



County Offices
Newland
Lincoln
LN1 1YL

31 August 2018

Highways and Transport Scrutiny Committee

A meeting of the Highways and Transport Scrutiny Committee will be held on **Monday, 10 September 2018 at 10.00 am in Committee Room One, County Offices, Newland, Lincoln LN1 1YL** for the transaction of the business set out on the attached Agenda.

Yours sincerely

A handwritten signature in black ink that reads 'Keith Ireland'.

Keith Ireland
Chief Executive

**Membership of the Highways and Transport Scrutiny Committee
(11 Members of the Council)**

Councillors M Brookes (Chairman), S P Roe (Vice-Chairman), B Adams, Mrs W Bowkett, C J T H Brewis, Mrs J Brockway, M A Griggs, R Grocock, R A Renshaw, A N Stokes and E W Strengiel

**HIGHWAYS AND TRANSPORT SCRUTINY COMMITTEE AGENDA
MONDAY, 10 SEPTEMBER 2018**

Item	Title	Pages
1	Apologies for Absence/Replacement Members	
2	Declarations of Members' Interests	
3	Minutes of the previous meeting of the Highways and Transport Scrutiny Committee held on 16 July 2018	5 - 10
4	Announcements by the Chairman, Executive Councillor and Lead Officers	
5	North Hykeham Relief Road <i>(A report by Mark Heaton, Programme Leader, which seeks the endorsement of the Committee over the length and type of carriageway, prior to the completion of the Outline Business Case)</i>	11 - 26
6	Highways Infrastructure Asset Management Plan <i>(A report by Vincent VanDoninck, Policy and Strategic Asset Manager, in connection with a proposed amended Plan and seeks the Executive Councillor for Highways, Transport and IT to approve the draft Plan)</i>	27 - 158
7	Winter Service Plan 2018 <i>(A report by Vincent VanDoninck, Policy and Strategic Asset Manager, in connection with proposed amendments to the existing Highways Winter Maintenance Plan)</i>	159 - 250
8	Civil Parking Enforcement Annual Report 2017 to 2018 <i>(A report by Matt Jones, Parking Services Manager, in connection with an update to the County Council's Annual Parking Report 2017 to 2018)</i>	251 - 266
9	CCTV Trial Enforcement Report <i>(A report by Matt Jones, Parking Services Manager, regarding the CCTV enforcement trial implemented outside eight schools within the County)</i>	267 - 276
10	Performance Report, Quarter 1 - (April 2018 to June 2018) <i>(A report by Paul Rusted, Infrastructure Commissioner, in connection with the performance of the highway service)</i>	277 - 328
11	Highways and Transport Scrutiny Committee Work Programme <i>(A report by Daniel Steel, Scrutiny Officer, in connection with the Committee's Work Programme)</i>	329 - 336

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**HIGHWAYS AND TRANSPORT
SCRUTINY COMMITTEE
16 JULY 2018**

PRESENT: COUNCILLOR M BROOKES (CHAIRMAN)

Councillors S P Roe (Vice-Chairman), C J T H Brewis, Mrs W Bowkett, A N Stokes, R A Renshaw, Mrs P Cooper and M A Whittington

Councillors: R G Davies and Clio Perraton-Williams attended the meeting as observers

Officers in attendance:-

Vincent Van Doninck (Policy and Strategic Asset Manager), Sam Edwards (Major Schemes and Design Commissioner), Richard Fenwick (Alliance Works Contract Manager), Paul Rusted (Infrastructure Commissioner), Daniel Steel (Scrutiny Officer) and Rachel Wilson (Democratic Services Officer)

10 APOLOGIES FOR ABSENCE/REPLACEMENT MEMBERS

Apologies for absence were received from Councillors Mrs J Brockway, M A Griggs, R Grocock and E W Strengiel.

The Chief Executive reported that having received a notice under Regulation 13 of the Local Government (Committees and Political Groups) Regulations 1990, he had appointed Councillors Mrs P Cooper and M A Whittington as replacement members of the Committee in place of Councillor M A Griggs and E W Strengiel respectively for this meeting only.

11 DECLARATION OF MEMBERS INTERESTS

There were no declarations of interest at this point in the meeting.

12 MINUTES OF THE MEETING HELD ON 11 JUNE 2018

RESOLVED

That the minutes of the meeting held on 11 June 2018 be agreed and signed by the Chairman as a correct record, subject to it being noted that Councillor R A Renshaw was in attendance.

13 ANNOUNCEMENTS BY THE CHAIRMAN, EXECUTIVE COUNCILLOR AND LEAD OFFICERS

The Chairman advised that agenda item 5 – Highways Infrastructure Asset Management Plan, would be deferred to the September meeting to allow additional work to be done on the report and ensure that members received it in sufficient time to scrutinise it properly.

There were no other announcements.

14 HIGHWAYS INFRASTRUCTURE ASSET MANAGEMENT PLAN

As previously advised, this item would be deferred to the September 2018 meeting of the Committee.

15 WINTER MAINTENANCE PLAN - UPDATE

Consideration was given to a report which invited the Committee to consider a report regarding the new Resilient Network and the Grit Bin resource.

Members were informed that within the new 'Well-Managed Highway Infrastructure' Code of Practice it was highlighted and recommended that each Local Authority should have a Resilient Network, which was described as a road network which "received priority through maintenance and other measures in order to maintain economic activity access to key services during disruptive events". The Resilient Network which had been produced by the County Council identified all the critical routes within the county which were classed as priority in severe weather incidents. This took into account connectivity to major communities, access to emergency services, links to all critical infrastructure and transport hubs, repeat weather events and additional local factors.

In terms of grit bins, members were advised that the Network Resilience Team, which was made up of three dedicated members of staff, was responsible for the managing and maintaining of all new and existing grit bins. It was noted that the County Council currently maintained 2100 grit bins around local communities at approved locations. A full restock of the 2100 grit bins was currently underway following the rapid depletion due to the cold winter experienced during the two "Beast from the East" weather events in late February and early March 2018.

Members asked questions in relation to the information contained within the report and some of the points raised during discussion included the following:

- It was confirmed that these documents were just to formalise those procedures which were already carried out in severe weather.
- This Plan would be linking in with DfT best practice, and officers would look to see if there were any new routes which should be included in the system.
- Clarification was sought regarding gritting routes around schools, as it was something which caused a lot of concern to parents who had to drive their children to school.

- It was noted that the resilient network would only be implemented in severe weather events. It was likely that during these events schools would be closed down quickly which was why they were not included within the Resilient Network. However, schools were covered in the precautionary salting routes.
- Members were advised that in relation to precautionary salting, the policy was to grit within 500m of every school, if the gritters could get to it. The resilient network was intended to keep critical infrastructure open and the weather conditions would need to be serious to take the extreme measure to drop down to just maintaining the main routes through the county.
- It was not anticipated that the minimum network would be implemented often.
- One member commented that they fully supported the proposed approach in relation to grit bins and the scoring system was excellent.
- It was suggested whether the 'responsible body' could also include the local member.
- It was commented that it was not thought it would be difficult to get every Parish Meeting to be a responsible body.
- It was suggested that it would be useful if members could be made aware of where all the grit bins in their area were located. It was thought that it would also be helpful if responsible bodies could also be provided with this information.
- It was reported that requests for grit bin refills had been made but negative responses had been received. Members were advised that it was hoped that this new policy would put in place a very clear process of what could be expected. Priority would be given to those requests from responsible bodies.
- Members welcomed the report and the steps which were being taken.
- It was noted that Parishes had the opportunity to request a 1 tonne bag of grit at the beginning of each winter season and it was confirmed that this would still be included within the maintenance plan.
- It was queried whether there was any guidance for the public who might be gritting roads in local areas using the grit bins. It was agreed that information and guidance on this would be passed onto district communication teams.
- Members were advised that there were some useful FAQs on the website and this information had been printed out and sent to Parish Councils including guidance on safe working.
- It was noted that some Parish Councils did have emergency plans which now included lists of 4x4 drivers who were willing to provide assistance during severe weather events.
- It was commented that some Parishes had bought a grit spreader and it was queried whether they could be provided with grit as they were currently buying their own. Members were advised that they would be able to request the 1 tonne bag.

RESOLVED

That the report and proposals for future service decisions be supported by the Committee.

16 ROUTE AND PLACE BASED TRANSPORT STRATEGY

Consideration was given to a report which detailed the purpose and benefits of a transport strategy to the County Council. The report also outlined the status of the County Council's existing Transport Strategies and recommended a more robust future approach across the whole county.

Members were advised that transport strategies were key to the delivery of improvements to the transport network through the identification of policies and proposals founded on a sound evidence base. The strategy set out what a local authority intended to achieve in an area and how it would go about it presenting the authorities' proposals for improving the transport network over a period of time.

Members asked questions and some of the points raised during discussion included the following:

- It was commented that if this work was not completed then the authority would not have the evidence base to pursue funding opportunities. It was confirmed that this was correct but there was a cost to this approach of around £500,000 per year. However, it was emphasised that this was an approximate average cost, and some years could be more or less than this figure.
- Members supported this approach as it was never known when an opportunity for additional funding might come up. It was important to be objective and have schemes which were ready to go.
- It was noted that it was important to have a joined up approach with Highways England and the Dft.
- In relation to the route based work the strategy was clear that if finance was not in place there could be a mechanism to go back to DfT with evidence to show that work needed to be done.
- What was the driver to get a scheme off the ground? An example was given of the planning permission given for the Lincoln Western Growth Corridor or waiting until funding was in place. Members were advised that there had to be a need for the work to be done and work would be carried out with the districts as well and then funding for the scheme would be looked at.
- It was confirmed that costs of £500,000 for this approach was a revenue cost as it was the cost of drawing up plans, etc. In some cases it was possible to include some of these costs as capital expenditure. Any work after planning permission had been received could be included as capital costs.
- It was noted that these costs would vary depending on the volume of work carried out but would be a recurrent cost. Some of the costs would be staff costs but a lot of work would also be done on understanding the economic situation and traffic modelling. It was noted that traffic modelling was a very complex process and a lot of this modelling work was carried out for the County Council through WSP.
- The Chairman advised that officers had the support of the Committee for this approach.
- It was requested whether the Committee could have an update report annually on how this approach was developing.

RESOLVED

1. That the comments made in relation to the proposed route and place based transport strategy approach to identifying future highway improvements across the county be noted.
2. That the programme of creating and updating the various traffic models and place/route based strategies across the County as detailed in Appendix A to the report be endorsed.
3. That the Committee receive an annual progress report.

17 HIGHWAYS AND TRANSPORT SCRUTINY COMMITTEE WORK
 PROGRAMME

Consideration was given to a report on the Committee's work programme for the coming year to ensure that scrutiny activity was focused where it could be of greatest benefit.

The following amendments were noted:

- The Committee to receive an annual report on Transport Strategies going forward.
- The Highways Infrastructure Asset Management Plan to go to the meeting on 10th September
- The A46 Welton scheme – this could go to a later meeting than September but would be confirmed.

RESOLVED

That the Work Programme and amendments listed above be noted.

The meeting closed at 11.10 am

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**Open Report on behalf of Richard Wills,
Executive Director for Environment and Economy**

Report to:	Highways and Transport Scrutiny Committee
Date:	10 September 2018
Subject:	North Hykeham Relief Road

Summary:

This item invites the Highways and Transport Scrutiny Committee to consider a report regarding the North Hykeham Relief Road. This report is due to be considered by the Executive on 02 October 2018. The views of the Scrutiny Committee will be reported to the Executive as part of its consideration of this item.

Actions Required:

- (1) To consider the attached report on the North Hykeham Relief Road and determine whether the Committee supports the recommendations to the Executive.
- (2) To agree any additional comments to be passed to the Executive in relation to this item.

1. Background

The North Hykeham Relief Road (NHRR) is a major infrastructure project aimed to complete the final phase of the circulatory around Greater Lincoln and North Hykeham.

This report seeks to gain approval for the length and type of carriageway, prior to the completion of the Outline Business Case. The report also seeks approval of the proposed project funding sources and associated percentages/values. The Outline Business Case is the key tool for justifying funding opportunities from governmental bodies such as the Department for Transport (DfT).

The full report is attached at Appendix 1 to this report.

2. Conclusion

Following consideration of the report, the Highways and Transport Scrutiny Committee is requested to consider whether it supports the recommendations in the report and whether it wishes to make any additional comments to the Executive.

3. Appendices

These are listed below and attached at the back of the report	
Appendix 1	North Hykeham Relief Road – Executive Report

4. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Mark Heaton, who can be contacted on 01522 553182 or mark.heaton@lincolnshire.gov.uk.

**Open Report on behalf of Richard Wills,
Executive Director for Environment and Economy**

Report to:	Executive
Date:	02 October 2018
Subject:	North Hykeham Relief Road
Decision Reference:	I016499
Key decision?	Yes

Summary:

The North Hykeham Relief Road (NHRR) is a major infrastructure project aimed to complete the final phase of the circulatory around Greater Lincoln and North Hykeham.

This report seeks to gain approval for the length and type of carriageway, prior to the completion of the Outline Business Case. The report also seeks approval of the proposed project funding sources and associated percentages/values. The Outline Business Case is the key tool for justifying funding opportunities from governmental bodies such as the Department for Transport (DfT).

Recommendation(s):

It is recommended that the Executive:

- (1) Approve a dual carriageway from the A46 (Pennells' roundabout) to connect with the roundabout at the A15 (currently being constructed as part of the Lincoln Eastern Bypass) as opposed to either a single or single + future proofed carriageway as the Council's preferred carriageway option in all future development of the NHRR including the making of funding bids.
- (2) Approve seeking funding from governmental bodies such as the DfT in line with the percentages/values contained in the body of this paper.
- (3) Delegate authority for approving the final form of the Outline Business Case (at the point when the bidding opportunity is announced) and submission of the same to the County Commissioner Economy and Place.

Alternatives Considered:

- | | |
|----|---|
| 1. | There are alternative carriageway length options which are detailed in the body of this report. The reasons for rejection are also contained in the body of the report. |
|----|---|

2.	There are alternative carriageway types (single and single+future proof) which are detailed in the body of this report. The reasons for rejection are also contained in the body of the report.
3.	Alternative funding sources and percentages/values were considered, however the NHRR Project Executive Board agreed this paper represents the best balance with regards LCC affordability, previous DfT bids and likelihood of success
4.	No further progress be made to this project

Reasons for Recommendation:

The full reasons are outlined in the body of this report, however to summarise. The proposed dual carriageway project delivers the greatest benefits to the public in terms of reducing traffic congestion, improving journey time, providing journey time reliability and unlocking development opportunities.

1.1 Introduction

The NHRR is the last major highway scheme contained within the Lincoln Integrated Transport Strategy (LITS). The NHRR is also the last element of a complete ring road around the greater Lincoln urban area comprising both Lincoln and North Hykeham. The ring road will be comprised of four sections of carriageway: the Lincoln Western Relief Road (LWRR), Lincoln Northern Relief Road (LNRR), the currently under construction Lincoln Eastern Bypass (LEB), and the NHRR.

1.2 The NHRR proposal is for an 8km bypass road providing a connection between the A46 (A46/A1434 Pennells' roundabout) to the A15 (A15 Lincoln Eastern Bypass/Sleaford Road roundabout) immediately to the south of the Greater Lincoln urban area and North Hykeham. The NHRR scheme has been an aspiration for key stakeholders in the Lincoln area for a number of years and recent changes to growth aspirations have further reinforced the need for the scheme. The scheme is identified in a number of regional and local strategies and policy plans and is a key piece of infrastructure in the wider transport strategy for the Lincoln area as well as being an important element in helping deliver planned growth in the area.

1.3 The current route of the NHRR, which is the subject of this Outline Business Case (OBC) is consistent with all strategy and policy documents dating back to and including when the preferred route was identified in December 2006. This includes the technical advice which was the basis for assessing consequential extent of blight on Station Road. The assessment of blight was based on a dual carriageway project and triggered LCC's decision to purchase those properties between 2006 and 2008. The below provides a summary of key historical strategies, policies and approvals the NHRR has been subject to:

- October 2005 First 'preferred route' consultation takes place

- April 2006 Route 2c selected as basis for an emerging preferred route
- October 2006 Second 'preferred route' consultation takes place
- December 2006 Route 2c endorsed as the NHRR's preferred route
- 2008 - 2010 Purchase of properties on Station Road due to blight concerns regarding the line of the NHRR
- 2006, 2008 & 2013 Lincoln Integrated Transport Strategies adopted/updated
- April 2013 4th Lincolnshire Local Transport Plan adopted
- April 2017 Central Lincolnshire Local Plan Adopted
- July 2017 Funding secured for the preparation of an Outline Business Case
- April 2018 Creation of a new Greater Lincoln Traffic Model
- June 2018 Project engagement carried out, including survey, drop in sessions and workshops
- End of 2018 Proposed submission of Outline Business Case to the DfT for project funding
- 2019 Proposed development of a new Lincoln Transport Strategy

1.4 In the summer of 2017, Lincolnshire County Council commissioned the development of an OBC for the North Hykeham Relief Road. The first step in this process was to formulate an Option Assessment Report (OAR), which provides the foundation of technical analysis upon which the OBC will be developed and the basis for decision-making on the preferred option for carriageway standard.

1.5 **Options Summary**

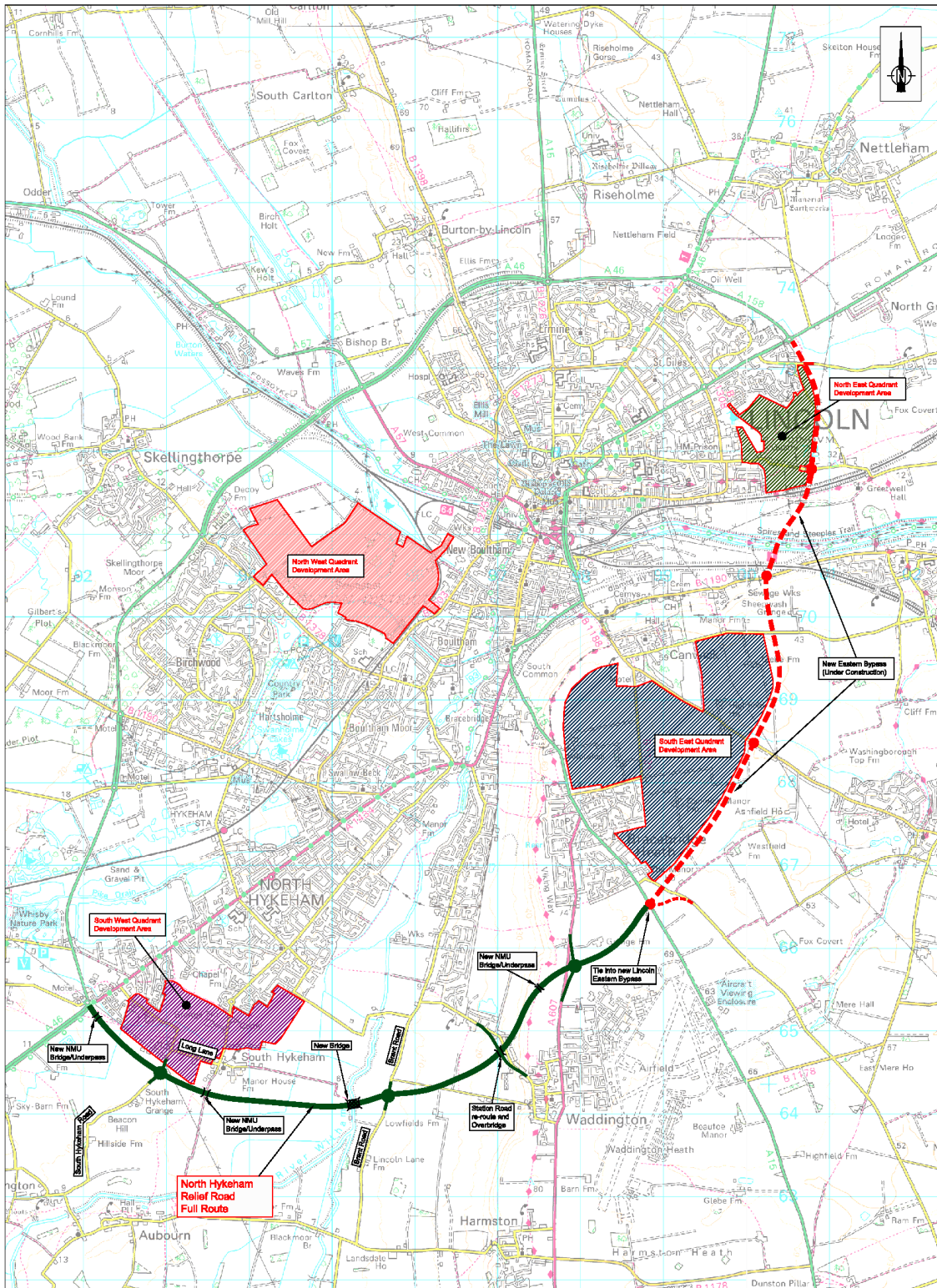
The OAR focussed on the options relating to the standard of carriageway. Three primary options have been considered, these are:

- a single carriageway
- a dual carriageway
- a single carriageway with future-proofed junctions and structures which allow for dualling of the scheme at a future date

1.6 Further options for shorter schemes have also been considered, which include:

- A46 to South Hykeham Road – single carriageway
- A46 to South Hykeham Road – dual carriageway
- A46 to Brant Road – single carriageway
- A46 to Brant Road – dual carriageway

Figure 1.0 – NHRR Location Plan



The above plan depicts the alignment of the LEB as a dashed red line, which is under construction. It also depicts the route of the NHRR in green and various coloured hatched areas which represent Sustainable Urban Extensions.

1.7 Option Assessment

The seven options were taken through a rigorous WebTAG compliant assessment process. (WebTAG is the DfT's Web-based Transport Analysis Guidance and toolkit which consists of software tools and guidance on transport modelling and appraisal methods that are applicable for highways and public transport interventions). The process included analysis of the current and future conditions, confirming the need for a scheme, objective setting, concept design, initial economic appraisal, stakeholder and public engagement. This work has been supported by the new Greater Lincoln Multi Modal Transport Model.

