

Director Decision Session

18 March 2015

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 2015/16.

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 2014/15 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 2014/15 and Proposals for 2015/16

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 2014/15. 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 locations previously identified as suffering persistent ponding problems, together with other new locations where problems occurred as a result of heavy rainfall events – the storm on the 8th August 2014 presented a significant increase in responses. 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 2015/16 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 capital rolling programme.

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. We are currently looking at the development 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, we are leading a West Yorkshire Combined Authority group to investigate options for joint procurement.
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 service is currently delivered in-house and in 14/15 the team was re-structured to maximise 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. We are currently assessing the market to determine the most cost effective energy procurement for future years.
13. The target response time for the repair of street lighting faults from the time of notification is four 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.
14. 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 was carried out in late 13/14 on four streets within the Council area. As a result of the trial a tender through the YPO arrangement has been successful to

supply LED lanterns to replace the current 35 watt sox lighting stock, 1500 units will have been replaced in 14/15.

15. A £6M bid into the Department for Transport Highways Maintenance Challenge Fund has been made to replace 5685 concrete columns and replace with modern LED units.

Resurfacing and Reconstruction Works (R&R)

16. The 2014/15 Surface Dressing and Micro Asphalt programme has delivered a well performing asset with few failures being observed.
17. 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.
18. 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 route.

Basic Maintenance (BM)

19. The previous severe winters weather conditions and the hydraulic pressure of storm events have left a legacy 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.
20. A mobile working system that interfaces the call centre with the inspectors and the BM gangs is expected as part of the corporate mobile solution, this has not yet reached Highways but it is expected during 15/16. A previous system was introduced in 2010, however, problems with the software mean that the system is not fully fit for purpose and the expected efficiencies and savings did not materialise. We will be inputting our requirements into the development of the system, this will be key to enable us to accurately review all aspects of highways work from inspection through to commissioning and scheme delivery.
21. 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.

22. 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.

Year	Total number of claims	Claims closed	Claims settled at zero cost	Claims open	Repudiation rate
2004-05	198	198	168	0	85%
2005-06	158	158	135	0	85%
2006-07	137	137	118	0	86%
2007-08	126	126	110	0	87%
2008-09	143	141	130	2	92%
2009-10	237	230	219	7	95%
2010-11	208	205	187	3	91%
2011-12	124	117	106	7	91%
2012-13	205	187	170	18	91%
2013-14	167	116	102	51	88%

Asset Management

23. 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.
24. The proposal for the financial year 2014/15 is the submission of a draft auditable valuation following recent guidance from CIPFA. Work is ongoing to reinforce this evaluation and this will be included in the future valuations of Council assets.

25. 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.
26. We continue to work to the new grading introduced in 2013 – increased from 3 to 5 (1-Very good, 2- Good, 3- Fair, 4-Poor and 5 Very poor). This has helped the asset team to identify treatment groups more easily and adopt a whole lifecycle approach to carriageway and footway maintenance.
27. Condition data and the machine survey information are used to determine the list of carriageway and footway schemes each year. The more detailed recording of survey data has given the opportunity to target sections of highway in most need. The processes will improve the way HMS react to adverse situations on the network

Bridges

28. Following the appointment of a specialist bridges and structures engineer in late 2013 an assessment and review of all structures is being carried out, existing capital programmes will be refined to identify the works needed to our key structural assets.

Winter Maintenance

29. At the beginning of February 2015 the designated network for precautionary gritting has been treated on 52 occasions compared to an annual average of 65. The designated footways have been treated on 11 occasions and cycleways on 3 occasions. Due to the relatively mild winter to date the Winter Maintenance Control Group has not been convened.
30. 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.
31. The off road and shared cycle routes have been treated using mini tractors equipped with snow brushes and salt spreaders. These

have been very effective in returning the cycle routes back to a usable condition.

32. 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

33. 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.
34. The tree maintenance program has progressed well 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 are not an effective deterrent which is a concern.
35. 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 and are 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.
36. The budgets for grass cutting and tree maintenance have been transferred to CANS and are not included in this report's annexes.

Annual Condition Scores

- 37 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 2014 survey for both carriageway and footway assets.

Network	Condition Grade (%)				
	1	2	3	4	5
Principal Roads	6.19	29.57	47.68	14.23	2.31
Non-Principal Roads	1.63	27.55	52.09	11.24	7.46
Unclassified Roads	2.35	27.20	51.56	11.32	7.56
All	3.31	28.29	50.47	12.34	5.57
Footways	3.05	34.64	56.77	3.74	1.78

Traffic Management Act (TMA)

38. 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 2015/16

Highway Maintenance Budgets 2015/16

39. Following approval from full cabinet on 26th February 2015 of the 2015/16 budget proposals, annex 1 shows a list of all budget headings linked to Highways.
40. CYC capital funding for highways in 2015/16 remains the same as last year at £750k with an additional £1.670k of CYC capital allocated for 2014/15. The street lighting carbon reduction allocation for five years has been brought forward totalling £1,000k and a further £570k is identified for contributions towards the DfT Challenge Fund Bid and improvements to the Bar Walls lighting. The LTP structural maintenance allocation has increased for 2015/16 to £2,261k and a needs based assessment has fixed the allocation for six years, however, a self assessment will need to be carried out from 2016/17 to confirm an incentivised element of the funding. We are working with the West Yorkshire Combined Authority on this process to ensure we maximise funding opportunities.

Highway Programmes for 2015/16

41. As set out in the Advanced Design of Programmes report to the Cabinet Member Decision Session on 11 December 2014, full detail of the proposed programmes of work forms part of this report.
42. 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 with annex 5 detailing the additional CYC capital in 2015/16.

Consultation

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

Corporate Priorities

44. 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

45. 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

46. There are HR implications due to the reduced revenue and capital budgets these issues have been managed through the HMS restructure process.

Equalities

47. 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

48. 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

49. There are no crime and disorder issues.

Information Technology (IT)

50. There are no IT implications in this report.

Property

51. There are no property implications.

Other

52. There are no other implications in this report.

Risk Management

53. 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
54. 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

55. Director of City and Environmental Services is recommended to:

- (i) Note the review of 2014/15 and proposals for 2015/16
- (ii) Approve the allocation of budgets for 2015/16
- (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

Author:	Chief Officer Responsible for the report:		
Steve Wragg Flood Risk and Asset Manager City & Environmental Services Tel: (01904 553401)	Neil Ferris Assistant Director (Highways, Waste & Fleet) City & Environmental Services		
	Report Approved	√	Date 18/03/2015
Wards Affected: All Wards			All ✓
For further information please contact the author of the report			

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 CYC Capital Funding 2015/16