the Civil's team. It is the aim of the Council to involve the community payback teams in the future cleaning of the bus shelters. The operation has been a success and it is proposed to extend this service into future years.

#### Asset Management

26. In July 2013 the Council reported a draft non-auditable highway asset valuation for the year 2012/13 in accordance with the CIPFA guidance. The valuation of the highway assets including carriageway, footway, structures, street lighting, traffic signals, street furniture and land was £2.23 billion. The 2012/13 valuation for the first time includes an element for land and this amount to £1.1 billion of the overall value.
27. The proposal for the financial year 2013/14 is the submission of a draft auditable valuation and the Council is waiting for guidance from CIPFA on the method and what assets are to be included.
28. The asset team continues to refine the use of hand held computer technology to log the annual condition survey in a computer database. The refined method can be used to identify those sections of a street where the condition varies along its length. This method gives a more representative condition of the network, as the process is able to record different grades along a section of highway rather than previously being predominately street based.
29. In 2013 the Council increased the number of condition gradings from 3 to 5. The new categories are 1-Very good, 2- Good, 3- Fair, 4-Poor and 5 Very poor. The introduction of the 5 categories has helped the asset team to identify treatment groups more easily and

adopt a whole lifecycle approach to carriageway and footway maintenance.

30. The condition data and the machine survey information are used to determine the list of carriageway and footway schemes for 2013/14. The more detailed recording of survey data has given the opportunity to target sections of highway in most need. HMS is adopting a more whole lifecycle approach to optimize the treatments identified. The adoption of an asset based methodology for assessing programmed maintenance will lead to an improved treatment model for the highway network and other assets. The processes will improve the way HMS react to adverse situation on the network
31. A survey of the Council's traffic signal assets is now complete and will be loaded into the asset register and be used on corporate GIS layers and energy submissions to our suppliers.

#### Bridges

32. At present the Council does not have a dedicated bridge manager and specialist structures advice is currently being sought and provided from a neighbouring authority. In December 2013 the Council appointed a dedicated specialist Engineer to provide an in-house resource to undertake asset management of the Council's bridge stock. Only essential maintenance activities and inspections have therefore been undertaken during 2013/14. A prioritised programme of maintenance and inspections will be undertaken during 2014/15.
33. The capital programme of the refurbishment to Severus and Piccadilly bridges for 2013/14 have been delayed and are to be carried over into 2014/15 along with their funding. Investigations have indicated that a further £200k will be required to complete the works on both bridges.

#### Winter Maintenance

34. A review of the winter maintenance service, including a fundamental review of gritting rounds and salt bins provision was undertaken in 2013. The review included a public consultation exercise during August and September and all departments and organisations involved with the service were asked to comment.

35. A revised gritting and salt bin provision was approved at a Cabinet Member for Environmental Services Decision Session on 9 October 2013. The primary gritting route was brought in line with the road hierarchical network with the addition of bus routes of 30min or less intervals in one direction and school bus routes. This had the effect of reducing the primary gritting network by 5.8% with those being removed added to the secondary route. The new arrangement brings the Council in line with other authorities in the APSE family group.

In addition a grit bin assessment criteria was approved and this was used to assess all highway and ward bins to rank them in order of priority. There were 158 grit bins approved during the review and there has been continuing dialog with resident associations and parish councils' with such organisations adopting grit bins that were being removed.

36. Approaching the middle of February 2013 the designated network for precautionary gritting has been treated on 40 occasions compare to an annual average of 65. The designated footways have been treated only once with some ad-hoc treatments to deal with public and member requests for assistance to other non-designated footways. At the time of writing this report, there is still the possibility of adverse winter weather over the remainder of this financial year, which could result in an increase in the number of precautionary grits. Due to the relatively mild winter to date the Winter Maintenance Control Group has not been convened.
37. The Council continue to promote the use of snow wardens and requests for assistance from areas not covered by the winter maintenance policy will be dealt with as resources became available.
38. The off road and shared cycle routes have been treated once using the 4 new mini tractors equipped with snow brushes and salt spreaders. These have been very effective in returning the cycle routes back to a usable condition.
39. During the annual review of the service we have looked at various alternative methods of footway and cycleway treatments. We have concentrated on mechanical methods of snow removal from these areas. The 4 mini tractors which were trialled last winter have proved to be extremely effective both in terms of speed of treatment



and savings on manual labour. These have now been added to the winter maintenance fleet.