1.8 The relative benefits of the scheme options have included the following stages:

- **Initial Sift.** An initial sift of options was completed to identify any significant problems and issues which are likely to prevent an option from progressing;
- **Early Assessment & Sifting Tool.** The Early Assessment and Sifting Tool (EAST) was utilised. This was developed by the DfT as a decision support tool to develop, quickly summarise and present evidence on options in a clear manner which is consistent with the DfT's five case transport business structure;
- **Traffic Impacts.** The traffic impacts of each option were assessed on the strategic and major road network, as well as on the local roads and routes.

1.9 Initial Sift

The shorter options (A46 to South Hykeham Road and the A46 to Brant Road) were discounted at this stage due to:

- scoring poorly against scheme objectives;
- not being deemed deliverable on the grounds that they do not align with long-term policy aspirations of a relief road to the south of Greater Lincoln as stated within the Lincoln Integrated Transport Strategy, the Lincolnshire 4th Local Transport Plan and the Central Lincolnshire Local Plan; and
- not being deemed feasible as the options are not technically appropriate when considering future demand.

1.10 EAST Assessment

The EAST Assessment identified the dual carriageway as being the best performing option in relation to the objectives and overall impact. In the main this is due to the higher level of traffic relief expected to result from its implementation. However, each option is likely to deliver high value for money (in line with DfT's criteria).

1.11 Traffic Impacts

The following summarises the traffic impacts and issues for the three shortlisted options.

- Across all three options, the opening year traffic flows for the NHRR are consistent with those acceptable for a dual 2-lane all-purpose

carriageway as set out in guidance contained within the Design Manual for Roads and Bridges (DMRB).

- The journey times along the dual carriageway option are over a minute quicker than the single carriageway and future proofed options in the peak periods both in 2026 and 2036. The average speeds are also forecast to be significantly quicker (approximately 10mph) in the dual carriageway option.
- The traffic modelling analysis indicates that the single carriageway links, particularly at the western end of the NHRR, will be operating at full capacity by the end of the Local Plan period (2036) whilst the dual carriageway option would remain within capacity in these timescales.
- The Lincoln Eastern Bypass is being constructed as a single carriageway with future proofed junctions and features (it should be noted that the Authorities intentions had always been for a dual carriageway). There remains an aspiration to upgrade this to a dual carriageway at some point in the future. Progression of the NHRR as a standard single carriageway could be seen as being inconsistent with the overall design approach to the Eastern Bypass.
- As dependent development, the South West Quadrant has not been taken into account in the 'with NHRR' scenario. This will place further development pressures on the network.
- All three options will improve the resilience of the transport network through the expansion of the orbital network and increases in capacity. However, a dual carriageway option would further improve resilience as it would have the capacity to better deal with incidents and the impact of maintenance works.
- The dual carriageway option is forecast to provide the greatest level of traffic relief on the A46 when compared to the 'Do-Minimum' situation in both 2026 and 2036. This is more pronounced on the northern sections of the existing relief road on the sections between Skellingthorpe Road and Riseholme Road.
- All three options will provide significant traffic relief across a number of routes both within central Lincoln and in the south of the city.
- The dual carriageway option provides the greatest level of relief.

1.12 Costs

The initial outturn scheme cost estimates range from £100m for the single carriageway option to £148m for the dual carriageway.

	Single Carriageway	Single Carriageway - Future Proofed	Dual Carriageway
Base Cost*	£60,620,560	£72,168,966	£91,040,330
Risk Allowance	£17,900,000	£20,324,000	£25,440,000
Inflation	£21,508,792	£25,339,031	£32,043,039
Total Outturn Cost	£100,029,352	£117,831,997	£148,523,369

**Does not include any sunk costs (costs that have already been incurred and cannot be recovered)*

1.13 Benefit to Cost Ratio (BCR)

The outcome of the indicative value for money Benefit Cost Ratio (BCR) assessment, for each of the three options is set out in the table below. The BCR presents the ratio of the forecast transport user and accident benefits to the present value of costs. The single carriageway and future proofed options are likely to produce a similar level of benefit and the dual carriageway is forecast to provide the greatest level of benefit (£321m over 60 years). However, considering the differing project costs, for the single carriageway would be expected to result in a higher BCR. It should also be noted that the BCRs for all options fall in the high value for money category (BCR between 2 and 4) as defined by DfT.

Indicative Value for Money Assessment	Options		
	Single Carriageway	Single Carriageway - Future Proofed	Dual Carriageway
Indicative BCR	3.67	3.12	2.87

1.14 Engagement Outcome

Stakeholder and public engagement was undertaken in June 2018. The engagement process included two stakeholder workshops and four public drop-in exhibitions. In parallel, a questionnaire was also released, of which 1,023 were completed. Some 73% of respondents strongly supported the scheme and 89% either supported or strongly supported the scheme. Only 8% of respondents opposed or strongly opposed the scheme with 2% either not knowing/having no opinion. In addition, 87% of respondents preferred the full length scheme between the A46 and the A15 with 75% of respondents preferring the dual carriageway option. Only 1% of respondents preferred any version of the A46 to South Hykeham Road option with 8% preferring the A46 to Brant Road option.

1.15 The OAR has assessed a number of options for the NHRR, including three different carriageway standards and three different lengths. Through initial sifting and the engagement process it has been deemed that the two shorter versions of the NHRR be discounted and more detailed assessment and appraisal be undertaken for the options of three different standards of the full length route. In summary:

1.16 Single Carriageway

- The single carriageway option will deliver the scheme objectives. It will improve the east west connectivity in the south of Lincoln, help to reduce traffic levels on local urban and rural roads, support the delivery of the Sustainable Urban Extensions and help improve the resilience of the orbital and key route network through and around Lincoln.
- It will provide significant traffic relief across a number of local routes both within central Lincoln and in the south of the city.
- The forecast flows on the single carriageway exceed the opening year flow range for a single carriageway as defined by DMRB. This identifies that a dual carriageway standard will be more economically

and operationally acceptable. Congestion Reference Flow analysis also indicates that some sections of a single carriageway scheme will be operating at full capacity by the end of the plan period in 2036.

- It will produce acceptable levels of benefits albeit these will be lower than the dual carriageway option.
- The standard single carriageway is the lowest cost option and the outturn costs are expected to be in the region of £48m lower than the dual carriageway.
- This option will produce a BCR that is within the high value for money category, as defined by DfT.
- Progressing the NHRR as a standard single carriageway could be seen as not being consistent with the overall design approach to the Eastern Bypass. This is being developed as a future proofed single carriageway and there is a clear aspiration to upgrade the route at a later date.

1.17 Single Carriageway + Future Proofed

- The future proofed option is expected to have a similar level of performance to the standard single carriageway and it will deliver the scheme objectives.
- It will provide similar levels of traffic relief to the standard single carriageway across a number of local routes both within central Lincoln and in the south of the city.
- The forecast flows on the scheme are again similar to the single carriageway and exceed the opening year flow range for a single carriageway as defined by DMRB.
- It will also produce acceptable levels of benefits albeit these will be lower than the dual carriageway option.
- This is the second lowest cost option. The outturn costs for the option with future proofing are expected to be in the region of £30m lower than the dual carriageway.
- This option will produce a BCR that is within the high value for money category, as defined by DfT.
- The design standard will be consistent with the overall design approach to the Eastern Bypass. However, there are risks in adopting this approach as it requires land not immediately required for the scheme making the case for compulsorily purchasing some elements of land more difficult to justify.

1.18 Dual Carriageway

- All three carriageway standard options of the full route deliver the scheme objectives. However, due to the greater capacity of the dual carriageway option, it is likely to do so more robustly.
- An analysis of opening year daily traffic flows compared to DMRB guidance for carriageway standards indicates that a dual carriageway standard is most likely to be economically and operationally acceptable.

- The recent stakeholder and public engagement exercise has shown that a very significant majority of people (75%) support the dual carriageway option for the full A46 to A15 NHRR.
- The dual carriageway option is forecast to provide the highest level of traffic relief on the A46 when compared to the Do-Minimum situation in both 2026 and 2036. This is more pronounced on the northern sections of the existing relief road. The dual carriageway option is also forecast to result in more traffic reassigning to use the Eastern Bypass with the southern section to the B1188 Lincoln Road expected to see the most significant increases.
- The dual carriageway option will provide the highest level of benefits, although not significantly higher than the other two options in proportion to the relative costs.
- The dual carriageway is more expensive than the other two options and has an outturn cost of approximately £148m.
- This option will produce a BCR that is within the high value for money category, as defined by DfT.
- If taken forward to the OBC stage, further work will need to be undertaken to demonstrate that the dual-carriageway option will provide sufficient value for money, wider economic benefits and strategic fit for the DfT to consider funding.

1.19 Project Funding

Project funding is the next key stage of the development of the NHRR and thus the need for the completion of the OBC for submitting to the DfT for funding. The DfT have suggested the next opportunity for submitting a funding bid will be in late 2018, possibly early 2019. Outlining the funding request to the DfT, along with all other sources of project funding is an essential element of the OBC submission.

The NHRR Executive Project Board has considered many factors when proposing the funding sources and values, which included:

- Previously percentage requests from successful bids to the DfT
- The value of previous successful bids to the DfT
- The value of the BCR for the dual carriageway scheme, which is 2.87 and categorised by the DfT as 'high'
- A review of LCC match funding expectations across all central government bodies
- An assessment of the NHRR benefits against the specific funding bid requirements

The below table depicts what the NHRR Executive Project Board decided would be the most efficient bid when balancing affordability and likelihood of success.

Dual Carriageway Project	
Funding Source	Funding Value
DfT requested contribution – 70%	£103,970,404
Developer funding contribution	£10,000,000 – which is a minimum
LCC funding contribution	£34,558,744
Whole Scheme Estimated Cost	£148,529,148

1.20 Abbreviations:

- Web Tag – DFT Web Based – Transport Analysis and Guidance and Toolkit
- EAST – Early Assessment and sifting tool
- DfT – Department for Transport
- BCR – Benefit to Cost Ratio
- OBC – Outline Business Case
- DMRB – Design Manual for Road and Bridges
- OAR – Options Assessment Report
- SUNK Cost - Funding already invested within the scheme, and not recoverable
- AADT – Annual Average Daily Traffic

2. Legal Issues:

Equality Act 2010

Under section 149 of the Equality Act 2010, the Council must, in the exercise of its functions, have due regard to the need to:

- * Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act
- * Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it
- * Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; and sexual orientation

Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:

- * Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic
- * Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it
- * Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to tackle prejudice, and promote understanding

Compliance with the duties in section 149 may involve treating some persons more favourably than others

The duty cannot be delegated and must be discharged by the decision-maker. To discharge the statutory duty the decision-maker must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision making process

An impact analysis has not been undertaken in relation to the OBC as at this stage of the project these are considered to be neutral in their impact on persons with protected characteristics. Should the project attract funding then the next project phase will be sourcing planning approval which will require a significant level of impact analysis.

Joint Strategic Needs Analysis (JSNA and the Joint Health and Wellbeing Strategy (JHWS)

The Council must have regard to the Joint Strategic Needs Assessment (JSNA) and the Joint Health & Well Being Strategy (JHWS) in coming to a decision

Consideration has been given to the JSNA and the JHWS and the NHRR scheme has significant benefits for both the health and well-being of the people of Lincoln and North Hykeham. This has been significantly scrutinised previously through the process of devising the adopting the Central Lincolnshire Local Plan.

Crime and Disorder

Under section 17 of the Crime and Disorder Act 1998, the Council must exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area (including anti-social and other behaviour adversely affecting the local environment), the misuse of drugs, alcohol and other substances in its area and re-offending in its area

The issues have been considered but there are not considered to be any direct implication for crime and disorder.

3. Conclusion

The NHRR scheme has been promoted through a significant number of published strategy and policy documents, which includes the County Council's Local Transport Plan, Lincoln Integrated Transport Strategy and the adopted Central Lincolnshire Local Plan. The need for the NHRR scheme and benefits it will bring are widely recognised and that has been reflected in the chosen route, which is shown and protected in the local plan.

For the reasons set out in the report the NHRR makes a compelling case of the significant benefits this infrastructure will derive in the public interest. The report concludes that carriageway shall be of a dual carriageway standard and this shall be the basis for all further project development, including funding bids.

The summarised reasoning for a dual carriageway over a single or single + future proof are:

- The dual carriageway standard would provide the greatest level of traffic relief to the North Hykeham highway network
- There is greater vehicle capacity on the dual carriageway option which will remove the need for abortive costs in improving further in future years.
- The dual carriageway option will provide the highest level of benefits.
- The daily traffic flows compared to DMRB guidance for carriageway standards indicates a dual carriageway standard is the most economically and operationally viable option.
- The dual carriageway will unlock the South East Quadrant Sustainable Urban Extension and help improve the resilience of the whole ring road and the key routes through and around Lincoln.
- The recent stakeholder and public engagement exercise has shown that a very significant majority of people (75%) support the dual carriageway option.
- This option will produce a BCR that is within the high value for money category, as defined by DfT.
- The dual carriageway option is forecast to provide the highest level of traffic relief to the existing Western Bypass.
- The dual carriageway option is in line with the LEB strategy being a single future proofed carriageway, which will be dualled in the future.
- The dual carriageway option is consistent with the existing A46 dual carriageway between Lincoln and Newark.
- There are clear aspirations from both LCC and Highways England to upgrade the full length of the existing Western Bypass to a dual carriageway standard (where it isn't already), which further reinforces the need for the NHRR to provide consistency.

Further work is necessary to gain funding, which is the next significant milestone. The requested endorsement will allow the NHRR to be progressed and provide the County Council with the ability to react quickly to upcoming funding opportunities. The endorsement will also provide potential funding bodies with the confidence that the County Council can deliver this ambitious project.

4. Legal Comments:

Lincolnshire County Council has power to make the decisions sought by the recommendations in this Report.

The proposal is consistent with the Policy Framework and within the remit of the Executive.

5. Resource Comments:

The Environment & Economy approved budget for advance scheme design includes sufficient resources to enable the development of the outline business case required to provide sufficient information to submit a funding bid to the Department for Transport at the appropriate time. The currently approved capital programme does not include any budget for the NHRR, so any bid to the DfT would need the approval of Council to include the scheme in the future capital programme.

6. Consultation

a) Has Local Member Been Consulted?

Yes

b) Has Executive Councillor Been Consulted?

Yes

c) Scrutiny Comments

The report will be considered by the Highways and Transport Scrutiny Committee at its meeting on 10 September 2018. Any comments from the Committee will be presented to the Executive.

d) Have Risks and Impact Analysis been carried out?

No

e) Risks and Impact Analysis

This will be completed as part of the planning application submission.

7. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Mark Heaton, who can be contacted on 01522 553182 or mark.heaton@lincolnshire.gov.uk .

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**Open Report on behalf of Richard Wills,
Executive Director for Environment and Economy**

Report to:	Highways and Transport Scrutiny Committee
Date:	10 September 2018
Subject:	Highways Infrastructure Asset Management Plan

Summary:

This item invites the Highways and Transport Scrutiny Committee to consider a report regarding the Highways Infrastructure Asset Management Plan. This report is due to be considered by the Executive Councillor for Highways, Transport and I.T between 17 and 22 September 2018. The views of the Scrutiny Committee will be reported to the Executive Councillor for Highways, Transport and I.T as part of his consideration of this item.

Actions Required:

- (1) To consider the attached report and to determine whether the Committee supports the recommendations to Executive Councillor for Highways, Transport and I.T.
- (2) To agree any additional comments to be passed to the Executive Councillor for Highways, Transport and I.T in relation to this item.

1. Background

This report provides a summary of the Highways Infrastructure Asset Management Plan. Lincolnshire County Council's new Highways Infrastructure Asset Management Plan (HIAMP) sets out the policies and standards around Highways Maintenance.

The full report is attached at Appendix 1 to this report.

2. Conclusion

Following consideration of the report, the Highways and Transport Scrutiny Committee is requested to consider whether it supports the recommendations in the report and whether it wishes to make any additional comments to the Executive Councillor for Highways, Transport and IT.

3. Appendices

These are listed below and attached at the back of the report	
Appendix 1	I015772 - Highways Infrastructure Asset Management Plan

4. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Vincent Van Doninck, who can be contacted on 01522550625 or Vincent.VanDoninck@lincolnshire.gov.uk.

**Open Report on behalf of Richard Wills,
Executive Director for Environment and Economy**

Report to:	Councillor R G Davies, Executive Councillor for Highways, Transport and IT
Date:	17 – 22 September 2018
Subject:	Highways Infrastructure Asset Management Plan
Decision Reference:	I015772
Key decision:	Yes

Summary:

This Report sets out a proposed amended Highways Infrastructure Asset Management Plan and invites the Executive Councillor for Highways Transport and IT to approve the draft Plan attached to the Report at Appendix A.

Recommendation(s):

That the Executive Councillor approves the Highways Infrastructure Asset Management Plan in the form of the draft dated July 2018 attached as Appendix A to this report.

Alternatives Considered:

Not to update the Plan and continue to operate to the 2017 version. The revision to the Highways Infrastructure Asset Management Plan and maintenance frequencies are not adopted. Lincolnshire County Council will continue with current policies, requiring additional funding in order to provide the resources needed to meet existing standards. This risks the loss of our Band 3 status, which would result in a loss of funding from the Department for Transport for highways maintenance.

Reasons for Recommendation:

Approving the proposed revisions to the Highways Infrastructure Asset Management Plan will allow the County Council's operational plan to align with proposed changes highlighted in the guidance document commissioned by the Department for Transport, the "Well Managed Highway Infrastructure – A Code of Practice" document published in October 2016. Compliance with the new code will be required to maintain our Band 3 status and the full Capital Maintenance Grant from the Department for Transport

1. Introduction

- 1.1. Lincolnshire County Council's new Highways Infrastructure Asset Management Plan (HIAMP) sets out the policies and standards around Highways Maintenance. It is reviewed annually to ensure that agreement is in place around the direction of the Service in terms of Asset Management.
- 1.2. Asset Management, in a Highways context, can be defined as *“a systematic approach to meeting the strategic need for the management and maintenance of highway infrastructure assets through long term planning and optimal allocation of resources in order to manage risk and meet the performance requirements of the authority in the most efficient and sustainable manner”*.
- 1.3. A robust Asset Management Plan is instrumental towards aligning ourselves to the requirements set out by Central Government, and achieving the aim of maintaining our Band 3 status. This status allows us as an Authority to receive maximum funding from the Department for Transport for Highways Maintenance.
- 1.4. The Highways Infrastructure Asset Management Plan is the third tier of how to accurately categorise and explain Highways Asset Management in line with Best Practice, as outlined by the Department for Transport. The first element of Asset Management is the Highways Asset Management Policy, which outlines the overarching principles of our approach to Asset Management. The second tier of describing our methods is the Highways Asset Management Strategy, which outlines our long-term strategies for maintaining the assets to its maximum potential, thereby achieving optimum lifecycle planning and aligning ourselves to the overarching principles set out in the Policy.
- 1.5. The Highways Infrastructure Asset Management Plan can be defined as the document which outlines our operational approach towards achieving both sets of goals explained in the Policy and Strategy through fixed policy requirements and standards. For information, the document runs alongside the Network Management Plan, which focuses more on network availability whilst the Asset Management Plan looks at the maintenance of the network.
- 1.6. "Well Maintained Highways – Code of Practice for Highway Maintenance Management" was published in July 2005 to provide local authorities with guidance on how to develop a highway maintenance policy based on best practice. The document prescribed standards and suggested service levels and complemented the structures and street lighting codes "Management of Highway Structures" and "Well Lit Highways" respectively. The Code of Practice is regularly referred to during highways claims against local authorities, who are expected to explain any deviation from the code. The HIAMP is therefore usually used as a reference point during legal claims.

- 1.7. "Well Maintained Highways, Management of Highway Structures" and "Well Lit Highways" were superseded in October 2016 by "Well Managed Highway Infrastructure – A Code of Practice", which covers all three areas. The revision to the code is substantial and entirely risk based, moving away from a prescriptive document to a system of guidance that encourages authorities to develop their own standards and levels of service based on evidence-based risk assessment. Many of the prescribed standards which were in the previous code, which formed the basis of Lincolnshire's own, have now been removed entirely.
- 1.8. "Well Managed Highway Infrastructure – A Code of Practice" allows highway authorities to adopt a risk-based approach immediately, but otherwise advises that authorities should adopt this approach by October 2018. The Highways Infrastructure Asset Management Plan has traditionally highlighted any local deviations from the Code of Practice.
- 1.9. Due to the revision to the Code of Practice, it was considered that the Highways Asset Management Plan was therefore in need of significant review in order to align with this guidance and continue to function as a relevant Policy document which can contribute to be a robust defence to any highways claims brought against the authority.
- 1.10. The document outlines the Service's approach to maintaining our Assets through a variety of methods. The document is structured in three key Asset Groups: Highways, Structures and Street Lighting. Firstly, it shows our approach to the accurate recording of all of our assets through our Asset Management system. Secondly, the document highlights our approach to maintaining the condition of all individual assets in extensive detail. Thirdly, it demonstrates our method of inspection for all assets. Finally, the document outlines all possible ways of programming our maintenance regime, from reactive to planned programming.
- 1.11. National indicators through network level surveys have demonstrated an overall improvement in the condition of our classified network by enforcing effective Asset Management. However, further improvements are required for our unclassified network. That is why this new Highways Infrastructure Asset Management Plan attempts to put forward a more extensive and detailed approach towards dealing with our unclassified carriageway network.
- 1.12. From a programmed maintenance perspective, Asset Management as outlined within this Plan entails focusing on Resurfacing and surface dressing schemes in a more structured approach, allowing for a more proactive maintenance method. These schemes are prioritised based on need, utilising data and engineering methodology to determine priority, and are collated in an annual works programme. Similar methods are in place for other Assets, as evidenced within the Plan throughout.
- 1.13. From a reactive maintenance perspective, dealing with potholes alongside a number of other surface defects, the Asset management approach allows

for a first-time fix approach. This allows for permanent repairs to be taken place, increasing the viability of the asset. The risk-based element of reactive maintenance is demonstrated within our response time matrix highlighted in Appendix B of the Highways Infrastructure Asset Management Plan, outlining how and when we respond to defects.

