

**Decision Session - Cabinet Member for
Environmental Services**

21 March 2013

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 2013/14.

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 at present provided by a external contractors Amey Local Government (Amey LG).
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 2012/13 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 2012/13 and Proposals for 2013/14

Adoptions

5. Over the past year the highway network has increased by 0.22 kilometres of carriageway and 0.24 kilometres of footway due to adoptions and new development.

Drainage

6. Members allocated £165k for high priority drainage works in 2012/13. 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 locations where problems occurred as a result of the heavy rainfall during 2012. The area-wide proactive approach is more effective than reactive response to individual enquiries, with all repairs carried out with a view to assisting future maintenance and reducing the recurrence of problems.
8. The proposed drainage allocation of £200k in 2013/14 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 on 4 December 2012. The allocation is an increase of £35k from 2012/13 and is part of 5 year capital rolling programme totalling £1m.

9. During 2012 a customised drainage network was developed within the Exor Highway Management System, which will enable highway drainage assets to be recorded electronically, and increase the efficiency of investigation and maintenance works in the future.

Street Lighting

10. The street lighting contracts currently with Amey LG is in its final year of a three year contract extension and is due to finish on 31 March 2013. We are currently evaluating three options available to the Council to procure this service. These are to tender a new contract, partner with North Yorkshire CC joining their framework agreement or to bring the service “in house.” A separate report is being written to detail the options available and recommend a preferred procurement of the service.
11. 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.
12. The replacements of approximately 1,200 columns that were identified in the latest structural testing are now completed. For the future the Council has a record of the structural status of the street lighting asset which will help to manage the risks to the public. A forward plan for testing and maintenance has now been established.
13. The contractual 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.
14. Street Lighting is currently continuing to trial new technologies and techniques in order to reduce energy usage and carbon emissions. These include the replacement of in-efficient lighting, installation of LED technology.

Resurfacing and Reconstruction Works (R&R)

15. The programmes of footway schemes carried out by HMS started early in the financial year and all schemes have been completed.

16. It is proposed to allocate £30k of funding to trial undertaking the slurry sealing process in-house. If successful a more enhanced programme will be implemented for 2014/15.
17. The Surface Dressing programme in 2012/13 ran very well overall but there was a minor failure on the A1237 which was identified early and rectified by the contractor immediately. The remainder of the works are performing well with no other failures being observed.
18. The two trials of alternative surfacing materials for use on concrete carriageways are both performing 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. Following a successful trial of Micro Asphalt as a surface treatment to bituminous surfacing in previous years it has now been extended throughout the programme. The process was successful through 2012/13 although there was a failure at one site following recent flooding conditions as a result of heavy rainfall. The contractor is aware of the failure and will carry out a permanent repair to the surface in March 2013 in conjunction with the completion of this year's programme. The cost of the repair will be borne by the contractor.
20. The carriageway resurfacing programme is on target with the majority of schemes already completed. Due to the extension of the Tranby Avenue scheme and the associated additional costs the carriageway scheme on Horseman Lane/Main Street, Copmanthorpe is to be carried over into the next financial year.
21. Due to financial pressures of the Council and the need to provide saving in 2012/13 no funding will be carried over for the above scheme. The funding for Horseman Lane/Main Street scheme will be borne from the 2013/14 budget.

Basic Maintenance (BM)

22. The severe winter weather condition of recent years including large deposits of snow, extreme low temperatures and the hydraulic pressure of recent flooding has 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.

23. The More for York process has 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. It is proposed to reassess the mobile requirements and to look at an alternative software solution. The project will incorporate both the HMS and ICT Business Engagement and Implementation sections.
24. 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. The implementation of the approved budget to bring the Council in line with the average national basic maintenance standards is continuing. This will see a reduction in both the number of BM gangs from the existing 3 to 2 in 2013/14 and the number of highways inspectors from 3 to 2. This reduction is required to facilitate the £185k approved revenue savings. This is the second reduction in 2 years as in 2012/13 the number of BM gangs and highways inspectors reduced from 4 to 3. Consultation on a proposed restructure within the Directorate of city and Environmental Service is currently underway and this may help to mitigate the impact from the reduction in highways inspectors.
25. 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 10 years is shown in the table below.

Year	Total Number Of Claims	Claims Closed	Claims settled at Zero Cost	Claims Open	Repudiation Rate
2002/03	258	257	215	1	84%
2003/04	199	197	167	2	85%
2004/05	198	194	165	4	85%
2005/06	157	152	132	5	87%
2006/07	137	134	117	3	87%
2007/08	126	124	108	2	87%
2008/09	145	131	119	14	91%
2009/10	237	227	219	10	96%

2010/11	207	192	179	15	93%
2011/12	122	82	78	40	95%

26. HMS is investigating the use of industry wide innovative solutions and techniques in maintaining the highway assets. This includes the use of preformed speed cushions that are bolted to the road surface which are more durable to traffic and easier to maintain. The process of installation is much quicker than the traditional use of hot rolled asphalt and reduces the overall carbon footprint. The cushions also have a longer lifespan and are easier to maintain and are constructed of recycled materials.
27. The bus shelter maintenance service for 2012/13 has been 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

28. In July 2012 the Council reported a draft non-auditable highway asset valuation for the year 2011/12 in accordance with the CIPFA guidance. The valuation of the highway assets including carriageway, footway, structures, street lighting, traffic signals and street furniture was £1.14 billion.
29. The proposal for the financial year 2012/13 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.
30. The Council received a national Gold Award for the standard and updating of the Authority's street gazetteer. The gazetteer forms part of a national dataset and is a cornerstone of the Councils address database and the asset team works closely with the property gazetteer team to maintain connectivity. The award recognises the efforts of the Authority in maintaining the street gazetteer and places the Council in a group of only 50 English councils that achieve this standard.
31. 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.