### Grass Verge and Tree Maintenance

40. The grass cutting service performed well this year with favorable weather conditions enjoyed for the majority of the cutting season, therefore leading to few operational issues.
41. Generally everything has gone well with tree maintenance and no serious accidents have occurred as a result of tree failures. Tree diseases are increasing year on year possibly due to global warming and as such we have lost a lot of trees through drought. We have also lost many trees during storms this winter but it's clear from past proactive work that many of the trees now falling onto the highway are from private land. Section 154 notices to dangerous tree land owners sadly don't seem to be prompting action which is of concern. Tree replacement planting is currently underway and should be finished by March but it is not possible to replace the last few years' tree losses.
42. One quarter of the highway trees have been inspected for safety as they are checked on a 4 yearly cycle. The trees surveyed are recorded on the Arboriculture Managers Database have now been successfully plotted as layers on our York map and local view to enable staff and the public to check tree positions and species within our boundaries whilst making enquiries. From the council web site search for online maps "Yorkmap" and the trees plotted can be viewed.
43. The budgets for grass cutting and tree maintenance have been transferred to CANS and are not included in this report's annexes. Information on the grass and tree maintenance operations will be reported by CANS in the future.

### Performance Indicators

44. The new performance framework for local authorities has produced a single set of national indicators and those impacting on the services in highway infrastructure are shown below:
  - NI 168 – principal roads where maintenance should be considered (using the machine based SCANNER technique)
  - NI 169 – non-principal roads where maintenance should be considered (again using SCANNER)

- BVPI 224b – Unclassified roads network where maintenance should be considered (using visual based CVI survey). This indicator has been removed from the national indicator set but councils are encouraged to continue to produce this figure to demonstrate condition trends.

Indicator/Year	2009/10	2010/11	2011/12	2012/13	2013/14
NI 168 (%) Principal Network	4	3	2	2	2
NI 169 (%) Non-principal Network	6	5	6	5	4
BVPI 224b (%) Unclass Network	7	9	11	10	10

Table of results over the last 5 years

45. The condition of both of the Council's principal and non-principal classified road network compares favourably with most other Council's network. The latest APSE service report for 2012/13 places both indicators in the top quartile mark. In comparison the unclassified network has deteriorated since 2009/10 to between 10 and 11% requiring maintenance works.
46. Both of the national indicators are linked into the DfT Departmental Strategic Objective to sustain economic growth and improved productivity through reliable and efficient transport networks.
47. In addition to the national indicators the Council carry out an annual condition survey grading the footway and carriageway 1 to 5 with 5 being the poorest. The table below shows the 2013 survey for both carriageway and footway assets.

Network	Condition Grade (%)				
	1	2	3	4	5
Principal Roads	31.5	35.6	26.5	6.3	0.1
Non-Principal Roads	6.2	26.2	50.9	14.7	2.0
Unclassified Roads	2.8	35.3	44.8	11.3	5.8
All	6.3	33.7	44.0	11.5	4.5
Footways	3.1	42.1	51.0	3.5	0.3

48. There is deterioration in the unclassified road network as mentioned in Para 45 and the result of the Big York Survey indicates residents concerns as to the condition of the carriageways and footways assets. This has led to the decision by the Council to invest £2.3m during 2014/15 and further details will be presented to the Decision Session – Cabinet Member for Environmental Services in April 2014.

#### Traffic Management Act (TMA)

49. All works carried out by HMS including street lighting is now being noticed in accordance with Traffic Management Act. A dedicated officer in the back office has been nominated and the level of workload encountered is being monitored.