- 1.14. Another example of improved Asset management is the use of the "Retread" programme on our unclassified network. The Council has been treating a number of its minor roads with a programme of "Retread" for some years. This involves the removal of the entire road surface which is then mixed with additional material and binder before being re-laid. The finished surface is then treated with either a surface dressing or new surface course.

2. Changes made

- 2.1. A number of systematic changes have taken place, of which the main ones are defined in more detail below. The changes outlined below will have a number of additional consequences to the service, which are demonstrated within the HIAMP throughout.
- 2.2. The primary change was the need for a hierarchy review, to install a risk-based approach to hierarchies. Carriageway and footway hierarchies were based on the guidance in the previous code of practice, and amended slightly for local variation. A prescriptive guidance was no longer present within the "Well Managed Highway Infrastructure" guidance document and so a full review was needed to evidence how our local hierarchies are defined.
- 2.3. The changes made include a new Major Road Network Hierarchy, and a further classification of our unclassified network through the inclusion of 3 additional Hierarchies, splitting the previous Hierarchy 4 down into classified and unclassified roads and the previous Hierarchy 5 to highlight the slight and full un-metalled highways. This will ensure a clear approach when responding to faults and inspecting roads within Lincolnshire.
- 2.4. A risk-based approach to inspections has been included. Following a hierarchy review, it was necessary to amend Lincolnshire's regime of safety inspections to align with the new local road hierarchies, thus creating a sound link between network hierarchy and the frequency of inspection for Category 1 defects. Inspections have been aligned with the updated hierarchies, and they are expected to be undertaken using key elements from risk management. The new Hierarchy 7 and 8 have received new inspection frequencies which are once every 3 years for Hierarchy 7 and once every 5 years for Hierarchy 8. The new inspection frequencies have been chosen based on the low traffic volumes and usage of these hierarchies.
- 2.5. A review of the risk-based approach to response times to defects has been undertaken. The Highways Asset Management Plan introduced risk-based

responses to defects in 2015, in advance of the new code of practice being published. The new code allowed a chance to review this approach and further refine the concept. The response times have become more risk-based due to the increase in inspections and the inclusion of a new 90 day response time for certain categories.

- 2.6. The new Code of Practice has given Lincolnshire County Council the opportunity to review how the inspectors respond to defects. Therefore changes have been introduced to give the inspectors the ability to escalate response times to a 1 or 2 hour make safe. The Highways Officer further has the opportunity to escalate or de-escalate a defect through a risk-assessment, and will be required to evidence the reasoning behind any changes made. Evidence for escalation could include Member-led escalation through a number of enquiries reaching elected representatives and this being fed to the Highways Officer, or the same enquiry being sent through our web portal on multiple occasions.
- 2.7. Finally, the "First-time fix" of defects has been formalised within the policy. Lincolnshire County Council shall adopt permanent repairs as the first choice. Temporary repairs shall only be used where safety cannot be managed using alternative approaches and in emergency circumstances. Although more efficient and better value for money, these procedures take more time than a temporary repair.
- 2.8. One of the recommendations was engagement and communication with Local Authorities. Throughout the last few months, several engagement sessions have taken place with adjacent Authorities to ensure service alignment despite different approaches being taken.

3. Conclusion

Following consideration of the report, the Executive Councillor is requested to consider whether to approve the changes implemented in the Highways Infrastructure Asset Management Plan as set out in Appendix A. The new HIAMP will then become operational from the 1st of October 2018.

4. Legal Issues:

Equality Act 2010

Under section 149 of the Equality Act 2010, the Council must, in the exercise of its functions, have due regard to the need to:

* Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act

* Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it

* Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; and sexual orientation

Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:

* Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic

* Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it

* Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to tackle prejudice, and promote understanding

Compliance with the duties in section 149 may involve treating some persons more favourably than others

The duty cannot be delegated and must be discharged by the decision-maker. To discharge the statutory duty the decision-maker must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision making process

This review of the Highways Infrastructure Asset Management Plan is considered to have no impact as the strategy is at a high level of generality and is neutral in its impact on people with a protected characteristic when compared with people who do not share that characteristic

Joint Strategic Needs Analysis (JSNA and the Joint Health and Wellbeing Strategy (JHWS)

The Council must have regard to the Joint Strategic Needs Assessment (JSNA) and the Joint Health & Well Being Strategy (JHWS) in coming to a decision

The effect of revisions to the Highways Infrastructure Asset Management Plan on the JSNA and JHWS has been considered and deemed to have no direct impact.

Crime and Disorder

Under section 17 of the Crime and Disorder Act 1998, the Council must exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area (including anti-social and other behaviour adversely affecting the local environment), the misuse of drugs, alcohol and other substances in its area and re-offending in its area

The duties under section 17 of the Crime and Disorder Act 1988 have been considered and it is deemed that the proposed changes to the Highways Infrastructure Asset Management Plan will have no direct impact.

5. Legal Comments:

Adoption of the amendments to the Highway Infrastructure Asset Management Plan would be lawful. The proposals are consistent with the Policy Framework and within the remit of the Executive Councillor.

6. Resource Comments:

Accepting the changes set out in the Highways Asset Management Plan will enable the service to operate within the budget approved for 2018/19. Any changes to the plan will need to be affordable within the approved budget for the service.

7. Consultation

a) Has Local Member Been Consulted?

N/A

b) Has Executive Councillor Been Consulted?

Yes

c) Scrutiny Comments

The report will be considered by the Highways and Transport Scrutiny Committee at its meeting on 10 September 2018. Any comments from the Committee will be presented to the Executive Councillor for Highways, Transport and I.T.

d) Have Risks and Impact Analysis been carried out?

Yes

e) Risks and Impact Analysis

See the body of the Report

8. Appendices

These are listed below and attached at the back of the report	
Appendix A	Draft Highways Infrastructure Asset Management Plan
Appendix B	Summary of Changes – HIAMP 2018

9. Background Papers

Document title	Where the document can be viewed
Well Managed Highways Infrastructure	http://www.ukroadsliaisongroup.org/en/codes/
Highways Asset Management Plan	https://www.lincolnshire.gov.uk/transport-and-roads/strategy-and-policy/documents/131314.article
Highways Asset Management Strategy	https://www.lincolnshire.gov.uk/transport-and-roads/strategy-and-policy/documents/131314.article

This report was written by Vincent Van Doninck, who can be contacted on 01522550625 or Vincent.VanDoninck@lincolnshire.gov.uk.

Highways Infrastructure Asset Management Plan



October 2018

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Foreword

The new Highways Infrastructure Asset Management Plan has been written in line with the approach outlined in the new Code of Practice "Well-Managed Highway Infrastructure" released by the UK Roads Liaison Group on October 28 2016, as commissioned by the Department for Transport. This document serves as a guidance document to Local Authorities, encouraging them to implement a Risk-Based Approach within their service. This document will demonstrate our commitment to a Risk-Based Approach, whilst taking into account the specific local factors that define Lincolnshire County.

Lincolnshire County Council has for some time been tied to our commitment to developing a consistent, proactive approach towards our service. Therefore, the Authority is continuing to move towards best practice with regards to Asset Management. Last year's Winter months show us that despite such tough challenges, this approach is very much the right way for us to deliver our service, to make maximum use of our available resources. Our Asset-led approach has already fostered results throughout the years, notably through our efforts to align ourselves with the Department for Transport's requirements through the Self-Assessment Process. These efforts enabled us at the time to become one of the first Counties to be accredited with a Band 3-status for the DfT, receiving maximum funding as a consequence.

National indicators through network level surveys have demonstrated an overall improvement in the condition of our classified network by enforcing effective Asset Management. However, further developments are required for our unclassified network despite recent improvements. That is why this new Highways Infrastructure Asset Management Plan attempts to put forward a more extensive and detailed approach towards dealing with our unclassified carriageway network. Hopefully, the elements highlighted within this Plan will enable the Authority to have an even more targeted approach with this crucial part of the Lincolnshire Roads. The rural nature of our county provides us with a responsibility to effectively prioritise the schemes of maintenance and improvement works undertaken on this section of the network.

Furthermore, it is important to realise that however critical, the carriageway network should not be the Plan's sole focus of attention. The Plan will highlight our linked approach towards all Assets that are the responsibility of the Lincolnshire County Council Highways Service. Therefore the Plan has been divided up into a Highways, Structures and Street Lighting Volume. All Volumes should show our commitment towards reactive and proactive maintenance for these Assets through the use of a risk-based approach.

Lincolnshire, with its distinct rural tone surrounding continually evolving urbanised centres such as Grantham, Lincoln City, Boston, and Spalding among others, requires an efficient highway network that takes into account all factors that may be influencing its development. We as a service believe that Asset Management is the correct way to deal with the challenges ahead for our Highways Service.

Paul Rusted, Highways Infrastructure Commissioner

July 2018

Highways Infrastructure Asset Management Plan



Volume 0 – Overarching Principles

1. Introduction

1.1. Principles and Context of the Plan

- 1.1.1. This document replaces the Highway Asset Management Plan (April 2017) and applies to all of Lincolnshire County Council's Highway Assets.
- 1.1.2. The Highway Infrastructure Asset Management Plan is produced as a single Plan spanning 4 Volumes to emphasise an integrated approach to highway network infrastructure assets. Overarching matters are dealt with in Volume 0 and additional asset-specific matters are dealt with in volumes 1, 2 and 3. This approach is consistent with the Highways Asset Management Strategy.
- 1.1.3. It is designed to align with the guidance in *Well Managed Highway Infrastructure – Code of Practice (October 2016)*, whilst setting out a specific approach for Lincolnshire County Council in line with local needs and priorities. There has been a shift from the previous guidance set out in *Well Maintained Highways – Code of Practice for Highway Maintenance Management (July 2005)* which was prescriptive, to a risk-based approach determined by each Highway Authority. This Plan will set out that approach taking into account appropriate analysis and development and is approved by the Council's Executive processes.

1.2. Status of the Plan

- 1.2.1. This Plan is approved as an operational Policy document by the Executive Councillor for Highways, Transport and I.T. The Plan is subject to annual Scrutiny from the elected members and will be reviewed as such on a yearly basis. The Action Plan highlighted in [Appendix F](#) demonstrates a continuous approach to trying to improve our service through effective Asset Management.

1.3. Links to Other Documents

1.3.1. The Highways Infrastructure Asset Management Plan forms part of family of documents which define Lincolnshire County Council's Asset Management Policies. The links to other documents are set out in the diagram below:



1.4. Maintenance Practice

1.4.1. Lincolnshire County Council provides a number of maintenance activities on the highways network which will be outlined throughout the course of this document.

1.4.2. Maintenance types contribute in varying degrees to the core objectives of safety, customer service, serviceability and sustainability. Levels of service and delivery arrangements shall be established having regard to these objectives and be focused on outcomes.

1.4.3. The main types of maintenance are as follows:

- Reactive – responding to inspections, complaints or emergencies;
- Routine – regular schedule, generally for lamp replacement, patching, cleaning, gully cleansing, grass cutting and landscape maintenance, cleaning bridge drainage;
- Programmed – flexibly planned schemes primarily of reconditioning or structural renewal;
- Regulatory – inspecting and regulating the activities of others;
- Winter Service; and
- Resilience

1.5. Scope of the Plan

1.5.1. The document will comprise of 3 Volumes, each outlining a specific Asset Group. The 3 Asset Groups are:

- Highways
- Structures
- Street Lighting

1.5.2. Each Asset group Volume will contain the following information: Legal Framework, Asset Condition, Asset Management, Asset Inspection and Asset Programming. All of these core elements generate a consistent approach to Best-Practice Asset Management, and it puts into practice the core demands of good life-cycle planning outlined within the Asset Management Strategy.

1.5.3. The Highways Infrastructure Asset Management Plan is not intended as a detailed technical reference for all aspects of highway infrastructure maintenance, or to repeat technical guidance available elsewhere. Areas referred to but not dealt with in detail include:

- Highway improvement and new construction;
- Network management, including the traffic management duty, or equivalent such as Permitting Schemes and management of utilities, which is dealt with in our [Network Management Plan](#).
- Management and maintenance of Public Rights of Way;
- Highway development control, including securing funds associated with developer obligations; and
- Town centre management, including use of public space.

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2. Policy Framework

2.1. Asset Management

- 2.1.1. The Highways Infrastructure Asset Management Group (HIAMG) defines Asset Management as follows:

"A systematic approach to meeting the strategic need for the management and maintenance of highway infrastructure assets through long term planning and optimal allocation of resources in order to manage risk and meet the performance requirements of the authority in the most efficient and sustainable manner".

- 2.1.2. The Association of Directors of Environment, Planning and Transport (ADEPT) define asset management as:

"A strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highways infrastructure to meet the needs of current and future customers."

- 2.1.3. Lincolnshire County Council is committed to the development of an Asset Management led approach to the maintenance of highways infrastructure assets. This is highlighted by our continual Level 3 status audited by central government through the incentivised fund created in December 2014. One element of this funding regime rewards authorities who are able to demonstrate that they have adopted an asset management based approach to the management of their infrastructure assets.

- 2.1.4. Lincolnshire's *Highways Asset Management Policy* and *Highways Asset Management Strategy* set out the high-level principles of the management of the highways assets.

- 2.1.5. Asset management supports making the case for funding, for better communication with stakeholders, and facilitates a greater understanding of the contribution highway infrastructure assets make to economic growth and social well-being of local communities, in line with the requirements set out by the Lincolnshire Joint Strategic Needs Assessment and the Health and Wellbeing Strategy.

- 2.1.6. Authorities have certain legal obligations with which they need to comply, and which may be the subject of claims for loss or personal injury or of legal action by those seeking to establish non-compliance by authorities. It is recognised that in such cases, *Well Managed Highway Infrastructure – Code of Practice* may be regarded as a relevant consideration. Where, in the light of local circumstances, Lincolnshire County Council has elected to adopt policies or approaches different from those suggested by the Code, they are identified, together with the reasoning for such differences, within this Plan.

- 2.1.7. Lincolnshire County Council Highways has developed an [Asset Management Policy](#) document, outlining its approach towards effective asset management in line with the member-approved commissioning strategies developed by the Authority as a whole.
- 2.1.8. Lincolnshire County Council Highways has further developed [an Asset Management Strategy](#), outlining its approach towards formalising strategies for investment in key highway asset groups through life-cycle planning, defining affordable service standards, improving how the highway assets are managed and subsequently enabling more effective and efficient highways services to be delivered.

2.2. Stakeholders and Communication

- 2.2.1. Stakeholder expectations and the importance of good communications and liaison are dealt with in the *UKRLG Highway Infrastructure Asset Management Guidance Document, Part A*. This document has informed the communication of this Plan and *Highway Asset Management Policy* and *Highways Asset Management Strategy*.
- 2.2.2. Arrangements have been established to facilitate the involvement of all authority elected members, employees, contractors and agents in building commitment and pride in the highway maintenance service and maximising individual contributions to the process of continuous improvement. These arrangements are not set out in detail within this plan but are covered in the *Highways Asset Management Strategy*.

2.3. Other Authorities

- 2.3.1. Consultation with other local, combined and strategic adjoining Highway Authorities has taken place to discuss the changes proposed within the new Code of Practice. A consistency in service, despite the various approaches towards implementing the Code of Practice, has been ensured by communicating with all of the adjacent authorities.
- 2.3.2. Responsibility for assets on Authority boundaries, e.g. river bridges, has been agreed with adjoining authorities. Lincolnshire County Council has outlined all of its boundaries with adjacent Local Authorities and included them within its Asset Management System.
- 2.3.3. Lincolnshire County Council has entered into agreements with adjacent authorities for certain aspects of service to be carried out by one Council on behalf of the other. Specific shared Gritting Route responsibilities can be found in the [Winter Maintenance Plan](#).

3. Legal Framework

3.1. General and Specific Requirements

- 3.1.1. All duties, powers and legislation, both general and specifically related to assets, e.g. highways, structures and lighting are dealt with in [Appendix E](#) of this plan.
- 3.1.2. Much of highway infrastructure maintenance activity is based upon statutory powers and duties contained in legislation and interpretations of these powers and duties provided by the court.
- 3.1.3. All those involved in highway maintenance with Lincolnshire County Council should have an appropriate understanding of their duties and powers, their implications, and the procedures used to manage and mitigate risk.
- 3.1.4. Specific legislation mentioned is generally that for England.

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4. Strategy and Hierarchy

4.1. Lincolnshire Highway Asset Management Strategy

- 4.1.1. Lincolnshire County Council's *Highways Asset Management Strategy* has been developed in line with the UKRLG *Highway Infrastructure Asset Management Guidance (HIAMG)*, Part B.
- 4.1.2. The [Highways Asset Management Strategy](#) sets out how the Highways Asset Management Policy is to be achieved, how long term objectives for managing the highway are to be met and how the strategy is to be implemented, including setting targets and measuring performance. It sets clear direction, provides links with other relevant documents, such as corporate plans, and sets out the benefits of investing in the highway infrastructure.
- 4.1.3. The development of a Highways Infrastructure Asset Management Plan (HIAMP) shows that the Authority is delivering value when maintaining highways as well as addressing wider objectives of corporate strategy and transport policy.
- 4.1.4. The HIAMP will be a key component of the Asset Management Strategy and will include such items as:
- A set of objectives and policies linked to business objectives (See [Appendix E](#) of this Plan) through Network Safety, Customer Service, Network Serviceability and Network Sustainability
 - An asset or inventory register
 - Managing risk of failure or loss of use
 - Development of co-ordinated forward programme for highway maintenance, operation and improvement
 - Measurements of performance and continuous improvement
- 4.1.5. Lincolnshire County Council adheres to the HMEP (Highways Maintenance Efficiency Programme) sector-led transformation programme. It is designed to maximise returns from highways investment and help to improve efficiency and effectiveness of the local highways sector which it is aimed at.
- 4.1.6. HMEP has developed a series of products to inform highways authorities of examples of best practice and recommendations which should lead to an improved highway maintenance service and better value for money for taxpayers.
- 4.1.7. Lincolnshire County Council has adopted, where affordable, recommendations which add value to current practices.
- 4.1.8. The pothole review and asset management guidance products produced by HMEP both recommend that authorities should employ an asset management approach. The principle "prevention is better than cure" in determining the balance between

structural, preventative and reactive maintenance activities has been embraced by Lincolnshire County Council. This philosophy should improve the resilience of the highway network and reduce the occurrence of potholes in the future, informing the risk-based approach to response times in a move to "first-time fixes" to highway defects.

4.2. Functional Hierarchy

- 4.2.1. A network hierarchy based on asset function is the foundation of a risk-based maintenance strategy. It is crucial in establishing levels of service and to the statutory network management role for developing co-ordination.
- 4.2.2. The hierarchy structure adopted reflects the whole highway network and the needs, priorities and actual use of each infrastructure asset. The carriageway hierarchy, for example, is determined partly by traffic volume, but also influenced by factors such as pedestrian or cyclist usage amongst other factors. Collectively, these issues may be referred to as the 'functionality' of the section of highway in question.
- 4.2.3. The hierarchies outlined below are considered to be maintenance hierarchies. They will be utilised to determine inspection frequency and reactive maintenance response times first and foremost. The maintenance hierarchies will also be used to increase efficiency within the use of our scheme selection toolkit.
- 4.2.4. Lincolnshire is a large and sparsely populated county with a greater than average length of road per head of population. The length of the road network is 8,869 km of carriageway. The network also comprises 3,643 Km, of footway. Clearly it is not practicable to develop and maintain the whole of the road network to the same standards.
- 4.2.5. Therefore the County Council has designated a hierarchy of road types with each highway link being allocated to one of these types. The types reflect the roles of different carriageways, and footways/cycle-ways based upon these principles.
- 4.2.6. Hierarchies are dynamic and will be regularly reviewed to reflect changes in network characteristics and functionality so that maintenance strategy reflects the current situation, rather than the use expected when the hierarchy was originally defined.
- 4.2.7. Where major maintenance, construction or other development signalling a change over the long term involves significant traffic diversion, or when congestion in one part of the network results in traffic shift to another part of the network, these changes shall be reflected in the hierarchy and subsequently in the maintenance and network management regimes.

4.2.8. Carriageway Hierarchy

Carriageway Hierarchy will not necessarily be determined by the road classification, but by functionality and scale of use. Hierarchy MRN, 1 and 2 roads comprise the County's strategic road network. Table 1 sets out Lincolnshire County Council's local maintenance hierarchies.