32. It is proposed in the 2013 condition survey to grade the footway and carriageway into 5 categories instead of the existing 3. The new categories will be 1-Very good, 2- Good, 3- Fair, 4-Poor and 5 Very poor. The introduction of the 5 categories will help the asset team to identify treatment groups more easily. To help the transition all condition reports will present the data in both formats.
33. 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 the sections of highway in most need. HMS is adopting a more whole life cycle approach to optimize the treatments identified.
34. 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, such as the recent winter weather and respond quickly to mitigate the effects on the condition of the highway.
35. A survey of the Council's traffic signal assets is near completion and this will be loaded into the asset register and will be used on corporate GIS layers and energy submissions to our suppliers.

Bridges

36. At present the Council does not have a dedicated bridge manager and discussions are taking place to either appoint within the Council or use an external resource. Only essential maintenance activities have therefore been undertaken during 2012/13 and a programme of maintenance and inspections will be assessed by the appointed bridge manager in 2013/14.
37. The capital programme of the refurbishment to Severus and Piccadilly bridges for 2012/13 have been delayed and are to be carried over into 2013/14 along with their funding. Investigations in 2011/12 have indicated that a further £200k will be required to complete the works on both bridges.

Winter Maintenance

38. Approaching the middle of February 2013 the designated network for precautionary gritting has been treated on 83 occasions compare to an annual average of 65. The designated footways were treated on 11 separate occasions 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.
39. Although there has not been the severe prolonged wintery condition of the previous 2 years there have been short periods of heavy snow and rainfall this winter. This coupled with temperatures falling just below freezing on many occasions has resulted in an above average numbers of call outs.
40. To date the Winter Maintenance Control Group has not been convened. There have been 4 radio interviews to date and articles in the press to explain the winter maintenance operations of the Council. There have also been 2 television transmissions that demonstrated the success of the snow wardens and communication with the public by use of Twitter.
41. Requests for assistance from areas not covered by the winter maintenance policy have been dealt with as resources became available.
42. The off road and shared cycle routes have been treated on 7 occasions 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.
43. 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.
44. A review of the winter maintenance policy, including fundamental reviews of gritting rounds and salt bins, will be undertaken in preparation for the winter of 2013/14. All departments involved with the service will be asked to contribute in order to deliver a coordinated response.

45. The review will take into account the budgetary constraints when focusing on issues such as existing designated routes, mechanical footpath and cycle track treatments, the facilitation of snow wardens and salt bins. Salt bins will form part of a public consultation exercise to determine the most effective use of this resource.

Grass and Tree Maintenance

46. Grass cutting went well this year with similar changeable weather patterns to last year, resulting in varying growing conditions. The conditions led to the Council altering the frequency of grass cuts to ensure standards were maintained throughout the growing season. The Council are winners in the Yorkshire in Bloom competition and the judges made mention of the standard of our grass verge maintenance in their feedback to us.
47. 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 still 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.
48. 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.
49. 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

50. 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)

Indicator/Year	2008/9	2009/10	2010/11	2011/12	2012/13
NI 168 (%) Principal Network	3	4	3	2	2
NI 169 (%) Non-principal Network	9	6	5	6	5

Table of results over the last 5 years

51. 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 2011/12 places both indicators in the top quartile mark.
52. Both of these indicators are linked into the DfT Departmental Strategic Objective to sustain economic growth and improved productivity through reliable and efficient transport networks.

Traffic Management Act (TMA)

53. 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 2013/14

Highway Maintenance Budgets 2013/14

54. The revenue budget distribution has been adjusted to accommodate the savings agreed by full council on 23 February 2012. This will have an impact on the levels of pro-active maintenance on roads and footpaths.
55. CYC capital funding for highways in 2013/14 remains the same as last year at £750k. Both the bridges element and street lighting carbon reduction allocations of £200k remains the same as 2012/13. The LTP structural maintenance allocation decreased by £34k and is anticipated to reduce further in coming years.
56. This is also the fourth year of severe winter conditions with extreme freezing temperatures that will accelerate deterioration. The latest 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 2013/14

57. As set out in the Advanced Design of Programmes report to the Cabinet Member Decision Session on 13 November 2012, full detail of the proposed programmes of work forms part of this report.
58. 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

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

Corporate Priorities

60. 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

61. 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

62. There are HR implications due to the reduced revenue and capital budgets approved at full Council on 23 February 2012. The implications have been identified in the budget report and processes applied.

Equalities

63. 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

64. 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

65. There are no crime and disorder issues.

Information Technology (IT)

66. There are no IT implications in this report.

Property

67. There are no property implications.

Other

68. There are no other implications in this report.

Risk Management

69. 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
70. 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

71. The Cabinet Member is recommended to:
- (i) Note the review of 2012/13 and proposals for 2013/14
 - (ii) Approve the allocation of budgets for 2013/14
 - (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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	Report Approved	√	Date	<i>Insert Date</i>
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 Government Funding 2013/14