### **Budgets and Works Programme Proposals for 2014/15**

#### **Highway Maintenance Budgets 2014/15**

50. The revenue budget distribution has been adjusted to accommodate the savings agreed by full council on 27 February 2014.
51. CYC capital funding for highways in 2014/15 remains the same as last year at £750k. Both the bridges element and street lighting carbon reduction allocations of £200k remains the same as 2013/14 with an additional £170k for street lighting column replacement. The LTP structural maintenance allocation decreased by £72k and but it is anticipated to increase in coming years and the government invest in structural maintenance.

52. Previous years of severe winter conditions with extreme freezing temperatures have accelerated the deterioration of the highway network. The recent cold snap has triggered additional central government funding for repairs over a 2 year period. The additional allocation for 2013/14 and 2014/15 are £318k and £173k respectively. The condition of the roads and footpaths will continue to be monitored over the coming years to establish network trends.

### **Highway Programmes for 2014/15**

53. As set out in the Advanced Design of Programmes report to the Cabinet Member Decision Session on 5 December 2013, full detail of the proposed programmes of work forms part of this report.
54. The detailed programmes are attached in Annexes 3, 4 and 5 covering carriageway, footway, street lighting, drainage and bridge works funded by CYC/LTP capital.

### **Consultation**

55. Due to the nature of this report no consultation has been undertaken.

### **Corporate Priorities**

56. Through the proposed measures CES supports delivery of the Create jobs and grow the economy, Get York moving, Build strong communities, Protect vulnerable people and protect the environment priorities from the Council Plan.

### **Implications**

#### **Financial Implications**

57. The capital and LTP funding is shown in Annexes 1 to 5. The highway maintenance service will be provided in accordance with the prescribed budgets and there are no financial implications.

#### **Human Resources (HR) and other implications**

58. There are HR implications due to the reduced revenue and capital budgets approved at full Council on 27 February 2013. The implications have been identified in the budget report and processes applied.

## **Equalities**

59. This report has taken into consideration the impact of the Council's Equality Strategy when recommending the proposed budget allocation and highway maintenance operations. Equalities Impact Assessment (EIA) is addressed in the global budget saving assessment.

## **Legal**

60. The Council has a statutory duty to carry out highway maintenance under Section 41 of the Highways Act 1980 and this report sets out the proposals and budgets to allow this to happen in the forthcoming financial year.

## **Crime and Disorder**

61. There are no crime and disorder issues.

## **Information Technology (IT)**

62. There are no IT implications in this report.

## **Property**

63. There are no property implications.

## **Other**

64. There are no other implications in this report.

## **Risk Management**

65. In compliance with the Council's risk management strategy, the main risks that have been identified in this report are:
  - Strategic Risks, arising from judgements in relation to medium term goals for the service
  - Physical Risks, arising from potential underinvestment in assets
  - Financial Risks, from pressures on budgets
  - People Risks, affecting staff if budgets decline
66. Measured in terms of impact and likelihood the risk score for all of the above has been assessed at less than 16. This means that at this point the risks need only to be monitored, as they do not

provide a real threat to the achievement of the objectives of this report.

### Recommendations

67. The Cabinet Member is recommended to:

- (i) Note the review of 2013/14 and proposals for 2014/15
- (ii) Approve the allocation of budgets for 2014/15
- (iii) Approve the implementation of the proposed programme

**Reason:** To ensure delivery of highway maintenance services in an efficient and cost effective manner.

### Contact Details

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		<b>Report Approved</b>	√	<b>Date</b>	11 <sup>th</sup> March 2014
<b>Wards Affected:</b> All Wards					<b>All</b> ✓
<b>For further information please contact the author of the report</b>					

### Background Papers:

#### Annexes:

Annex 1 - Summary of Budgets and Annexes

Annex 2 - Highway Maintenance Revenue Budgets

Annex 3 - City of York Council Structural Maintenance Programme

Annex 4 - LTP Structural Maintenance Programme

Annex 5 - Additional Government Funding 2014/15