LCC Local Standard	National Standard
<p>Major Road Network</p> <p>Local Highways Authority selected A roads that have a strategic importance which links areas across the UK. These routes encounter constant high levels of traffic and should be easily accessible and identifiable. Further consideration to be made is the traffic generated by seaside tourism during the vacation months, which creates the need for robust routes to seaside attractions. They will be the primary component of our resilient network and subsequently our precautionary salting network.</p> <p><i>Major Road Network in Lincolnshire to include:</i></p> <ul style="list-style-type: none"> ▪ A15 (M180 to Sleaford) ▪ A16 ▪ A17 ▪ A52 (Boston – Skegness) ▪ A57 (Dunham bridge from A1 – Lincoln) ▪ A46 (Lincoln Saxilby Road Roundabout to Nettleham Road roundabout) ▪ A151 ▪ A158 	<p>Category 2 - Strategic Route</p> <p><i>Trunk and some Principal “A” roads between Primary Destinations</i></p> <p>Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.</p>
<p>Hierarchy 1</p> <p>Major long distance, inter-urban routes, which either:</p> <ul style="list-style-type: none"> – Provide a network of routes for traffic passing through the county, – Link major urban areas (over 8000 population) to major urban areas outside the county <p>Particularly for long distance through industrial and commercial traffic.</p>	<p>Strategic Route</p> <p><i>Trunk and some Principal “A” roads between Primary Destinations</i></p> <p>Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.</p>

LCC Local Standard	National Standard
<p>Hierarchy 2</p> <p>The remaining inter-urban routes of more than local importance by virtue of their role in handling substantial flows of long distance traffic between:</p> <ul style="list-style-type: none"> – Adjacent towns within the county. – Lincolnshire towns near the county boundary and nearby centres of populations in adjacent counties. 	<p>Main Distributor</p> <p><i>Major urban and Inter-Primary links. Short to medium distance traffic.</i></p> <p>Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.</p>
<p>Hierarchy 3</p> <p>Local roads which provide a good quality connection between the main settlements (population of 500 plus) to the MRN, H1 and H2 Roads, including rural bus routes and links to major HGV generators.</p>	<p>Secondary Distributor</p> <p><i>B and C class roads and some unclassified urban routes carrying bus, HGV and local traffic with frontage access and frequent junctions</i></p> <p>In rural areas these roads link the larger villages and HGV generators to the Strategic and Main Distributor Network. In built areas these roads have 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons.</p>
<p>Hierarchy 4</p> <p>Classified roads, which link the smaller villages and settlements to the MRN, H1, H2 or H3 roads.</p>	<p>Link Roads</p> <p><i>Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions</i></p> <p>In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two way traffic. In urban areas they are residential or industrial inter-connecting roads with 30 mph speed limits random pedestrian movements and uncontrolled parking.</p>

LCC Local Standard	National Standard
<p>Hierarchy 5</p> <p>Unclassified roads, which link the smaller villages and settlements to the MRN, H1, H2 or H3 roads.</p>	<p>Link Roads</p> <p><i>Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions</i></p> <p>In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two way traffic. In urban areas they are residential or industrial inter-connecting roads with 30 mph speed limits random pedestrian movements and uncontrolled parking.</p>
<p>Hierarchy 6</p> <p>Urban and rural roads whose main purpose is to provide access to residential properties or provide access to agricultural land.</p>	<p>Local Access Road</p> <p><i>Roads serving limited numbers of properties carrying only access traffic.</i></p> <p>In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or cul-de-sacs.</p>
<p>Hierarchy 7</p> <p>Minor metalled rural and small roads which include carriageways overgrown by vegetation. They serve a very limited number of properties or provide access to agricultural land. They include Gated roads and restricted access roads.</p>	<p>Minor Roads</p> <p><i>Little used roads serving very limited numbers of properties.</i></p> <p>They are locally defined</p>
<p>Hierarchy 8</p> <p>The remaining Unclassified Roads, which although we are liable for in terms of maintenance are un-metalled.</p>	<p>Minor Roads</p> <p><i>Little used roads serving very limited numbers of properties.</i></p> <p>They are locally defined.</p>

Assignment of a carriageway to a particular category takes the following issues into consideration:

- character and volume of traffic;
- current usage and effect of proposed development works;
- routes to important local facilities and to the strategic network (for more information, please refer to the Winter Maintenance Plan);

- designation as a traffic sensitive route;
- accident and other risk assessment;
- potential for use as a diversion route;
- special characteristic of certain assets, e.g. historic structures;
- access to schools, hospitals and medical centres;
- vulnerable users or people with special needs, elderly people’s homes etc; and
- ceremonial routes and special events.

4.2.9. Footway and Cycleway Hierarchy

Footway Hierarchy is determined by functionality and scale of use. Table 2 sets out Lincolnshire County Council's local hierarchies.

LCC Local Standard	National Standard
<p>Hierarchy 1</p> <ul style="list-style-type: none"> – Footways in the main shopping street of the urban areas of towns – Pedestrianised shopping streets in the urban areas of towns listed in the structure plan. <p>Note: Hierarchy 1 status will not be extended beyond the main shopping street area merely because there are other shops or a proliferation of public buildings etc. outside the main shopping centre.</p>	<p>Primary Walking Routes</p> <p>Busy urban shopping and business areas and main pedestrian routes.</p>

LCC Local Standard	National Standard
<p>Hierarchy 2</p> <p>– Footways along main pedestrian routes just outside the main shopping area but within the central areas of towns listed in the structure plan.</p> <p>- Local shopping streets in settlements not listed in the structure plan where there is a linear shopping development to 10 retail units or more within a 100 metre length.</p> <p>– Footways remote from the carriageway linking main shopping streets (Hierarchy 1) to other areas e.g. pedestrian access to car park etc.</p>	<p>Secondary Walking Routes</p> <p>Medium usage routes through local areas feeding into primary routes, local shopping centres etc..</p>
<p>Hierarchy 3</p> <p>Linking local access footways through urban areas and busy rural footways.</p>	<p>Link Footways</p> <p>Linking local access footways through urban areas and busy rural footways.</p>
<p>Hierarchy 4</p> <p>Footways associated with low usage, for example estate roads to the main routes, cul-de-sacs, adjacent to local access roads and rural footways between villages.</p>	<p>Local Access Footways</p> <p>Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.</p>

Assignment of a footway to a particular category takes the following issues into consideration:

- pedestrian volume;
- designation as a traffic sensitive pedestrian route;
- current usage and proposed usage;
- contribution to the quality of public space and streetscene;
- age and distribution of the population, proximity of schools or other establishments attracting higher than normal numbers of pedestrians;
- accident and other risk assessment; and
- character and traffic use of adjoining carriageway.

- 4.2.10. Some Public Rights of Way (PROW) may be metalled and within or on the fringe of urban areas. To recognise users' requirements for consistency, these are considered for maintenance consistent with a similar footway and be incorporated in the footway hierarchy, irrespective of their designation.
- 4.2.11. Cycle Routes will be maintained and inspected on the same level as the linking footway hierarchy or the adjacent carriageway hierarchy. The highest hierarchy will always be chosen, as part of the risk-based approach.
- 4.2.12. The limited amount of cycleway asset not linked with a footway asset or an adjacent carriageway asset will be categorised based on use within the Asset management database and maintained and/or inspected accordingly.

4.3. Lifecycle Planning

- 4.3.1. The objectives of lifecycle planning are stated by the UK Roads Liaison Group in the Highway Infrastructure Asset Management Guidance as:
- Identify long term investment for highway infrastructure assets and develop an appropriate maintenance strategy.
 - Support decision making, the case for investing in maintenance activities and demonstrate the impact of different funding scenarios.
 - Predict future performance of highway infrastructure assets for different levels of investment and different maintenance strategies
- 4.3.2. Lifecycle planning has been undertaken as part of the development of the Asset Management Strategy and provides an outline of the long term plans and funding requirements for the key asset groups (carriageways, footways, structures, street lighting and signals) to maintain the required levels of service at the lowest whole life cost.
- 4.3.3. The County Council has undertaken considerable investment in systems and surveys to collect and manage inventory and condition information on the carriageway and this data is utilised to:
- Assess the long term funding requirements for the maintenance of the network
 - Assess priorities for required maintenance
 - Develop the programme of maintenance schemes
 - Design detailed treatments for the H1 and H2 network
- 4.3.4. Lincolnshire County Council has reviewed and evaluated various options to assist with lifecycle planning. Following detailed evaluation of options the county council decided to build upon its existing systems and processes for deterioration and budget modelling which are also utilised for scheme identification, evaluation and prioritisation.

- 4.3.5. Building on past experience of in-house deterioration modelling and following the principles of the HMEP Toolkit and other lifecycle planning options, current and historic SCANNER and CVI condition data was used to develop local deterioration curves for all carriageway classes. For more information, please go to [Volume 1, section 6](#) or the [Highways Asset Management Strategy](#). Appendix C of this Plan further highlights the factors that are considered for future maintenance, in line with the Code of Practice.

4.4. Road/Rail Incursion

- 4.4.1. Lincolnshire County Council shall work with relevant organisations to identify road/rail interfaces where a risk of incursion of road and pedestrian traffic onto a railway is present.
- 4.4.2. The Council shall ensure that appropriate warning signs on the approaches to road/rail interfaces are placed and maintained such that they are clearly visible to highway users.

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5. Asset Management Database

5.1. Management Systems, Recording and Monitoring of Information

- 5.1.1. All records and information maintained by Lincolnshire County Council will be accurate and effectively managed.
- 5.1.2. Various Highway and Transportation Guidance notes (HAT's), Departmental Policy Documents (DPDs) and Good Practice Guidelines detail the internal procedures that will be adhered to ensure the effective management of records relevant to highway maintenance.
- 5.1.3. The QMS (Quality Management System) has been implemented for the effective management of documents and records, which structures areas to complement the layout of Highways organisational structure and contains links to other areas, HATs and DPDs.
- 5.1.4. Lincolnshire County Council has a legal duty to maintain an up to date asset register. This records service requests, complaints, reports or information from users and other third parties. These may require immediate action, special inspection, or influence future inspection or monitoring arrangements. The nature of response, including where no response is required, is recorded. All inspections record as a matter of course: time, weather conditions, any unusual circumstances of the inspection and the person conducting the inspection.
- 5.1.5. The inspection, assessment and recording regime is reviewed at intervals to consider:
- changes in network characteristics and use;
 - completeness and effectiveness of data collected;
 - effectiveness of data analysis; and
 - the need for changes to the inspection regime derived from risk assessment.
- 5.1.6. The frequency of reviews should regard the extent and nature of changing circumstances. Other factors which will influence the frequency of review include the following:
- ensuring compliance with legal obligations;
 - measuring network serviceability and condition performance;
 - seeking continuous improvement; and
 - monitoring service delivery arrangements.
- 5.1.7. Managing the safety and wide range of other risks associated with the delivery of highway infrastructure maintenance requires effective and co-ordinated information systems. The Confirm system includes all user contact information, records of inspection and condition and records of all maintenance activity.

- 5.1.8. The efficiency, accuracy and quality of information and records is crucial both to the effective management of the service.
- 5.1.9. As the Confirm system holds sensitive and/or personally identifiable information, a security minded approach, appropriate to the level of risk, has been adopted in relation to the capture, creation, processing, storage, distribution and use of relevant data and information in accordance with the Data Protection Act. This approach is covered by Lincolnshire County Council's Information Governance Policy.
- 5.1.10. All information obtained from inspections and surveys, together with the nature of response, including nil returns, shall be recorded consistently to facilitate analysis. Such analysis enables the data from inspections and surveys to be reviewed independently, but also in conjunction with other information to enable a holistic view to be taken of likely future maintenance need, asset condition and trends related to network characteristics and use.

5.2. Network Inventory

- 5.2.1. For the purposes of robust asset management, Lincolnshire County Council uses the "Confirm" asset management system as a detailed highway asset register and database to establish a cost effective and adequate maintenance regime. The system is also used to record inventories of asset types for which Lincolnshire County Council has responsibility.
- 5.2.2. The majority of Lincolnshire's highways network assets are recorded in detail and are widely available through the use of the corporate/directorate systems such as "Map Info" Geographical Information System (GIS), Confirm, "MayRise" (street lighting), Structures database, Traffic Signal database and the Traffic Signs database.
- 5.2.3. Definitive maps and statements for Public Rights of Way (PROW) are kept, forming the legal record of the position and status of PROW.

5.3. Information Management

- 5.3.1. The Authority is currently developing a Data Management Strategy, which will outline its approach towards security, reviews and additional information management which keeps records of asset up-to-date and secure.
- 5.3.2. Records of construction and maintenance treatments are kept to inform lifecycle plans. Information on mobile electronic devices used by highways officers in the field is used to support their decision making and reporting of asset condition and defects in real time.
- 5.3.3. Lincolnshire County Council adheres in principle to a series of relevant Standards set out by the British Standards Institution. **BS 1192:2007, PAS 1192-2:2013, PAS 1192-3:2014, BS 1192-4:2014, PAS 1192-5:2015** and **BS 8536-1:2015**.

6. Risk-Based Approach

6.1. Principles and Considerations

- 6.1.1. Management of highway infrastructure maintenance, including setting policy, strategy and levels of service, establishment of inspection and condition assessment regimes, determining priorities and programmes, procuring the service and the management of all associated data and information shall be undertaken against a clear understanding and assessment of the risks and consequences involved.
- 6.1.2. The principle of this Plan is that Lincolnshire County Council has generated a risk-based approach in accordance with local needs (including safety), priorities and affordability. This is consistent with ISO 55000, which states that “asset management translates the organisation’s objectives into asset-related decisions, plans and activities, using a risk based approach.”
- 6.1.3. Lincolnshire County Council has adopted a risk-based approach and a risk management regime for all aspects of highway maintenance policy. This includes investment, setting levels of service, operations, including safety/service and condition inspections, and determining repair priorities and replacement programmes. This approach is undertaken against a clear and comprehensive understanding and assessment of the likelihood of asset failure and the consequences involved.
- 6.1.4. When determining the balance between structural, preventative and reactive maintenance, the principle that “prevention is better than cure” has been adopted.

6.2. Developing the Risk-Based Approach

- 6.2.1. Eight elements are considered key when developing a robust Risk-based Approach. These are evidenced below:

Elements	Lincolnshire County Council Evidence
Alignment with Lincolnshire County Council corporate objectives, legislative requirements, and corporate approach to risk	Lincolnshire County Council continues to adhere to its legal requirements outlined within the various acts shown within Appendix E of this plan, whilst aligning its risk-based approach with its corporate Risk Management Strategy.
An understanding of risk in a highways service	Lincolnshire County Council has taken the necessary steps to fluidly integrate risk-elements within the key facets of the Highways service in terms of defect response, a risk-based inspection regime for all assets and its lifecycle planning based on prioritisation through data-analysis.

Elements	Lincolnshire County Council Evidence
An understanding of the potential risks and their likely significance	The Asset Management Strategy, through the lifecycle planning process, demonstrates a clear understanding of the needs of our assets. Continual data-gathering, risk-based inspections and analysis provides us with an understanding of the risks for each asset, allowing the Highways service to make informed decisions.
An understanding of the various assets comprising the highway network;	Lincolnshire County Council maintains and updates an inventory category through its Asset Management Database system which highlights the function, criticality, sensitivity, characteristics and use of the assets for which it is responsible.
The establishment of hierarchies and levels of service with appropriate funding	Hierarchies have been established and are outlined in Section 4 of this Volume .
The establishment and subsequent implementation of agreed levels of service	The levels of service are outlined in our Highways Asset Management Policy . Its subsequent measures, funding regimes and lifecycle planning are outlined in the Highways Asset Management Strategy . Finally, the operational elements carrying out the levels of service and measures are explained within this Highways Infrastructure Asset Management Plan.
Competencies	Those involved in managing, developing and implementing the risk-based approach must be competent to the satisfaction of Lincolnshire County Council as the Highways Authority. Clear guidance and training is provided to employees including establishment of the risk-based approach itself and practical implementation. Training recognises the possibility of legal challenge to decisions. The Engineering Council, as the UK regulatory body for the engineering profession, sets and maintains standards of professional competence and ethics that govern the award and retention of the titles Chartered Engineers (CEng), Incorporated Engineers (IEng) and Engineering Technicians (EngTech).
Regular evidence-based reviews.	Lincolnshire County Council constantly reviews its data, systems, policies, hierarchies and inspection frequencies to strive towards further efficiencies through the implementation of the risk-based approach. This approach ranges from large-scale data reviews to individual hierarchy changes which will need to be evidenced and logged within the Asset Database.

6.3. Inspections and Surveys

- 6.3.1. Establishment of an effective regime of inspection, survey and recording is the most crucial component of highway infrastructure maintenance. The characteristics of this regime, including types and frequency of inspection, items to be recorded and nature of response have been defined following an assessment of the relative risks associated with potential circumstances of location, agreed level of service and condition. These are set in the context of the Highways Asset Management Strategy.
- 6.3.2. The inspection, survey and recording regime provides the basic information for addressing the core objectives of highway maintenance, namely:
- network safety;
 - network serviceability; and
 - network sustainability.
- 6.3.3. It can provide the basic condition data for the development of maintenance programmes.
- 6.3.4. Every Volume within this Plan will outline its inspection regime for those particular assets, with all various categories of inspection discussed and a risk-based approach to these inspections outlined. Lincolnshire County Council undertakes safety inspections for its various asset groups using a risk based approach where ever reasonably practicable.

6.4. Defect Reporting and Repair

- 6.4.1. All defects observed during safety inspections that provide a risk as defined throughout this document to users are recorded and the level of response determined on the basis of risk assessment. The degree of deficiency in highway elements is crucial in determining the nature and speed of response.
- 6.4.2. Category 1 defects which are considered to require urgent attention shall be corrected or made safe at the time of the inspection, if reasonably practicable. In this context, making safe may constitute displaying warning notices, coning off or fencing off to protect the public from the defect. If it is not possible to correct or make safe the defect at the time of inspection, repairs of a permanent or temporary nature shall be carried out as soon as possible. The maximum response times for making safe defects are set out in detail in sections B, C and D of this plan.
- 6.4.3. Category 2 defects that do not represent an immediate or imminent hazard or risk of short term structural deterioration may have future safety implications, although of far less significance than those which are considered to require urgent attention. They are more likely to have serviceability or sustainability implications. If repairs are to be

undertaken these are likely to be within a planned programme of works with their priority determined by risk assessment. Access requirements, other works on the network, traffic levels, and the desirability of minimising traffic management, shall also be considered as part of the response.

6.5. Reporting by the Public

- 6.5.1. Feedback from members of the public is an increasing source of data on the condition of all aspects of the highway network, with the use of smartphones and other personal mobile technology providing details such as location, time and imagery.
- 6.5.2. This source of data is to be used to complement dedicated inspection and survey techniques outlined above.
- 6.5.3. Lincolnshire County Council has a specific Web Portal designed to receive reports from members of the public outlining perceived faults on the highways network. Faults are passed through automatically to the Confirm Asset Management System where they will be investigated by a designated Highways Officer.
- 6.5.4. Members of the public can further report any issues on the highway network through the Council's Customer Service Centre.

7. Financial Management, Priorities and Programming

7.1. Financing of Highway Maintenance

- 7.1.1. Financial constraints, lifecycle planning, making the case for investment and investment strategy are all dealt with in the Highways Asset Management Strategy.

7.2. Priorities and Programming

- 7.2.1. Lincolnshire County Council's highway network will be viewed as a whole when developing priorities, rather than as a series of asset groups such as carriageways, footways, structures, lighting, etc.
- 7.2.2. Lincolnshire County Council shall seek to share and coordinate short and long term programmes of work with others undertaking works on the highway for several years in advance. A prioritised forward works programme for a rolling period of three to five years has been developed and is updated regularly. For more information please go the programming section of each volume.

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Highways Infrastructure Asset Management Plan



Volume 1 – Highways

1. Introduction to Volume 1

1.1. Introduction

1.1.1. Volume 1 of the Highway Infrastructure Asset Management Plan covers specific issues and themes regarding highways themselves, and includes the following asset types:

- carriageways;
- footways;
- public rights of way;
- cycle routes;
- highway drainage systems;
- embankments and cuttings;
- landscaped areas and trees;
- fences and barriers;
- traffic signs and bollards; and
- road markings and studs.

1.1.2. The overarching principles and common themes of maintaining highway infrastructure are covered within [Volume 0](#). Asset specific guidance for structures and lighting are covered in [Volume 2](#) and [Volume 3](#) respectively.

2. Legal Framework

2.1. Introduction

2.1.1. General duties and powers are dealt with in [Volume 0](#) of the plan. This section contains information on duties and powers specifically related to highways.

2.2. Highway Specific Legal Considerations

2.2.1. The Highways Act 1980 sets out the main duties of Highway Authorities in England and Wales. In particular, Section 41 imposes a duty to maintain highways maintainable at public expense,

2.2.2. Section 58 provides for a defence against action relating to alleged failure to maintain on grounds that Lincolnshire County Council has taken such care as in all the circumstances was reasonably required to secure that the part of the highway in question was not dangerous for traffic.

2.2.3. Additional Acts relevant to the HIAMP are outlined in [Appendix E](#) of this Plan.

2.3. Winter Service

2.3.1. Details of the Winter Service and its legal requirements undertaken by the Lincolnshire County Council are outlined in a separate document named the [Winter Maintenance Plan](#), approved annually by Members. This document should be read as an annex to the Highways Infrastructure Asset Management Plan.

3. Asset Management Information

3.1. Principles and Considerations

3.1.1. Asset data management is an essential part of the Highways Asset Management Strategy and relies on a specific Asset Management System to enable this. A highway asset management system is essential to deliver an effective and efficient approach to asset management. Lincolnshire County Council currently uses the Confirm Asset Management System to cover all of the asset types outlined in [Section 1.1.1](#), with the actual data collected aligning to the Highways Asset Management Strategy.

3.1.2. The UKPMS (National standard for Pavement System) accredited Confirm Asset Management system consists of a specific asset register and database, outlining details regarding Lincolnshire's carriageways, footways, cycle ways, Structures, Street Lights, Drainage Assets, Traffic Signals and any additional street furniture that is the responsibility of Lincolnshire County Council to maintain.

3.1.3. The Confirm Asset Management System enables Lincolnshire County Council to undertake multiple activities such as:

- Loading network, inventory and condition data, including data collected by:
 - Visual surveys (CVI and DVI);
 - SCANNER and TRACS Type Surveys (TTS);
 - Footway Network Surveys (FNS);
 - SCRIM; and
 - Deflectograph
- Data processing
- Condition reporting Financial reporting to support asset management, including
 - Inventory reports;
 - Accumulated and annual depreciation of carriageways; and
 - Supporting information for footways, cycletracks and paved verges.

3.1.4. HMEP (Highways Maintenance Efficiency Programme) is a sector-led transformation programme. It is designed to maximise returns from highways investment and help to improve efficiency and effectiveness of the local highways sector which it is aimed at. HMEP has developed a series of products to inform highways authorities of examples of best practice and recommendations which should lead to an improved highway

maintenance service and better value for money for taxpayers. Lincolnshire County Council uses these tools of Best Practice to shape its organisation and its methods for delivering the service.

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4. Asset Condition

4.1. Introduction

- 4.1.1. This section deals with asset condition for each element of the network and its contribution to safety, serviceability and sustainability. For more information, please go to [Appendix A](#) of this Plan.
- 4.1.2. This section does not deal with the Safety and Service Inspections undertaken by the Highways Service. Lincolnshire County Council undertakes Condition Inspections and Safety/Service Inspections separately. More information on the Safety/Service Inspections can be found in [Section 5 of this Volume](#).

4.2. Principles and Considerations

- 4.2.1. Each element of the network can have different condition requirements, a minimum one to satisfy the need for safety, and higher ones, designed to meet local requirements for serviceability or sustainability, in line with the Highways Asset Management Strategy. A good Asset Management approach will entail both reactive and proactive measures designed to maintain the viability of the network. Our Reactive service, Programming and various safety, service and conditions inspections all serve as an accurate method to maintain a record of the condition of the asset and enables Lincolnshire County Council to accurately plan the best course of action each time.

It is important to recognise that all information recorded, even if not intended for network safety purposes, may have consequential implications for safety.

- 4.2.2. As outlined in [Volume 0, Section 4.1.4](#), the level of customer service is generally more relevant when applied to the whole of the network and it is therefore not dealt with by this plan under each of the individual elements in the following sections.

4.3. Condition Surveys – Carriageways, Footways and Cycle ways

- 4.3.1. The most significant financial investments in highway maintenance will be in repairing, reconditioning and reconstructing carriageways, footways and cycle routes. Condition surveys identify the current condition of the network, and from this condition both long-term and short-term maintenance funding decisions can be made. Repeatable condition surveys allow trend analysis to be used to confirm the original decisions or allow for changes as a result of the changing network condition, and inform lifecycle planning.
- 4.3.2. Frequencies of carriageways/footways/cycleways condition inspections are derived using the principles outlined in [Volume 0, Section 4](#) of this plan (categorising the network into an appropriate hierarchy) and [Section 6](#) (covering risk-based approach for inspections).

4.3.3. There are a number of types of survey, each providing information from a differing perspective, and which in combination can provide a comprehensive picture of the condition of the asset. Lincolnshire county Council undertakes a comprehensive regime of carriageway network level surveys at the following scope and frequencies to assist with:

- Maintenance Scheme Identification and Planning
- Performance Monitoring
- Detailed Scheme Design

4.3.3. The Asset Management Team are responsible for producing plans for the Local Highways Teams showing the results of SCANNER, CVI, Deflectograph, and FNS/DVI surveys to assist them to target and prioritise maintenance in their areas.

Survey method	Scope	Inspection Frequency
SCANNER (Surface Condition Assessment of the National Network of Roads)	Traffic speed surveys that collect data on transverse and longitudinal profiles, texture and cracking of carriageways. SCANNER surveys are mandatory requirement for reporting of Data Topic 130-01 (formerly NI 168/ BVPI 223), "Condition of principal roads" and Data Topic 130-02 (formerly NI 169/BVPI 224a) "Condition of non-principal classified roads". These surveys are undertaken by a specialist vehicle at traffic speed. The information is both reliable and repeatable giving a consistent survey.	100% of the MRN, Hierarchy 1 & 2 Network (and other A & B Road) in a single direction each year 50% of the Hierarchy 3 and Hierarchy 4 Classified Network in a single direction each year. Therefore every road inspection is undertaken bi-annually.
CVI (Coarse Visual Inspection)	CVI is normally carried out from a slow moving vehicle, complemented in some cases with machine measured rut depth data. CVI survey data is collected using UKPMS accredited data capture software. Inspectors are trained in house at Lincs Laboratory in accordance with the UKPMS Visual Survey Manual. All inspectors are accredited.	100% of the MRN, Hierarchy 1 & 2 Network each year 50% of the Hierarchy 3 and Hierarchy 4 Classified Network 25% of the Unclassified Network each year

<p>SCRIM (Sideway-force Coefficient Routine Investigation Machine)</p>	<p>SCRIM results are used to identify lengths of road with poor skidding resistance. SCRIM surveys are carried out in accordance with national good practice.</p>	<p>33% of the MRN, Hierarchy 1 and 2 Network each year</p>
<p>Deflectograph (Structural Condition Surveys)</p>	<p>These surveys measure the structural integrity of the carriageway. The results provide an estimate of its residual life and are a crucial component when assessing structural maintenance requirements.</p>	<p>20% of the MRN, Hierarchy 1 and 2 Network each year</p>
<p>FNS (Footway Network Surveys)</p>	<p>The condition of footways is monitored by means of FNS (Footway Network Surveys) and DVI (Detailed Visual Inspection) surveys and an accredited UKPMS pavement management system.</p>	<p>20% of the Network each year</p>
<p>DVI (Detailed Visual Inspection)</p>	<p>The condition of footways is monitored by means of FNS (Footway Network Surveys) and DVI (Detailed Visual Inspection) surveys and an accredited UKPMS pavement management system.</p>	<p>20% of the Network each year</p>

- 4.3.3. SCANNER surveys process condition information, and were introduced with the aim of providing both reliable and repeatable information, for the assessment of carriageway condition. They can support national requirements for reporting where applicable.
- 4.3.4. CVI surveys are a fast, cost-effective survey that enables authorities to cover large parts of their road network on a regular basis. Rather than recording detailed measurements of individual defects, the survey identifies and categorises lengths of features having generally consistent defectiveness.
- 4.3.5. Network surveys such as SCANNER and CVI provide regular whole network coverage and are used to target more detailed investigations of provisional treatments, using more detailed project level surveys.
- 4.3.6. The maintenance of adequate levels of skidding resistance on carriageways, footways and cycle routes is an important aspect of highway maintenance, and one that contributes significantly to network safety, particularly for cyclists, motorcyclists and equestrians.
- 4.3.7. Lincolnshire County Council undertakes routine skid resistance testing on the Hierarchy MRN, 1 and 2 Network using the SCRIM machine. Surveys are undertaken on a 3 year cycle using the single survey method with benchmark sites. Lincolnshire's Skid Resistance Strategy is published as part of the Asset Management Framework and available on the [County Council's website](#).
- 4.3.8. The Deflectograph is a tool to indicate the structural condition of the whole carriageway, particularly on local authority roads which are not deemed long life. A long life carriageway is defined as a carriageway with over 300mm of bituminous materials and a low deflection.

- 4.3.9. The Footway Network Survey (FNS) is intended to provide a cost effective, efficient and consistent approach to footway surveys, based on a linear basis. The survey is carried out by a single surveyor walking along the footway, referenced to length within a UKPMS section.
- 4.3.10. FNS surveys record defects in four categories:
- As new
 - Aesthetically impaired
 - Functionally impaired
 - Structurally impaired
- 4.3.11. DVI surveys are carried out in 20 metre lengths and records accurately the position and defect type in that area. This gives a much more detailed survey than the FNS. DVI surveys are carried out when more detailed information is required to support and validate a treatment decision or identify a scheme (supplementing the FNS data). Also DVIs are used on a cyclic basis on footway (Hierarchy 1 and 2) in accordance with the requirements of BVPI 187.
- 4.3.12. With trees on the footway, Lincolnshire County Council takes into account local and environmental factors.
- 4.3.13. Securing continuous improvement in the safety and serviceability of cycle routes, in particular network integrity, is a necessary component for encouraging cycling as an alternative to the car.
- 4.3.14. Cycleways are included within the FNS asset database to be condition inspected at the same intervals. This only applies for combined footway/cycleway assets, which signifies the majority of the cycleway network.
- 4.3.15. Specific Cycle track provision within the county has increased significantly since the implementation of the Local Transport Plan through the Community Travel Zone Initiative and Rural Priority Initiative. Therefore the majority of cycling provision is of relatively new stock and maintenance is yet to become a significant issue. However it is recognised that maintenance standards for these facilities will be established quickly in order to provide guidance to local highways staff and to ascertain the financial commitment, in terms of the future maintenance costs.

4.4. Condition Surveys – Additional Assets

4.4.1. Condition of Public Rights of Way

- 4.4.1.1. The condition of Public Rights of Way (PROW) can contribute to the core objectives and to the broader quality of life objectives associated with leisure and recreation.
- 4.4.1.2. The requirements for PROW are determined as part of the Lincolnshire Countryside Access and Rights of Way Improvement Plan (ROWIP), in consultation with the Local Access Forum established by the Countryside and Rights of Way Act 2000. The document is currently undergoing revision. Its original version can be found on the Lincolnshire County Council Website: <https://www.lincolnshire.gov.uk/countryside/public-rights-of-way/countryside-rights-of-way-improvement-plan/120916.article>
- 4.4.1.3. The ROWIP has been implemented under four themes, each with a strategic aim and supporting the wider social objectives of the County Council including the aims of the LTP:
- Sustainable Transport - Strategic Aim to increase the use of the network for sustainable transport and utility trips
 - Health and Well-being - Strategic Aim to make it easier for people to incorporate exercise into their daily lives and lead healthier lifestyles
 - Rural Economy and Tourism - Strategic Aim to support local businesses and tourism through access improvements
 - Social Issues - Strategic Aim to enable more people to enjoy walking and riding
- 4.4.1.4. Lincolnshire County Council Countryside currently utilises the Countryside Access Management System through which it maintains an overview of its assets. It further maintains and updates the Definitive Map and Statement to outline its legal record of public rights of way.
- 4.4.1.5. Countryside follows an Area-based inspection regime (for more information, please go to Section 5.9 of this Volume). It further prioritises schemes and individual pieces of work representing a risk to Health & Safety, using the following methods:

Priority 1	Routes actively promoted by Lincolnshire County Council (e.g. Viking Way, Bridle Trails, Recreational Walk Routes)
Priority 2	Routes that are known to be well used, predominantly close to settlements <u>or</u> routes promoted by other bodies and specifically endorsed by Lincolnshire County Council
Priority 3	All other available routes.

Priority 4	Routes that could only be made available by the significant investment of capital resources or requiring extensive legal work to resolve alignments and obstructions.
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PRIORITY	Rights of Way Act Infringements (Ploughing & Cropping)	Grass Cutting & Vegetation Clearance (Subject to cyclical programme)	Path Furniture Repair and Minor Obstructions	New or Replacement Bridges	Essential Surfacing Works
1	3 Months	2 Months	3 Months	Subject to size, location and resource availability	Works Subject to Finance and Availability of Workforce
2	4 Months	2 Months	6 Months		
3	Works Subject to Finance and Availability of Workforce				
4	Works only to be undertaken when major issues are resolved.				
Any report which is a Health and Safety consideration will be dealt with in a timescale dependent on an appropriate risk analysis					

4.4.1.6. These timescales are for guidance only and there may be times when it may not be possible to meet these service standards. In such instances the County Council will inform respondents as to the reasons why and what action is being taken. One such example could be where a request is made that vegetation and hedging needs clearing from the line of a right of way. Bearing in mind Lincolnshire County Council's obligations concerning protecting biodiversity, stemming from the Natural Environment & Rural Communities Act 2006 and various other wildlife legislation, it may be prudent to defer works until a more appropriate time providing that the route is not wholly obstructed.

4.4.2. *Condition of Highway Drainage Systems*

4.4.3. The Highway Authority are responsible for the maintenance of highway drains i.e. drains which only carry water discharged from footways, access crossings, highway verges and carriageways. Drains which carry other water including foul water may be sewers or combined drains and are the responsibility of the water authority (Anglian Water or Severn Trent Water) or the local District Council. Roadside gullies are maintained by Lincolnshire County Council and are usually cleaned once a year on a targeted approach.

4.4.3.1. Highway drainage condition standards fall into these main categories:

- Grips and ditches - can be obstructed by growth of vegetation or damaged by traffic and animals. Grips and Highway Authority ditches will be cleared of vegetation and dug out when required. Grip clearing will be commenced after the last grass cut and the programme completed if possible before the worse of the winter weather.
- Gullies and Kerb offlets will be cleared on a targeted basis. In most cases the responsibility for maintenance of roadside ditches will rest with the adjoining landowner.
- Piped drainage – includes a wide variety of conduits and filter drains, which may be susceptible to siltation or blockage. Piped drainage, soakaways and associated systems will be checked and flushed if necessary during service inspections and cleared when required.

4.4.3.2. More information on culverts can be found in [Volume 2](#) of this plan.

4.4.3.3. Material arising from all road drainage emptying and cleansing operations has potential implications for pollution and shall be disposed of correctly in accordance with Environment Agency, or equivalent authority, requirements.

4.4.3.4. Where despite effective maintenance operations, flooding of the highway occurs, with implications for safety or serviceability, relevant warning signs will be placed in position as quickly as possible and users advised through local media. The cause of the flooding shall be determined and addressed as appropriate.

4.4.3.5. The highway may flood if the surrounding land is in flood and there are limitations to the action that can be reasonably taken. If it is subsequently determined that the flooding is attributable to deficiencies in infrastructure or the maintenance regime, given the nature of the weather conditions under which it occurred, then action to permanently relieve the problem shall be considered which may involve consultation with other public bodies and/or third parties. If the event is attributable to the actions of a third party, the matter shall be taken up with them at the earliest opportunity.

4.4.3.6. Ironware comprising covers, gratings, frames and boxes set in carriageways, footways and cycle routes has the potential to compromise safety and serviceability, and in certain cases cause noise and disturbance to local residents. Responsibility for defective ironwork may lie with Utilities.

4.4.3.7. Although responsibility for defective ironwork may lie with Utilities, defects identified during inspection or from users will therefore be formally notified to the Utility with a follow up procedure to ensure that dangerous defects are remedied within the prescribed timescale.

- 4.4.3.8. The standards outlined below can be varied where necessary to deal with problem locations where more frequent treatment may be required.

Drainage	Type of Cleanse
Gullies	Annual Targeted Cleanse
Catch-pits	Annual Targeted Cleanse
Grips	When Required
Offlets	Annual Targeted Cleanse

4.4.4. *Condition of Embankments and Cuttings*

- 4.4.4.1. Slips and rock-falls happen rarely. However the Council have records of suspect locations and have established an inspection and maintenance regime based on a local risk assessments. The Council’s scheme is based on the Highways Agency’s inspection regime which inspects cuttings and embankments over 5 metres in height and lower ones which have been identified as suspect. The embankments and cuttings which have been identified as suspect will be inspected once a year. All inspections will be undertaken by a qualified geotechnical engineer or geologist with experience of slope instability.

- 4.4.4.2. The following standards are used for Embankments and Cuttings (Condition Inspections):

- Inspections to be based on specialist geotechnical advice.
- Inspections to take place during winter months and after periods of heavy rain whenever possible. This is the worst time of year for instability, the easiest for inspection and there is little foliage to hide evidence.
- A record of locations prone to rock-falls and slips is kept by the Council.
- These locations and others identified by Local Highways Managers as being suspect are inspected once a year.
- All inspections will be undertaken by a qualified geotechnical engineer or geologist with experience of slope stability.

- 4.4.4.3. The probability of failure will be affected by soil conditions and drainage. The impact of embankment or cutting failure will generally be high in all situations, but particularly so on important high speed links, or where dwellings could be affected. In such circumstances, the condition of embankments and cuttings shall be subject to a robust regime of inspection.

- 4.4.4.4. Slips and rock-falls from embankments and cuttings are relatively infrequent but the frequency and severity of such events may be affected by climatic change. The Council has records of relevant locations and has established an inspection and maintenance regime based on a local risk assessment.

4.4.5. *Condition of Landscape Areas and Trees*

4.4.5.1. Lincolnshire County Council undertakes regular safety surveys of its highway network to assess the risks posed by trees. This section defines the terms of reference for the safety survey.

4.4.5.2. All established trees within the highway are visually inspected as part of condition surveys to identify obvious potential hazards. Surface damage to carriageways, footways and cycle ways, associated with root growth will be recorded as part of Safety and Service Inspections for those elements. More information on those inspections can be found in [Section 5](#) of this Volume.

4.4.5.3. Trees on or adjacent to the highway are surveyed using tree management software, trees are only recorded if they meet the following criteria, i.e. they have a stem diameter greater than 300mm, are planted within the highway limits or are within 25m of the highway (private trees) if appropriate the tree is assessed with a system called Quantified Tree Risk Assessment (QTRA). QTRA is a method of quantifying risk associated with tree failure and requires 3 variables in order to make the assessment.

- Size of part likely to fail.
- Likelihood of failure.
- What will be hit (Target).

Lincolnshire County Council Officers will QTRA score any privately owned within falling distance of the highway that has an identified defect in the trees condition. An NVQ level 5+ inspector will carry out the assessment.

4.4.5.4. The Health and Safety Executive (HSE) states that risk ratings above 1/10,000 are a 'tolerable' level of risk that can be imposed on the public for the wider good, where the risk is As Low As Reasonably Practicable (ALARP).

4.4.5.5. Lincolnshire County Council follows exactly the same process for the whole network. However, where the risk score from individual trees is above 1:10,000 the emphasis will be on the collection of highway trees as assets. The potential for private trees to fail onto these routes is the same, however the risk ratings and subsequently the target is expected to be reduced due to infrequent use of these routes (i.e. reduced traffic flows than H1a, H1 & H2 routes).

4.4.5.6. Highway trees identified for safety work through the survey will be dealt with through the term contract. For all other LCC trees, a safety report will be sent to the owning department for their attention and action. Private Trees with risk ratings of 1:1 – 1:10,000 will be enforced through letters and ultimately S. 154 notices where appropriate.

- 4.4.5.7. The obstruction of street lighting and traffic signs can be a major safety risk to users. A risk based inspection process has been put in place, which is detailed in [Volume 3](#) of this plan. Trees and other foliage shall be trimmed back to allow the lighting to function and the signs to be legible, while maintaining the shape of the tree wherever possible. During routine night patrols any obstructions should be recorded. More details can be found in [Volume 3](#) of this plan.
- 4.4.5.8. Significant pruning or felling of trees can be the subject of significant local concern and will only be done with specialist advice and support. The relevant District Council will be informed and proposed work discussed prior to work on the highway trees with TPOs and in conservation areas.
- 4.4.5.9. In rural areas work on highway trees will be mainly reactive and limited, other than for safety reasons. Some routine maintenance will be necessary from time to time to maintain the condition of the trees. This will be a matter for local consideration having regard to users and community views.
- 4.4.5.10. In urban areas trees have a significant impact on the local environment, but can cause damage to highways and property if not properly managed. The County Council Arboricultural Officer is co-ordinating a proactive management programme including regular inspections.
- 4.4.5.11. The maintenance of hedges ensures that visibility sight lines and road signs are not obscured this work will mainly be the responsibility of adjoining landowners. Any action taken is in accordance with the requirements of the European Birds Directive (2009) and the Wildlife and Countryside Act (1981), which includes protection for birds, their nests and other relevant legislation. Significant nature conservation benefits will result from this practice. Any trimming is, as far as possible, done in late winter, to avoid the bird-nesting season and to allow birds and mammals the maximum opportunity to take advantage of any fruits or seed present.
- 4.4.5.12. Any proposed tree planting shall conform to the maxim 'The right tree in the right place' and consider proximity to existing or planned street lighting, to minimise the risk of shrouding the street lights, or casting unnecessary shadows on the highway.

4.4.6. *Condition of Verges*

Grass Cutting

- 4.4.6.1. Vegetation on highway verges should not restrict visibility at junctions, access points and bends. Sight lines and minimum stopping distance will be kept clear and signs, lights, and markers posts will not be obstructed.
- 4.4.6.2. Good practice suggests that verge (flail) cuts are undertaken to control the extent of self-set bushes and tree growth. The exception to the above is where Roadside Nature Reserves are established. Lincolnshire has 65 Roadside Nature Reserves, some of which are Sites of Specific Scientific Interests where the flora and fauna are of particular conservation value. Under an agreement with the Lincolnshire Wildlife Trust, the Trust is responsible for all environmental maintenance at these sites, apart from safety mowing.
- 4.4.6.3. Edge maintenance or “siding” of carriageways, footways and cycleway is occasionally necessary to prevent encroachment of grass and reduction of width. This work will be carried out infrequently, preferably during the autumn. On un-kerbed roads, siding will be carried out in advance of footway surface treatment, where necessary.
- 4.4.6.4. This plan provides for flexibility in applying judgement in urban and rural areas, and this shall take account of the character of the area rather than be determined solely by speed limit considerations.

Weed Treatment

- 4.4.6.5. The growth of weeds in footways and cycle routes, hardened verges, central reserves filter drains and along kerb lines may cause structural damage, drainage issues and the general perception of such growth is that it is untidy. In some circumstances weeds have been considered to have implications for pedestrian safety. Weed growth is also a source of significant community interest and service requests. Weed treatment is therefore undertaken according to traffic and pedestrian usage and to a level of usage that takes account of local concerns.
- 4.4.6.6. The Council carries out total weed control operations on areas of paving and hard standings, kerb and channels, back of footway, base of walls and around street furniture. Weed spraying covers a total of 4600 km of kerbs, and is undertaken bi-annually.
- 4.4.6.7. Specialist environmental guidance is adhered to regarding the materials used for weed spraying and the frequency of application, with regards to levels of usage. Noxious weeds shall be dealt with on an ad hoc basis. All weed spraying is carried out in accordance with the Control of Pesticides Regulations 1986. Only approved pesticides are used, these are chemicals listed in the Plant Protection Products (Sustainable Use Regulations) 2012.

4.4.6.8. The most common specified weed under the Weeds Act 1959 is Common Ragwort. Section 14 of the Wildlife and Countryside Protection Act 1981 makes it an offence, liable to a fine, to plant or otherwise cause to grow in the wild, certain specified weeds. It may be a defence to prove that all reasonable steps were taken to prevent the plants growing in the wild. Specified weeds under the Wildlife and Countryside Act 1981 are Giant Hogweed; Himalayan Balsam and Japanese Knotweed.

4.4.6.9. Lincolnshire County Council's policy is to carry out selective weed control operations on rural highway verges to control the growth of injurious, noxious and controlled weeds including other invasive vegetation. It is important to note that The Noxious Weeds Act 1959 does not seek to eradicate ragwort; but only seeks to control it where it poses a high risk to grazing animals and/or feed/forage production and Lincolnshire County Council must take action to control the spread of ragwort.

Verges	Treatment
Grass Cutting	Safety (Rural) Hierarchy 1 – 2 cuts Safety (Rural) Hierarchy 2 & 3 – 2 cuts Safety Hierarchy 4 & 5 – 2 cuts
Weed Treatment	2 treatments a year

4.4.7. *Condition of Non-illuminated Traffic Signs and Bollards*

4.4.7.1. The impact of failure will be greater for regulatory signs than for warning signs, the impact of which will be greater than direction signs. The probability of sign failure is generally low, although it will be higher in areas subject to vandalism. However, the probability of sign illegibility, defectiveness or clutter is much higher.

4.4.7.2. Lincolnshire County Council carries out both general route reviews and specified whole route reviews, reviewing all sign assets on a particular route/area with regard to legality, condition and ownership. Every five years the signing regime for Hierarchy 1, 2 and selected 3 roads will be reviewed to ensure integrity and to remove unnecessary clutter from the network.

4.4.7.3. It is Lincolnshire County Council's policy that smaller Signs would not be replaced unless they were

- Warning (eg Give way , Chevrons)
- Prohibition (eg No entry)
- Regulatory (eg Speed limit /TRO's warning plates)

4.4.7.4. Lincolnshire County Council is responsible for ensuring that any safety issues with regards to any signs are resolved in line with the risk-based response times to reactive maintenance.

- 4.4.7.5. Large Advances Direction Signs (ADS) and other community signs will continue to be replaced if needed depending on work volume and resource capacity.
- 4.4.7.6. Sign cleaning will be undertaken in accordance with schedules and frequencies defined in the Highway Works Term Contract. This entails once a year for the signs on the MRN, Hierarchy 1 and Hierarchy 2 carriageway network and 4 times a year for bollards. All others as required.
- 4.4.7.7. Although in many circumstances illuminated signs are essential, the use of high-reflectivity, non-illuminated signs can bring benefits in terms of sustainability. This shall be a consideration where legally permitted, both for new signs and on replacement, and shall also be considered during any network integrity inspections.
- 4.4.7.8. Heritage signs and milestones will be refurbished or will be replaced with same or similar whenever possible.

Condition Inspection	Frequency
General Condition	Part of the General Highways Inspection
Route Reviews	Every 5 years on MRN, H1, H2 and selected H3 Roads
Cleaning	Once a year for strategic road network (MRN-H1-H2 and 4 times a year for bollards. All others as required. Note: Any faults will be reported including any within 20 m on each side of the road
Replacement and repair of damaged signs and bollards	Respond according to the degree of danger. In extreme cases this would be within 2 hours.

4.4.8. *Condition of Road Markings and Studs*

- 4.4.8.1. The general condition of road markings and studs will be inspected during the annual condition survey by divisional staff. An annual night-time survey to check reflectivity will be undertaken on Hierarchy 1 and 2 roads and some designated hierarchy 3 roads. This survey will be undertaken between November and February and will include non-illuminated bollards.
- 4.4.8.2. Any anomalous results from the above surveys will be referred to Lincolnshire Laboratory where consideration will be given to further investigation. The results of the surveys will be maintained on a Database.
- 4.4.8.3. Road marking will be prioritised for renewal based on the results of the condition inspections.

4.4.8.4. All mandatory road markings existing before resurfacing, patching or surface dressing shall be replaced as soon as is reasonably practical:

- Stop and Give Way markings shall be replaced within 7 days
- Other Mandatory lines within 14 days
- All other markings and road studs within 28 days of completion of works

4.4.8.5. At all times when markings or studs are removed “No Road Marking” boards shall be displayed until all markings have been replaced. In addition, where “double line” systems have been removed “No Overtaking” boards shall be displayed.

4.4.8.6. There will be a preference toward bulk changes of road studs on all other routes prioritised in accordance with the condition inspection results. Bulk changes will reflect the type of use of a particular route and will start and finish at salient points on the route (e.g. major junctions). Displaced road studs lying on the carriageway, hard shoulders or lay-bys, and loose studs if considered to be a hazard, are removed immediately if reasonably practicable.

4.4.8.7. A programme of works regarding markings and road studs will be developed, based on needs and priorities. This demonstrates a move towards more programmed and routine maintenance of road studs and markings.

4.4.9. *Condition of Traffic Signals, Pedestrian and Cycle Crossings*

4.4.9.1. An annual inspections will be carried out and shall include the following items:

- Signal lenses will be cleaned
- Inspections of the physical condition of the controller and auxiliary equipment cabinets and other site hardware
- Earth testing

4.4.9.2. Full inspections for electrical safety will be carried out at intervals of six years. Guidance on aspects to be inspected and on defect criteria is given in TD 24/86.

4.4.9.3. The priority objective is to provide and maintain all traffic signals, controlled pedestrian and cycle crossings to a high standard to ensure the safety of all road users and to ensure the efficient operation of the highway network.

4.4.9.4. The following frequencies will be used:

Condition Inspection	Method & Frequency
Scouting for illumination	Covered by Urban Traffic Control and Remote Monitoring Systems
Lamp changing	Bulk change every 12 months

Internal inspections and cleaning	At least annually or additionally when required
Checking of phasing	When a fault is suspected
Checking of alignment	Annually or when a fault is suspected
Mechanism	Annually or when a fault is suspected
External Cleansing	Every 12 months

4.4.10. User and Community Response

- 4.4.10.1. User and community responses can make a significant indirect contribution both to safety and serviceability by ensuring that service requests and complaints are dealt with appropriately and converted into actions. Adequate provision of information will also enable users to obtain better serviceability from the network. Lincolnshire County Council engages with the NHT Public Satisfaction Survey and has robust options for dealing with service requests and complaints involving a dedicated Customer Service Centre and a web portal for online reporting.
- 4.4.10.2. Lincolnshire County Council has attempted to provide clarity and transparency in its policy and approach to repairing potholes. This includes a published policy and details of its implementation, including the prevention, identification, reporting, tracking and repair of potholes. More details can be found on <https://www.lincolnshire.gov.uk/transport-and-roads/strategy-and-policy/documents/131314.article>
- 4.4.10.3. To provide clarity, the Council has adopted dimensional definitions for potholes based on best practice as part of its maintenance policy. LCC's reactive maintenance works based on fixed response times, including those put forward by members of the public, outlined in [Appendix B](#) of this plan.

5. Safety and Service Inspections

5.1. Introduction

- 5.1.1. The general principles to be applied to inspections, assessment and recording are outlined in [Volume 0, Section 5](#) of this plan. This section covers guidance for the Safety and Service inspections relating to highways assets. This section does not include details revolving around condition inspections, which can be found in [Section 4](#) of this Volume
- 5.1.2. In order to satisfy the statutory duties set out in the Highways Act 1980, Lincolnshire County Council has put in place inspections to assess the highway network. The collection of inspection results is managed through the use of Confirm Enterprise Infrastructure Management System using portable tablet computers and handheld devices with global positioning system (GPS).
- 5.1.3. Lincolnshire County Council undertakes Safety and Service inspections to accurately monitor the carriageway and footway network. The inspection schedules are route and area based. Results are uploaded and downloaded within the Confirm Enterprise Infrastructure Management System and stored within the asset management system.

5.2. Safety Inspections – General

- 5.2.1. Safety Inspections are designed to identify defects that are likely to create a safety issue to users of the network. Such defects will be made safe as soon as reasonably practicable, and in any case within the timescales detailed in Appendix B of this Plan.
- 5.2.2. LCC has determined the most appropriate way to undertake inspections in order to clearly observe any defects for each asset type. This may include inspections from a slow moving vehicle or, in busy urban areas, and particularly when inspecting footways, it may be difficult to obtain the necessary level of accuracy from vehicle-based inspections and walking is used.
- 5.2.3. Frequencies of safety inspections are derived using the principles outlined in [Volume 0, Section 4](#) of this plan (categorising the network into an appropriate hierarchy) and [Section 6](#) (covering risk based approach for inspections).
- 5.2.4. Routine Local Highway Inspections comprise of Safety Inspections and Service Inspections. They do not cover the following:
 - Condition inspections such as specialist engineering inspections (including Coarse Visual Inspection and Detailed Visual Inspection), machine inspections (e.g. SCRIM and deflectograph) and the Footway Network Survey

- streetworks inspections (under the New Roads and Street Works Act 1991)
- Structures, Safety Barriers and Traffic Signals inspections
- development control inspections (section 278 & section 36 inspections)
- street lighting (including illuminated signs) inspections
- ad-hoc inspections in response to specific problems or complaints

5.2.5. However defects resulting from any of the above must be reported and dealt with under the appropriate procedure.

5.2.6. All category 2 defects should be identified as much as reasonably possible during the inspection to provide a clear understanding of our assets.

5.2.7. Service Inspections are designed primarily to establish programmes of routine maintenance tasks which, although they may be essential work, do not require urgent execution.

5.3. Highway Network Hierarchy

5.3.1. Each part of the highway network is assigned a hierarchy which relates to its importance for transportation and usage. Footway hierarchies are different from carriageway hierarchies. Therefore most roads have a different hierarchy classification for the carriageway and footway. Where there are (i) carriageways with no footway, or (ii) footways with no carriageway (typically called 'link' footways and usually found in urban areas), there is only one hierarchy classification. Public Rights of Way within built up areas that have been identified as having a metalled surface are categorised as link footways and are assigned the appropriate hierarchy and inspected as an integral part of the network.

5.3.2. The detailed definitions of each hierarchy classification are found within [Volume 0, Section 4](#).

5.4. Inspection Frequencies

5.4.1. The inspection frequencies for Safety and Service inspections are as follows:

Hierarchy Type		Inspections per annum
Carriageway	Footway	
MRN, 1	1	12
2	2	4
3	3 & slabbed/modular 4	4
4, 5, 6	4 (excluding slabbed/modular)	1
7	/	Once every three years
8	/	Once every five years (unmetalled carriageways)

Cycleways	Inspection requirements
Cycle Lane	Include with adjacent carriageway inspections
Cycle Track	As per Type 4 Footway
Shared Cycle/Pedestrian	Include with the adjacent footway inspections

5.4.2. For reasons of route efficiency hierarchy MRN, 1 and 2 carriageway inspections will be Route Based i.e. the inspections will extend across the whole of an Local Highways Managers area and as such the inspecting officer may not be responsible for the routine maintenance requirement of the road (s)he is inspecting.

5.4.3. All other inspections are Area Based i.e. they are a selection of roadway assets within a discrete maintenance area which satisfy the criteria of a given inspection schedule. In normal circumstances the inspecting officer will have routine maintenance responsibilities within the maintenance area. However allocation of available staff resources will mean that this may not always be the case.

5.4.4. Service inspections will be carried as part of the Local Area Inspection for all hierarchies of carriageway and footway, combining with the safety inspections.

5.5. Inspection Schedules

5.5.1. To facilitate the efficient implementation of the inspection regime each roadway asset will be assigned to one of seven inspection schedules. The schedules are based upon the lead hierarchy of each asset which is defined as the higher of the LCC carriageway or

LCC footway hierarchy with both carriageway and footway being inspected at the same time. In Line with the risk-based approach which outlines ‘Where carriageway and footway hierarchies intersect, for example at pelican or zebra crossings, bollards, or other defined crossing points at junctions, the higher inspection frequency takes precedence in determining of inspection frequency, defect definition and responses. This principle also applies to intersections between carriageways and cycle routes and between cycle routes and footways.’

5.5.2. The exceptions to this rule are:

(Ex.1) Hierarchy MRN, 1 and 2 carriageways in rural areas, where the adjacent footway inspection is carried out separately from the carriageway inspection (as referenced to in the schedules below).

(Ex.2) Hierarchy MRN, 1 and 2 carriageways in urban areas on which the adjacent footways have been identified as being impractical to inspect from a vehicle due to obstruction by way of remoteness, difference in level or other physical obstruction along a significant length (as referenced to in the schedules below).

5.5.3. For each of the above categories each footway will be inspected at the correct frequency for its designated hierarchy.

5.5.4. Where sections are identified as being impractical to inspect from a vehicle the inspections will be walked, irrespective of hierarchy.

5.5.5. Explanation of inspection schedules:

Numeric = frequency of inspection (e.g. 12 per annum)

A = Area based

D = Driven

R = Route based

W = Walked

5.5.6. The inspection schedules are tabulated below:

Schedule	Roadway Asset	Hierarchy	Inspection Frequency per annum	Comments
12WA	Footway and Carriageway	MRN/1	12	Includes carriageway adjacent to footway
12DR	Urban & rural carriageway and footway	MRN/1	12	Includes adjacent footways except Ex1 and Ex2
4WA	Footway and Carriageway	2	4	Includes adjacent carriageways except Ex1 and Ex2

4DR	Urban & rural carriageway and footway	2	4	Includes adjacent footways except Ex1& Ex2 above and Schedules 12WA & 4WA
4DA	Carriageway and footway	3	4	Excludes footways identified in Schedules 12WA, 4WA, 12DR and 4DR. Includes hierarchy 4 slabbed/modular footways.
1WA	Footway	4	1	All footways not included in Schedules 12WA, 4WA, 4DR, 4DA and 12DR
1DA	Carriageway and footway	4, 5, 6	1	Excludes footways identified in Schedules 12WA, 4WA and 4DA.
1/3DA	Carriageway	7	Every 3 years	Driven if possible, else walked
1/5WA	Carriageway	8	Every 5 years	

- 5.5.7. If a single section of road is bordered by footway assets which have different hierarchies the highest hierarchy is deemed to apply to all the footways along the section for the purposes of the inspection procedure.
- 5.5.8. The annual programme of inspections should be created to ensure that all assets are inspected at the frequency required and to allow the resource available to respond within the agreed timescale. The schedules which have an inspection frequency greater than 1 per annum are programmed to provide an equal interval between each inspection throughout the year. The pattern of inspections is consistently applied to consecutive years so that the inspection intervals are maintained year on year.
- 5.5.9. Link footways, alleyways and very narrow roads are incorporated into the appropriate schedule.

5.6. Service Inspections - General

- 5.6.1. Lincolnshire County Council undertakes Service Inspections in conjunction with the Safety inspections.
- 5.6.2. Service inspections are strongly focused on ensuring that the network meets the needs of users and provides future scheme identification, to ensure that they meet the levels of service defined within the Asset Management Framework. These surveys are dependent upon the Highways Asset Management Strategy to determine programmes of work.

5.7. Service Inspections for Carriageways, Footways and Cycle Routes

- 5.7.1. Service inspections for carriageways, footways and cycle routes are carried out in conjunction with safety inspections for these assets. These surveys may be undertaken either by slow moving vehicle, on foot or by utilising data such as video depending upon the circumstances.
- 5.7.2. As each carriageway and footway asset is inspected in turn there are different categories of carriageway treatments that can be recommended for it, dependent on which physical features that particular section contains. The available treatment categories are Structural Treatment, Surface & Patching Treatment, Surface Treatment and Edge Treatment.

5.8. Safety and Service inspections of PROW

- 5.8.1. The Countryside team follows an area-based approach towards its inspection regime.
- 5.8.2. The regime follows Countryside Areas A, B, and C, with these areas split up into two, bar one, due to respective size. This equates to 5 area-based inspections. Inspections are undertaken across all priorities of path in set numbers of parishes annually. This equates to 20% of the County network per annum so that after a 5 year period each parish and paths will have been inspected once.
- 5.8.3. As per [Volume 0, Section 4](#) of this plan, where certain PROW are considered part of the footway hierarchy, safety inspections are carried out accordingly.
- 5.8.4. The Inspections will highlight issues, defects and obstructions on the Public Rights of Way whilst providing information on the condition of any known PROW structures.

5.9. Safety and Service Inspections of Landscaped Areas and Trees

- 5.9.1. Lincolnshire County Council is responsible for ensuring that trees outside the highway boundary, but within falling distance, are safe. Section 154 of the Highways Act 1980 empowers Lincolnshire County Council to deal, by notice, with hedges, trees and shrubs growing on adjacent land which overhang the highway, and to recover costs if appropriate.
- 5.9.2. Safety and Service inspections undertaken by our Local Highways Team incorporate highway trees, including those outside but within falling distance of the highway. Gale damage, broken or overhanging limbs and unstable/leaning trunks which endanger the

highway are further included within the Safety inspection, if the inspector judges them to pose a danger to highway users.

- 5.9.3. When the tree is privately owned and safety considerations permit, the owner/occupier shall be informed and given notice to take action within 28 days. If safety considerations do not permit, then appropriate action should be taken to make safe. Follow-up action will be necessary immediately after the 28 days have expired if the owner/occupier does not respond appropriately.
- 5.9.4. Lincolnshire County Council includes some basic arboricultural guidance in training for inspectors but arboricultural specialists advise on the appropriate frequency of inspections and works required for each individual street or mature tree that is considered to hold a high risk to users of the network. A separate programme of safety inspections for all trees, is undertaken by the Council's arboricultural officers. See Condition Surveys [Section 4](#), for more information.
- 5.9.5. Highway trees contribute to amenity and nature conservation and in urban areas can enhance the space between buildings, reinforcing the area's character and appeal. Close co-operation between arboriculturalists, highway engineers, landscape architects and urban designers is essential to preserve and enhance the range and quality of street trees, ensuring that a considered approach has been taken to supporting sufficient species diversity to make the overall town or neighbourhood tree population more robust to the advent of disease and/or more resilient to climate change. Avenues, boulevards, town squares and formal spaces, and informal rural locations all require the application of different planting principles. Trees and planting may reflect the history, architecture and tradition of places. Small pockets of poor quality planting can undermine the quality of the streetscape.
- 5.9.6. Street trees and planting are not appropriate in every instance. Trees and planting should always form part of the overall urban context, and not be added or preserved without question. Trees may be planted where trees have not been planted previously particularly in urban areas that have changed use (e.g. warehousing to residential) or in areas where historically they were considered unworthy of tree planting.

5.10. Safety and Service Inspections of Traffic Signs and Bollards

- 5.10.1. Traffic signs are the most visible elements of the highway network, highly valued by users, and contribute significantly to network serviceability through facilitating efficient and effective use of the network.
- 5.10.2. The Inspections will monitor non-illuminated signs which have fallen into the highway or are in an unsafe condition. This item includes poles which have been damaged or worked loose if they are leaning into the carriageway area. A sign shall be deemed unsafe if half or more of its fastening points have failed and it is visibly capable of being dislodged or moved dangerously by high winds.

- 5.10.3. Traffic signs shall be kept legible, visible and effective as far as possible at all times in relation to the road use and traffic speeds. The defects in the following small signs and bollards shall be considered during the Safety and Service inspections as potential replacement options:
- Warning (eg Give way , Chevrons)
 - Prohibition (eg No entry)
 - Regulatory (eg Speed limit /TRO's warning plates)
- 5.10.4. Any Non-illuminated “stop” signs, “give way” signs, “no entry” signs and “one way” directional signs identified within the inspection should therefore be repaired or replaced in the timescales outlined in Appendix B of this Plan.
- 5.10.5. Any sign or bollard identified as a potential safety issue will be made safe as soon as reasonably practicable. A Large Advanced Direction Signs (ADS) identified as a safety risk will be dealt with as an emergency and made safe. Subsequently it will be put onto a programme to be replaced accordingly.
- 5.10.6. Vegetation potentially obscuring road signs shall be recorded during safety inspections and service inspections of carriageways, footways and cycle routes, and treated accordingly. The level of risk associated with such vegetation may change during periods of maximum growth.
- 5.10.7. Special signing schemes, for example blockwork chevron treatments at roundabouts and traffic calming schemes using special signing may deteriorate more quickly than conventional signing. They are also likely to have been installed to improve network safety.
- 5.10.8. The condition of non-illuminated road signs shall be inspected in daylight, and also at night for degradation of colour, retro-reflectivity, deteriorating fittings, legibility distance, and average surface luminance, after cleaning. The frequency of cleaning required will be influenced by the risk of soiling in local areas.
- 5.10.9. Service inspections shall be used to identify signing that is inappropriate or no longer necessary and may be a distraction to users, or detrimental to the street scene. Such inspection is combined with the condition inspection and will be route-based, where both legality and appropriateness will be assessed, and a decision by our Signs and Lines team will be made whether to remove the sign.

5.11. Safety and Service Inspection of Road Markings and Studs

- 5.11.1. Inspections in respect of wear, spread, colour, skid resistance and retro-reflectivity shall be undertaken for paint markings and for thermoplastic markings, at frequencies determined by local risk assessment. Inspections for reflective conspicuity shall be carried out during the hours of darkness and programmed to enable maintenance

works to be completed before the onset of winter. This is undertaken annually and combined with the condition inspection. For more information see [4.4.7. of Section 4](#)

- 5.11.2. Although the hole left by a dislodged stud is unlikely to quickly enlarge to meet the pothole criteria more than one stud missing in any particular section of road should alert the inspector to the possibility of more failures and trigger a detailed inspection of all studs in that section.

5.12. Service and Safety Inspection of Traffic Signals & Pedestrian/Cycle Crossings

5.12.1. The priority objective is to provide and maintain all traffic signals, controlled pedestrian and cycle crossings to a high standard to ensure the safety of all road users and to ensure the efficient operation of the highway network.

5.12.2. The Traffic Signals Contractor operates a remote monitoring system which records or reports lamp failures.

5.12.3. The following standards are used in the operation of the highway network:

- Urgent traffic signal faults or damage constituting a danger to the road user are attended to within 2 hours and repaired within 24 hours.
- Traffic signal controllers damaged beyond repair are replaced within 72 hours where reasonably practicable
- Failed traffic signal lamps are repaired within 24 hours.
- Less urgent faults are repaired within 48 hours.
- Traffic signals installations are inspected for safety once a year.
- Additional cleaning is carried out when required
- Warning signs are erected if traffic signals are off and temporary traffic signals will be provided where reasonable practicable.

5.13. Regulatory Functions

5.13.1. A significant element of the Highway Service comprises regulation and enforcement of activities on or affecting the highway

5.13.2. Key Regulatory duties include:

- New Roads and Street Works Act 1991
- Management of Highway Register
- Management of Public Rights of Way
- Dealing with encroachment on the Highway
- Dealing with illegal and unauthorised signs
- Licensing skips, hoardings, temporary closures and other authorised occupation of the highway

- Construction of vehicle crossovers

5.13.3. Although each of these are separate duties, many of them have wider implications for highway maintenance, for example:

- many of these items, for example illegal signs or encroachment, may have the potential to contribute to accidents; and the details of how the occurrence was dealt with (or not dealt with) by Lincolnshire County Council may be a material consideration in legal proceedings; and
- illegal parking on verges and footways, especially by heavy vehicles, could cause considerable damage and where this has occurred it might be relevant to increase inspection frequency and consider new materials or prevention.

5.13.4. A regime of regulatory inspection has been developed on the basis of risk assessment. Further information regarding regulatory functions can be found in our [Network Management Plan](#).

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6. Programming and Priorities

6.1. Introduction

6.1.1. The general principles to be applied to programming and priorities are outlined in [Volume 0, Section 7](#) of this plan, with this section relating to highways assets.

6.2. Balancing Priorities by Type

6.2.1. The broad priorities for the respective types of highway maintenance are largely determined by the outcome of safety and service inspections and condition surveys, assessed against local risks and policies. Lincolnshire County Council has established priorities and programmes for each of the following:

- emergency / reactive maintenance – attending to defects and other safety matters that require urgent action arising from inspections or user information;
- planned maintenance – attending to defects and other less urgent matters that may benefit from further planning leading to permanent repairs ;
- programmed maintenance – providing lifecycle / road condition based work streams;
- Cyclic/routine maintenance – providing locally defined levels of service;
- regulatory functions – regulating occupation, interference or obstruction of the network, outlined in our [Network Management Plan](#); and
- Winter Service – providing locally defined levels of service of salting and clearance of ice and snow, outlined in our [Winter Maintenance Plan](#)

6.2.2. The determination of priorities and programmes for items within the categories of regulatory functions and Winter Service tend not to require any special consideration and largely arise out of the design of the services.

6.3. Priorities for Emergency/Reactive Maintenance

6.3.1. Emergency / reactive maintenance involves attending to the rectification of defects and other safety matters that require urgent action arising from inspections or user information in accordance with the locally determined levels of response. Although all such matters will by definition have a degree of urgency, some may have potentially even more serious consequences, and priorities will usually be determined exclusively on the basis of risk assessment. This risk assessment will be based upon our response time risk matrix, outlined in Appendix B of this Plan.

6.3.2. Reports from members of the public provide a source of information on the condition of all aspects of the highway network. This source is used to complement formal inspections and surveys, and this Plan is available publicly to outline the processes and

systems in place. To ensure that suitable communication is provided to contributors to acknowledge receipt of information and provide feedback, the Highways Portal has been implemented allowing fault reporting through the Council's website and the Customer Service Centre provides feedback on enquiries which are all logged on the Confirm asset management system.

- 6.3.3. The option selected, together with relevant follow up, will largely be determined by operational practicalities and also whether the site is already part of a programme for more comprehensive treatment, in which case a temporary repair may be an appropriate course of action.
- 6.3.4. Consideration will be given to one of the following
 - Sign and make safe
 - Carry out initial temporary repair
 - Effect a permanent repair
- 6.3.5. Lincolnshire County Council shall adopt permanent repairs as the first choice. Temporary repairs shall only be used where safety cannot be managed using alternative approaches and in emergency circumstances.

6.4. Priorities for Planned & Programmed Maintenance

- 6.4.1. There is a presumption that a programmed maintenance regime will provide lower whole life costs than one based upon a reactive approach. Lincolnshire County Council therefore employs systems that enable a data-led approach to the targeting of structural maintenance.
- 6.4.2. The updated PMS system provides UKPMS outputs from CVI and DVI inspections. Combined with results of other surveys such as deflectograph, SCRIM and local Safety & Service inspections enable informed decisions to be made in respect of planned maintenance programmes and treatments.
- 6.4.3. As mentioned in Volume 0, current and historic SCANNER and CVI condition data has been used to develop local deterioration curves for all carriageway classes, as part of our lifecycle planning development. This historic data was also used to determine the effectiveness of maintenance works carried out (i.e. scheme efficiency) for various treatment types. In combination with current treatment cost information used in DRC calculations, future carriageway surface condition by road classification was predicted for a number of treatment and budget scenarios. Strategic analysis is continuously being carried out on these scenarios to determine the most efficient maintenance strategy with current funding. These scenarios inform the targets included in Lincolnshire's Asset Management Strategy.

- 6.4.4. Programmed Maintenance within Lincolnshire County Council Asset Management can be divided up into the following types of work:
- Surfacing (reconstruction)
 - Patching
 - Surface Dressing and Slurry Sealing
 - Minor Works
- 6.4.5. For scheme identification and prioritisation on the Classified Road Network (MRN, H1, H2, H3 and H4) a Lincolnshire Condition Indicator (LCI) has been developed which utilises a combined CVI and SCANNER indicator to give an overview of the surface condition of the network. A large number of potential schemes have been identified based on a visual assessment of the condition information. All available condition data including SCANNER, CVI, Residual Life from Deflectograph surveys and SCRIM that is held in Confirm is queried using the existing mapping tools to prioritise schemes and identify suitable treatments based upon an established set of "Rules and Parameters"
- 6.4.6. The maintenance schemes for carriageways are identified using the following stages:
- The information obtained from condition surveys is processed by the Lincolnshire Condition Indicator system to establish an indicative programme with process outlined in 6.4.5. ;
 - The indicative 3 year programme for individual hierarchies should then be developed into individual schemes that meet the levels of service in the Highways Asset Management Strategy. The schemes may then be prioritised using a process of Value Management. Schemes are not necessarily be prioritised on the basis of 'worst first' as this is unlikely to provide the best value for money in terms of whole life cost.
- 6.4.7. The list of schemes developed is provided to the County Councils asset management engineers who undertake further investigation and assessment to refine the details of the scheme and develop the detailed treatment schedules for the works taking into account the following Value Management:
- Whole Life Costs
 - Network management Considerations
 - Buildability
 - The Budget Available
 - Risk
- 6.4.8. The data alongside engineering expertise generates a five-year programme of major structural maintenance schemes for the principal road network (MRN, H1 & H2), which is updated annually on the basis of latest survey data.

- 6.4.9. The LCI generates a three-year indicative programme for the surface maintenance schemes H3 and H4 carriageway network, with an annual works programme for the schemes of work outlined, approved and put on the Lincolnshire County Council website: <https://www.lincolnshire.gov.uk/transport-and-roads/highways-maintenance/highways-works-programmes/130284.article>
- 6.4.10. For the Unclassified Network (H5, H6, H7 and H8), schemes are determined using a combination of CVI data maps and the priorities of Local Highway Managers. They are provided with detailed maps showing the results of CVI and DVI surveys. These combined with annual local Safety & Service inspections undertaken by the Local Highways teams enable effective planning of maintenance programmes.
- 6.4.11. Further elements included in determining the prioritised list shall be clusters of enquiries highlighted by members of the public regarding surface defects, location to generate linked work schemes to improve efficiency.
- 6.4.12. Surface Dressing will be linked with this approach, as well as aligning itself with patching works around the county and any local safety issues regarding skidding resistance. All surface dressing schemes will take into account lifecycle planning, with SCRIM surveys and PRN data guiding prioritisation. Routine Surface Dressing programmes of work are further based upon the results of local inspections and reports from CVI surveys and facilitated by Local Highway Managers.
- 6.4.13. Footways and cycleways undergo a similar scheme prioritisation process, with the data from the FNS (Footway Network Survey) collated and processed appropriately. The prioritisation process demonstrates an area-based approach towards micro-asphalt slurry sealing of footways. The Local Highways Managers will further highlight priorities for their respective areas to be included within the upcoming works programmes.
- 6.4.14. A 3 yearly indicative programme of schemes will be generated highlighting priorities, with an annual fixed programme outlined, approved and made publicly available.
- 6.4.15. Budget disaggregation to Asset Managers is also based upon the visual survey data output to ensure that available funding is correctly apportioned. Maintenance funding for other none routine elements of the network such as signs, lighting columns etc. are based upon inventory counts.
- 6.4.16. Programmed maintenance seeks to minimise cost over time and to add community value to the network or to the environment. It can also be for safety purposes by, for example, improving skidding resistance or contributing to serviceability by, for example, improving ride quality.
- 6.4.17. As demonstrated in this section, Lincolnshire County Council has developed priorities and programmes for the structure, surface and edge of carriageways, footways and

cycle routes, using data such as age, condition, hierarchy, location and lifecycle planning.

- 6.4.18. Programmed maintenance schemes may be more expensive than routine or reactive treatments in initial cost, but should be designed to have a lower whole life cost, therefore providing value for money. The determination of priorities between competing schemes is based more objectively utilising robust Value management. Quarterly Value Management sessions are formalised to ensure this approach towards Programmed maintenance.

6.5. Priorities for Routine Maintenance

- 6.5.1. Routine maintenance is primarily for the purpose of providing defined levels of network serviceability, maximising availability, reliability, integrity and quality. The priorities and programmes are determined largely, but not exclusively, from non-urgent defects identified during service inspections together with items from safety inspections not requiring urgent attention and user requests.
- 6.5.2. Priorities and programmes have been defined for all routine maintenance categories based on the Highways Asset Management Strategy. Routine maintenance for each category may be undertaken separately, according to the frequency defined in each case, but it will usually be more efficient to combine a number of operations into a co-ordinated programme. Consideration shall be given to co-ordination with other related street activities.
- 6.5.3. The results of safety inspections identifying non-urgent works, condition surveys and customer requests may also generate routine works programmes.
- 6.5.4. Lincolnshire County Council undertakes numerous forms of cyclic and/or routine maintenance -
- drainage systems – cleansing and repair;
 - embankments and cuttings – drainage and stability;
 - landscaped areas and trees – management;
 - verges – grass cutting;
 - fences and barriers – tensioning and repair;
 - traffic signs and bollards – cleansing and repair; and
 - road markings and studs – replacement.
 - Weed Spraying

- 6.5.5. Routine maintenance standards for cyclic works such as drainage cleansing, grass cutting, tree management and sign cleaning are defined in Section 4 of this Volume. For fences and barriers, please refer to [Volume 2 Structures](#).
- 6.5.6. Timing of such cyclic works can be dependent upon various factors such as time of year or weather conditions. Asset management ensures that all cyclic work is structured so that a consistent approach to this type of work and effective service delivery is maintained.

6.6. Value Engineering & Treatment Best-Practice

- 6.6.1. Lincolnshire County Council adheres to the second stage of the Value Management process that is conducted on an individual scheme, to optimise both the design and construction phases. In principle, it reduces the risk associated with unforeseen issues at the time of scheme development.
- 6.6.2. Lincolnshire County Council utilises the Lincolnshire County Council's Maintenance Design Manual, outlined by expert Lincolnshire designers based on recognised best practice, as its starting point for design. The Maintenance Design Manual deals with the design element of non-cyclic works. The manual has been prepared to ensure uniform, economic designs are produced throughout the county and utilises the results of research carried out both nationally and locally.
- 6.6.3. It further follows the guidance documents set by the Road Surface Treatments Association (RSTA) that aim to raise awareness of the range and benefits of road surface treatments, and to encourage product and process innovation. Many of these have been produced in conjunction with the ADEPT Soils and Materials Design Group, and cover topics including service lives, surface dressing, innovative patching products and systems, high friction surfacing, structural road recycling, crack sealing and slurry surfacing, geosynthetics and steel meshes, asphalt preservation systems, grouted macadam, retexturing and ironwork installation.
- 6.6.4. In terms of Surface Dressing, Lincolnshire County Council adheres to Transport Research Laboratory's Road Note 39 which sets out Best-Practice when considering surface dressing programmes.

Highways Infrastructure Asset Management Plan



Volume 2 – Structures

1. Introduction to Volume 2

1.1. Introduction

- 1.1.1. Volume 2 of the Highways Infrastructure Asset Management deals with the highway structures associated with the adopted road network which meets the dimensional criteria, in line with Part C of the Well-Managed Highways Infrastructure Code of Practice. In addition, the general principles apply to structures associated with all other highways that are used by the public, e.g. segregated footpaths and cycle routes, and the Public Right of Way network.
- 1.1.2. Highway Structures include Culverts, Bridges, Footbridges, Retaining Walls, Subways and Overhead Gantries. There are 3961 structures in Lincolnshire that are the responsibility of Lincolnshire County Council including 1516 bridges (over 1.5m span), 2163 culverts, 12 Subways, 126 Highway footbridges and 144 recorded retaining walls. In addition there are a further 1780 privately owned structures, carrying County roads. The main owners of these are Network Rail, Rail Property, the Environment Agency and various Internal Drainage Boards.
- 1.1.3. Some two thirds (66%) of the County's bridges are situated on minor (C class or unclassified) roads, with 22% on Principal Roads (A class) and the remaining 12% on B roads. Approximately 60% of the bridge stock was built prior to 1922. A high proportion of the bridges and culverts in Lincolnshire consist of brick arches, many in excess of 100 years old.
- 1.1.4. The overarching principles and common themes of maintaining highway infrastructure are covered within [Volume 0](#). Asset specific guidance for highways and lighting are covered in [Volume 1](#) and [Volume 3](#) respectively.
- 1.1.5. Highway structures represent a significant investment, with most being publicly owned and many being prominent features in the local environment. In Lincolnshire, as in the entirety of the UK, the management of highway structures is undertaken by a variety of owners/agencies.

2. Legal Framework

2.1. Statutory Obligations

- 2.1.1. General duties and powers are dealt with in [Volume 0](#) of this HIAMP. All relevant legislation on Highways Structures is mentioned in [Appendix E](#) of the Plan.

3. Asset Management Information

3.1. Introduction

- 3.1.1. Asset data management and its systems are dealt with by the UKRLG Highway Infrastructure Asset Management Guidance (HIAMG), Part B and Part C.
- 3.1.2. Lincolnshire County Council Highways operates with the Asset Management System Confirm, which among other assets, stores all Structures.

3.2. Principles and Considerations

- 3.2.1. The Confirm asset management system supports the following list of functions with regards to Structures assets.
- collection, storage and retrieval of inventory data and condition data;
 - works management and prioritisation;
 - asset valuation – both gross replacement and depreciated replacement cost to support Whole of Government Accounting requirements;
 - deterioration modelling and life cycle planning; and
 - Aid in Management and storage, in electronic format, of drawings, photographs and reports.

3.3. Management of Asset Information

- 3.3.1. Data entry for Inspections, mostly for General Inspections is combined with the identification of needs in order to produce a more time and cost-efficient approach. The highway structures stock is divided into groups and sub-groups: Bridges, Culverts, Retaining Walls, Safety Barriers and Fences, Signal Gantries, Structures, PROW and a drainage group. These groups have similar deterioration characteristics and maintenance.
- 3.3.2. The extent of data held by Lincolnshire County Council can be summarised by the following, by no means exhaustive list: Basic inventory data (the basic data and

information on the stock of highway structures in terms of descriptive parameters), Condition data, Structural Assessment & Review data and a Health and Safety File.

- 3.3.3. General and Principal Inspections provide the majority of condition data. These are supplemented by Special Inspections, testing and monitoring, as appropriate, where the data sought is often focussed on a particular part of the structure or aspect of performance. More information on the various types of inspections can be found in [Section 5 of Volume 2](#).
- 3.3.4. Condition data from previous inspections is retained as the evolution of this data over time, which gives a clear indication of the rate of deterioration and residual service life. This data is used to estimate deterioration rates for different element and structure types which may be utilised to develop lifecycle plans.

4. Asset Condition and Investigatory Levels

4.1. Introduction

- 4.1.1. Lincolnshire County Council, as a Highways Authority, is responsible for the construction, maintenance and repair of highway structures owned by the authority. This section will focus on the design and construction element of Lincolnshire County Council's responsibilities.
- 4.1.2. All Design specifics for small-scale structures have been defined in the Lincolnshire County Council's Maintenance Design Manual (MDM), Section 12.
- 4.1.3. All maintenance work should preferably be designed to current standards, although there may be situations where lesser standards are acceptable, e.g. repair of part of an element, repair of accident damage. Each case should be considered on its merits.
- 4.1.4. The design life for adoptable highway structures is 120 years and technical design standards produced by the Department of Environment and Economy are intended to achieve this.
- 4.1.5. The Design Manual for Roads and Bridges (DMRB) and the Manual of Contract Documents for Highway Works (MCHW) are maintained by Highways England on behalf of all Overseeing Organisations (the national highway / roads authorities in England, Scotland, Wales and Northern Ireland).
- 4.1.6. The DMRB provides detailed guidance in the form of standards (BDs) and advice notes (BAs) for most aspects of highway structure design and assessment. The guidance includes criteria for structural loading, analysis, material properties, element design or assessment, in addition to geometrical requirements and best practice for design for durability. Lincolnshire County Council's own MDM takes note of these standards and integrates them into their service standards.

- 4.1.7. All structural design and assessment are subject to a formal Technical Approval procedure.
- 4.1.8. Departures from DMRB standards are carefully recorded to enable an audit trail for certification by Lincolnshire County Council through a standard departure form.
- 4.1.9. The Eurocodes are a series of European Standards developed by the European Committee for Standardisation, to provide a common approach for the design of buildings and other civil engineering works and construction products. The Eurocodes have replaced national codes that were previously published by national standard bodies and have become mandatory for European publicly funded works. As with other European standards, the Eurocodes will be used in public procurement.
- 4.1.10. Changes in demand in the future may alter how a structure should be managed. The prediction of future demand on highway structures should align with the network demands and are likely to include changes in vehicle weight, height and width, and traffic volume. Future demands can be predicted using available data, historical trends, and local factors.

4.2. Resilience Requirements

- 4.2.1. The principles of resilience for highway infrastructure shall be dealt with it in the Resilient Network Plan, which outlines how Lincolnshire County Council maintains a resilient network during adverse weather events and other emergency situations. This document, among other things, will outline contingency plans generated for structural failure caused by extreme weather events. This document is currently in development and will be published October 2018.
- 4.2.2. For the purposes of this plan, it is important to highlight that inspections, overall maintenance of structures and fixed design standards ensure a robust approach which minimises risk of structural failure. Failure is defined as the inability of a structure, or one of its primary load-carrying components, to perform its intended function of being safe for use and fit for purpose.
- 4.2.3. For more information on Inspections and maintenance, please go to [Section 5 of Volume 2](#).

4.3. Interaction with Other Owners and Third Parties

- 4.3.1. The Structures Manager shall work with other owners and third parties in order to maintain the safe operation of the public highway and to carry out maintenance work.

4.3.2. Lincolnshire County Council may carry out the following activities on Third Party Structures:

- Clearing vegetation for General Inspections
- Clearing obstructions to prevent immediate flooding
- Carrying out General Inspections and reporting safety issues to owner
- Carrying out accident damage procedures that includes:
 - Operating a recoverable works system
 - Signing and guarding
 - Special inspections, excluding preparing cost estimates.
 - Reporting the inspection results and recommendations to the owner
 - Invoicing the owner for costs incurred by the County Council

4.3.3. Lincolnshire County Council is not responsible for any Trunk Road structure. Trunk Road structures are managed by Highways England or their agents. In the case of Network Rail structures the General Inspection will specifically exclude inspection from land owned by Network Rail.

5. Inspection, Assessment and Recording

5.1. Introduction

5.1.1. The general principles to be applied to inspections, assessment and recording are outlined in [Volume 0](#) of this HIAMP. This section covers guidance for each category of inspection relating to structures.

5.1.2. Inspection, testing and monitoring shall be used to:

- provide data on the current condition, performance and environment of a structure. The data enables the Structures Manager to assess if a highway structure is currently safe for use and fit for purpose, and provides sufficient data for actions to be planned where structures do not meet these requirements;
- inform analyses, assessments and processes. The outputs inform asset management planning and enable cost effective plans, which deliver the agreed levels of service; and
- compile, verify and maintain inventory data

5.1.3. The Inspection Manual for Highway Structures (Volumes 1 and 2) was commissioned by Highways England and published in May 2007 and is utilised for Lincolnshire County Council's Inspection regimes.

- 5.1.4. Structures Inspections can be divided up into three different inspection types: General Inspections, Principal inspections and Special inspections.

General Inspection

- 5.1.5. General Inspections comprise a visual inspection of all parts of the structure (that can be inspected without the need for special access or traffic management arrangements) and, where relevant to the behaviour or stability of the structure will include an inspection of the adjacent earthworks or waterways.

Principal Inspection

- 5.1.6. Principal Inspections comprise a close examination, within touching distance, of all accessible parts of a structure, including, where relevant, underwater parts and adjacent earthworks and waterways, utilising suitable access and/or traffic management works as necessary. Closed circuit television and high resolution digital photography/video may be used for areas of difficult or dangerous access, e.g. obscured parts of a structure, confined spaces and underwater inspections.

- 5.1.7. A Principal Inspection will establish:

- the scope and urgency of any remedial or other actions required before the next inspection;
- the need for a Special Inspection and/or additional investigations; and
- the accuracy of the main information on the structure held in the inventory.

- 5.1.8. Both Principal and General Inspections will be of sufficient scope and quality to determine:

- the condition of all parts of the structure;
- the extent of any significant change or deterioration since the last Inspection; and
- any information relevant to the stability of the structure and/or continued use in service and safety.

Special Inspection

- 5.1.9. There are occasions when a more specific inspection, concentrating on the condition of particular parts of the structure, is required. This is known as a Special Inspection. The need for a Special Inspection normally arises due to specific circumstances or following certain events.

Acceptance Inspection

- 5.1.10. The need for an Acceptance Inspection should be considered when there is a changeover of responsibility for the operation, maintenance and safety of a structure

from one party to another. The Acceptance Inspection is normally carried out by the party taking over responsibility but who may be accompanied by the other party to facilitate agreement.

5.2. Inspection Regime

5.2.1. Summary of Inspection Cycles

Structure Type	Inspection Type	Classification	Cycle
Culverts	General	Brick or Reinforced Concrete	2 yrs
Culverts	General	Corrugated Steel or Concrete Pipes	6 yrs
Bridges & Miscellaneous	General	All	2 yrs
Bridges & Miscellaneous	Principal	Span >5m	6 yrs
Bridges & Miscellaneous	Principal	Span < 5m	Subject to risk assessment
Retaining Wall	General	Ret Ht >3m	2 yrs
Retaining Wall	General	Ret Ht >1.37m	6 yrs

Notes:-

(1) Refer to [Appendix D](#) for Type of Structure definitions

(2) Structures on the Public Rights of Way (PROW) network will be subject to an independent inspection and recording regime.

5.2.2. Lincolnshire County Council carries out routine surveillance as part of the regular Highway Safety Inspections. We will inspect the surface over highway bridges, footbridges and through subways at regular intervals to identify any potential trips.

5.2.3. Structures inspections exclude all drainage that is defined as a pipe with a diameter or span less than 600mm.

5.2.4. Lincolnshire County Council carries out General Inspections on Third Party structures as a duty of care to protect the safety of the general public and road users.

- 5.2.5. Lincolnshire County Council carries out General Inspections of all structures that carry or support County Maintained Highway or Highway footpaths. General Inspections are also carried out on structures with spans 5m or greater carrying Public Right of Ways. The Structures Team shall also note significant potential trips on the walking surface of bridges, footbridges and subways. The steps and ramps leading to subways are an extension of the walking surface.
- 5.2.6. Retaining walls will receive General Inspections every 6 years, unless greater in height than 3m, in which case they will be inspected every 2 years. No Principal Inspections are carried out on retaining walls.
- 5.2.7. The frequency of General Inspections will be every 2 years. For Public Rights of Way footbridges over 5m span General Inspection interval is 6 years, and Public Rights of Way bridges between 5 and 10m span receive a Principal Inspection at 6 yearly intervals (instead of General Inspection).
- 5.2.8. Countryside Staff will have sole responsibility for carrying out inspections to structures with spans less than 5m carrying Public Rights of Way. The frequency of inspection of structures on Public Rights of Ways is every 2 years on sign posted paths and 3 years on every other path.
- 5.2.9. The Structures Team carry out all General Inspections and Principal Inspections of all County owned structures (that are eligible*) that carry or support County Maintained Highway and Highway footpaths.
- * Structures with spans less than 5m will receive a risk assessment to determine the requirement for a Principal Inspection. In many cases a General Inspection every 2 years will be more than adequate.*
- 5.2.10. The approach to risk based inspection intervals taken within Lincolnshire is that, in most cases, General Inspections will occur every 2 years, and where the structure qualifies for a Principal Inspection it will take place every 6 years. This approach presents a regularity of inspection interval and record keeping which reduces risk to the authority.
- 5.2.11. There may be circumstances in which a Principal Inspection interval is reassessed depending on other information available to the Structures Team at the time (i.e. available records from third parties such as NR or CRT).
- 5.2.12. According to 'Well Managed Highway Infrastructure: A Code of Practice' (Oct 2016), culverts < than 1.5m span are no longer defined as structures. However, within Lincolnshire, the view is that this asset will continue to need to be managed. A risk-based decision has been taken to reduce the General Inspection interval for concrete pipes and corrugated steel pipes between 0.6m and 1.5m diameter to 6 yearly.

5.2.13. The Structures Team will carry out or organise **Special Inspections** that fall into three distinct categories:

Routine Diving Inspections

5.2.14. The Structures Team carry out risk assessments of structures susceptible to the effects of scour based on local knowledge of the form of bridge construction, soils, foundation type, risk of flash flooding, tidal waters, etc. Diving inspections are categorised into two groups according to the risk and different frequency of inspections allocated. Only a limited number of structures known to be at risk or likely to be at risk are targeted. Diving inspections are carried out by commercial divers under contracts awarded by competitive tender.

5.2.15. The current policy is to carry out a small number of diving inspections every year, with structures inspected at intervals determined by perceived risk of scour. A small number of bridges are inspected annually, generating two to four year cycles for inspection.

5.2.16. The Structures Team utilises Sonar technology to inspect the Trent Bridge in Gainsborough annually, instead of Diving inspections, which reduces the risk taken by inspectors and increases the amount of data that can be picked up during an inspection. Lincolnshire County Council continues to explore options to increase the utility of sonar technology within its inspection regime, keeping into account risk, suitability, safety, and the cost of such an enterprise.

Routine Monitoring

5.2.17. The Structures Team will carry out monitoring of structures where movement or scour may lead to failure of a structural element. In addition, those bridges which have failed a bridge assessment but have not been weight restricted are assigned a monitoring frequency of 3, 6 or 12 months, depending upon the degree of concern or risk.

Special Inspections not part of the routine inspection programme

5.2.18. The Structures team shall carry out special inspections:

- To investigate a specific problem as a follow up to a previous inspection
- If settlement or rotation is reported
- After flooding of abnormally high water flows where a problem is anticipated
- After a major accident or incident
- In response to safety concerns by individuals or representative bodies

5.2.19. **Acceptance Inspections** on new, existing and concession structures include the following, as appropriate.

- Handover of a new structure:

- o An Acceptance Inspection should be undertaken for new structures about one month before the issue of the completion documentation or opening to traffic. A Principal Inspection is used for this purpose.
 - Transfer of an existing structure:
 - o An Acceptance Inspection should be undertaken prior to an authority taking over responsibility of an existing structure. A Principal Inspection should be carried out as part of the Acceptance Inspection unless the results of a recent Principal Inspection are deemed to be relevant and sufficient.
- 5.2.20. The arrangements of an Acceptance inspection shall be integrated within the section 38 and 278 processes regarding adoption of roads and any potential improvement works to be undertaken on developments.

5.3. Safety and Service Inspection of Fences and Barriers

- 5.3.1. Steel and wire road restraint systems shall be inspected at intervals determined through risk assessment in respect of mounting height, surface protective treatment and structural condition, to ensure that they remain fit for purpose. Tensioning bolts of tensioned safety fences should be checked and reset to correct torque at intervals determined by risk assessment. Safety barriers adjacent to bridges shall be inspected as part of the highway asset, as well as part of General and Principal Inspections for structures.
- 5.3.2. Pedestrian safety fences, boundary fences and environmental barriers for which Lincolnshire County Council is responsible, shall also be inspected in respect of integrity, and where appropriate stock proof qualities, during the course of service inspections of carriageways, footways and cycle routes. These inspections are undertaken as part of the Local Highways Teams duties and more information on their inspection frequencies can be found in [Volume 1, Section 4](#) and [5](#) of this Plan.
- 5.3.3. Vehicle restraint systems are inspected in accordance with Lincolnshire County Council's strategy based upon the UKRLG/DfT October 2011 document – Provision of Road Restraint Systems for Local Authorities.
- 5.3.4. Safety barriers and fences adjacent to railway lines shall be inspected irrespective of liability.

5.4. Condition of Fences and Barriers

- 5.4.1. It is required that all safety fence be maintained to a sufficient sound structural condition to serve their purpose and not to be a danger to road users or pedestrians. All damaged sections of safety fence will be made safe (signing and guarding) within 24 hours unless the damage is superficial and there is no loss of integrity.

4.4.10.4. All high risk situations are subject to a robust inspection regime with a commensurate high level of condition. Road restraint systems are maintained in a sufficiently sound structural condition to serve their function and not be dangerous to road users or pedestrians.

4.4.10.5. Pedestrian guard rails, boundary fences and environmental barriers will be inspected in respect of integrity during the course of a condition inspection. (The general condition of timber guard rails, not associated with a structure, will be checked each year in conjunction with condition inspections.)

4.4.10.6. All steel beam safety fences will be inspected at the intervals in the table below:

Steal Beam Safety Fence	Inspection every five years for mounting height, surface protective treatment and structural condition.
Tensioned Safety Fence	Tensioning bolts should be checked and reset to correct torque every two years.

5.5. Competence and Training

5.5.1. A programme of Continuing Professional Development (CPD) and training for Structures Managers, engineers, inspectors and other staff shall be provided to enable them to understand and implement the processes described within the HIAMP.

5.5.2. New members of staff are encouraged to participate in the Bridge Inspector Certification Scheme, where they will be provided with specific training on all elements of structure inspections, including sampling and testing.

5.5.3. The Structures team further enables members of staff to complete further education up to degree level and participate in the company approved training scheme (approved by the Institution of Civil Engineers) up to Incorporated Engineer and where possible Chartered Engineer status.

5.6. Structural Reviews

5.6.1. The future management of highway structures should include a regime of ongoing structural reviews to ascertain their adequacy to support imposed loads. Such reviews should be undertaken when significant events occur that could increase the imposed loads above those previously assessed for and/or reduce the load bearing capacity of structures. A structural review should be undertaken, for example, when one or more of the following conditions or events occur:

- the structures are known or suspected to have load bearing capacities below those deemed to be appropriate for the class of highway supported;
- there is a significant change in the regulations governing the configurations and weight limits of vehicles which may use the relevant highway. The impact of such changes would generally have been assessed by the Department for Transport or Highways England and guidelines issued to authorities on the actions to be taken;
- the hierarchy of the road carried by the structure has changed or is proposed to be changed. The change may modify the density and type of traffic carried resulting in a change to the 'loading class' defined in BD21 The Assessment of Highway Bridges and Structures;
- records of the original design or subsequent assessment do not exist or have become discredited;
- the structure has been modified or is proposed to be modified;
- the structure is on a route proposed for an abnormal load movement, either a Special Order vehicle or an un-common STGO vehicle, for which the structure has not been previously assessed;
- significant deterioration or damage has been identified by an inspection. Conditions considered would include those found in structures such as arches which may be susceptible to changing condition factors.

5.5.2 Structural reviews are recommended to follow alternate Principal Inspections when these are done at the frequency included in the Inspection Manual for Highway Structures. Lincolnshire County Council will undertake Structural Reviews every two Principal Inspections. Where appropriate, a structural review may result in the need for a full structural bridge assessment.

6. Programming and Priorities

6.1. Introduction

- 6.1.1. Programming and priorities are dealt with in the UKRLG Highway Infrastructure Asset Management Guidance (HIAMG), Part B. The general principles to be applied to programming and priorities are outlined in [Volume 0](#) of this Code, with this section covering guidance relating to structures.
- 6.1.2. The maintenance planning and management process enables the Structures Manager to deliver Lincolnshire County Council's long term goals and objectives by developing maintenance plans that align with and provide detail to the work volumes and phasing identified in the Asset Management Framework.

6.2. Classification of Works

- 6.2.1. Three classifications have been made to describe the current operational standard for Structures:
- Routine Maintenance
 - Reactive Maintenance
 - Programmed Major Maintenance

6.3. Routine Maintenance

- 6.3.1. Lincolnshire County Council has established an appropriate routine maintenance regime for highway structures. In doing so particular consideration is given to the following points:
- Planned routine electrical, hydraulic and mechanical maintenance of moving bridges, carried out by specialist contractors. This is a significant commitment and undertaking for the Cross Keys Swing Bridge.
 - Planned routine electrical and mechanical maintenance of pumps used to drain subways, carried out by specialist contractors.
 - Minor maintenance is carried out by the Term Service contractor's 2 maintenance gangs for small Structures and safety fence items generated by bridge inspections and third party reports.

6.4. Reactive Maintenance

- 6.4.1. Lincolnshire County Council will reactively respond to any defects on its network, in accordance with its designated response times. Defects will usually be passed on to the Structures team in two ways: through inspections undertaken by Structures or Highways

inspectors, or noticed by members of the public. For Structures, all defects will be inspected by a delegated inspector and subsequently put on a planned programme regime and dealt with as soon as is reasonably practicable.

- 6.4.2. Removal of graffiti – Where graffiti on a highway structure is offensive or obscene, Lincolnshire County Council will remove it as soon as practicable. None offensive graffiti may be removed during other planned maintenance works.
- 6.4.3. Lincolnshire County Council is suitably prepared for urgent safety and stability concerns and emergencies and deals with them effectively when they occur. An emergency response procedure has been developed for this purpose and documented through the Network Resilience Team, and an associated emergency budget determined.
- 6.4.4. Lincolnshire County Council will further have a reactive response to its road restraint systems in terms of safety barriers. If the damage is safety critical Lincolnshire County Council will aim to make safe as soon as possible and repair within 7 days if reasonably practicable.

6.5. Programmed Major Maintenance

The Planning Process

- 6.5.1. The overarching elements for the Structures team to consider their planning process are the structure's ability to be safe to use and fit for purpose for its user.
- 6.5.2. They therefore consider the public safety, its location on the road network and the ease of access for the user. Its principal concern is the effect any issue may have on the local population and Lincolnshire's economy.
- 6.5.3. Relevant condition and performance inputs to the maintenance planning and management process include:
 - Inspection, testing and monitoring
 - Assessment of structures through structural reviews
 - Incidents, emergencies and reports from the police or public
- 6.5.4. The asset inventory, condition and performance data is used to determine the current performance of the highway structures in a way that supports the identification of needs. These needs can be identified through up-to-date Condition and Performance Data, Lifecycle planning and regular maintenance intervals.

- 6.5.5. The condition and performance data should be reviewed periodically by the Structures Manager to identify maintenance needs. It is recommended that General Inspection pro forma are reviewed and signed off no longer than two months after the inspection.

Lifecycle Plans

- 6.5.6. Lifecycle plans shall be used to identify needs on specific structures and elements. The cyclic/intervention rules established in the lifecycle plans are compared against the current condition and performance of a structure/element and the specific characteristics of the structure are assessed to determine if the lifecycle plan activity is appropriate.
- 6.5.7. Lifecycle plans are developed using whole life costing in order to establish the most cost-effective approach alongside asset performance and network safety. For more information on Lifecycle Planning, please refer to the Structures section in the Highways Asset Management Strategy

Works Programme

- 6.5.8. The structures workbank (works programme for Structures) is a database of all work that is currently outstanding on the network, including estimated costs for doing the work. It is recognised that certain work types by their very nature, e.g. re-active maintenance, cannot be planned in detail in advance but the workbank should still include a volume of work for these, albeit on unknown structures, based on past experience and engineering judgement.
- 6.5.9. The Forward Work Plan is a detailed 1 year programme of work. This provides details of the schemes to be carried out in the 1 year period and their approximate annual phasing. The Annual and Forward Work Plan are regularly monitored and reviewed to assess work delivery and changing priorities.
- 6.5.10. The Structures team further has a 5 year rolling indicative programme of work, which outlines all identified planned works over the upcoming 5 years, subject to analysis and approval. This list may alter, but provides a solid foundation to instigate a risk-based approach towards all upcoming programmed maintenance.
- 6.5.11. Feedback from inspections and maintenance work is utilised to improve the accuracy and development of lifecycle plans and maintenance strategies. Out-turn costs should be used to improve work bank cost estimates, whole life costing and asset management planning.
- 6.5.12. The workbank includes a full list of all maintenance required on the structures stock. The workbank provides the following information for each item of work:
- name and number/reference of the structure;
 - element where work is required;
 - defect, including severity and extent (if appropriate);
 - required work;
 - work type;
 - recommendation for when the work should be undertaken, i.e. which year; and

- estimated cost.

Value Management

6.5.13. Lincolnshire County Council prioritises the identified needs compiled in the structures workbank.

6.5.14. Value Management is the evidence provided by the Structures Team, by highlighting the reasoning behind the prioritisation of schemes within its workbank on a risk-based approach. It enables engineers readily to compare and identify a priority score for all schemes taking into account budgetary and conditional considerations, whilst ensuring network safety and structural solidity. Further socio-economic and environmental factors are also taken into consideration. The indicative works programme is reviewed annually to generate a 1 year Forward Work Plan

6.5.15. Factors considered in scheme selection include:

- position on the carriageway, footway, cycle route or PROW hierarchy;
- public safety implications;
- Financial implications of the work;
- implications of not acting, or delaying action;
- type of asset, e.g. bridge, tunnel, retaining wall, earth structure, etc;
- obstacle crossed, bridge span, retained earth height;
- critical asset, historic structure, permanent weight, height, width or swept path restriction;
- construction material, e.g. concrete or steel bridge, arch, slab or beam/girder bridge, concrete or stone walls, etc; and
- local factors.

Value Engineering

6.5.16. Value Engineering is the process of developing an optimal solution to a maintenance need and reducing waste and inefficient aspects of design, construction and maintenance. Value Engineering takes the prioritised needs from the Value Management exercise and creates cost effective schemes that can be planned, scheduled and implemented.

6.5.17. The two key components of Value Engineering are option appraisal and scheme development. Important criteria that feed into these components include maintenance options and standards, Whole Life Costing and synergies with other schemes.

6.5.18. Option appraisal is necessary to identify the appropriate maintenance solution when there is more than one practical alternative for addressing the maintenance need.

Scheme development is the effective combination of individual work items into schemes, in which each item makes best use of available funding and resources.

- 6.5.19. The full Value Engineering process is only appropriate for major schemes but a simplified process should be used to deal with moderate and minor works, where minor works should be grouped into those of a similar type to streamline the process.
- 6.5.20. Lincolnshire County Council employs multiple methods of Value Engineering, both on a day-to-day basis and for individual schemes. Mostly, throughout the process of the procurement exercises for large schemes, the Contractor will put forward its optimal method which will be reviewed and adjusted by the Authority if required.
- 6.5.21. Lincolnshire County Council further undertakes multiple feasibility studies throughout its processes for Structures schemes. Scheme specific risk reduction meetings are also required to be undertaken to ensure minimal risk and optimal Value for Money for planned major works
- 6.5.22. The developed schemes are included within the Forward Work Plan.

DRAFT

Highways Infrastructure Asset Management Plan



Volume 3 – Street Lighting

1. Introduction

- 1.1. Volume 3 of the Highways Infrastructure Asset Management deals with specific issues and themes regarding Street Lighting within Lincolnshire, in line with Part D of the Well-Managed Highways Infrastructure Code of Practice.
- 1.2. Lincolnshire County Council, as a highway authority, are empowered to light the highways but they do not have a duty to provide lighting for roads. Other local councils, such as City, District and Parish, can adopt powers to provide street lighting.
- 1.3. Street Lighting cover a number of different asset types, these can include:
 - lighting columns;
 - lighting units attached to walls/wooden poles;
 - heritage columns;
 - illuminated bollards;
 - illuminated traffic signs;
 - columns and foundations;
 - brackets;
 - luminaires;
 - control equipment, cables; and
 - control gear, switching, internal wiring cabling (within ownership).

2. Legal Framework

- 2.1. All general duties, powers and legislation specifically related to Street Lighting are dealt with in [Volume 0](#) and [Appendix E](#) of this HIAMP.

3. Asset Management Information

3.1. Central Management System (CMS)

- 3.1.1. Subject to funding being available, it is the policy of Lincolnshire County Council to implement a CMS system for the control of Street Lighting in Lincolnshire.

3.1.2. CMS shall be used to control street lights and provide an adaptable and flexible street lighting network.

3.1.3. CMS may be used to manage lights according to the hierarchy. Upon request from the appropriate authority, lights may be switched on or light output increased at sites where there is:

- Congestion
- Road works
- Incidents such as road traffic collisions, flooding etc.
- Localised reports of high crime or vandalism

3.1.4. Subject to them investing in the installation of communication nodes on their street lights, and paying for any other hardware or software expansions required, lighting authorities within Lincolnshire and neighbouring areas may make use of the CMS to manage their lights.

3.1.5. Participating authorities shall meet the full cost of providing CMS for their lights.

4. Asset Condition

4.1. Introduction

4.1.1. Street Lighting installations shall be the minimum standard for each class of road and designed in accordance with the recommendations contained in BS:5489 -1:2013 and BS EN 13201-2:2013.

4.1.2. In the interest of economy during the whole life of a street lighting installation designers shall be permitted to manage reasonable relaxations or departures from the recommendations contained in BS 5489 2013

4.1.3. Street lighting associated electrical installations shall comply with: BS 7671 17th edition 2011: The Requirements for Electrical Installations.

4.1.4. LED and HID white light lamps shall be the preferred light source throughout the county.

4.1.5. Street Lighting burning hours will normally* be:

Part Night Lighting: Dusk to 24:00 then

06:00 to Dawn

Dusk and Dawn switching levels as All Night Lighting

Dimmed Lighting: Depending on road geometry, expected use, traffic volumes and speed:

21.00 to 06:00 dimmed to 75% OR

24:00 to 06:00 dimmed to 75% OR

20:00 to 24:00 dimmed to 75% then to 06:00 dimmed to 50%

Dusk and Dawn switching levels as All Night Lighting

All Night Lighting: Dusk to Dawn 35 LUX on and 18 LUX off

Pedestrian Subway lighting twenty-four hour operation

*The UK adjusts clocks between British Summertime and Greenwich Mean Time in the spring and autumn. The lights have individual sensors that monitor the number of daylight hours, which is how they set their internal clock. This is then used to adjust for the change to British Summertime or Greenwich Mean Time. That means the sensors on the part-night lights enter a period of adjustment during spring and autumn, where the lights may start to turn off, or dim, slightly earlier or later than normal. Unfortunately, this is unavoidable but should have little or no impact on safety.

4.1.6. To minimise light pollution, lanterns on principal routes, major traffic routes and towns centre areas shall have a cut off distribution to minimise upward light glow with little or no light emitted above the horizontal, conforming to a minimum G4 luminous intensity rating.

4.1.7. Low energy electronic control gear and photocells shall be used.

4.1.8. In dimmed areas the levels of light at the bright and dimmed phases shall be compatible with an appropriate standard derived from BS 5489 – 1: 2013 and BS EN 13201-2: 2013

4.2. Street Lighting on Existing Roads

4.2.1. On existing adopted roads, Lincolnshire County Council will, as far as practicable, ensure its lighting forms a sustainable network by managing energy consumption to a minimum by:

A. Working through the following hierarchy for existing street lights wherever practicable, including when lighting comes to the end of its useful life:

1. Complete removal of lights (subject to a lighting assessment and local engagement) where this is the most financially sustainable solution considering removal costs.
2. Turning lights off (subject to a lighting assessment)
3. Part night lighting as described in section 4.1.5.
4. Dimming lights as described in section 4.1.5.
5. As a last resort, leaving lights fully lit during normal lighting hours.

B. Only supporting the provision of additional street lights on the existing highway where they are part night lit or dimmed and either:

1. they are financed by other local councils in Lincolnshire, in which case Lincolnshire County Council will adopt and maintain them without a commuted sum or;

2. it is in the interest of improving road safety (see 4.3 below) and finance is available from road safety budgets or;
3. they are paid for as part of a S278 scheme required for a developer to comply with a planning condition and are accompanied by a commuted sum or;
4. they are requested and paid for by major trip or abnormal load generators and are accompanied by a commuted sum.

C. Considering removal or replacement of existing street lighting, taking account of the hierarchy in A above:

1. when it comes to the end of its useful life and it is financially sustainable in the specific location, considering replacement or removal costs or;
2. when paid for as part of a S278 scheme required for a developer to comply with a planning condition or;
3. it is requested and paid for by major trip or abnormal load generators

4.2.2. Lincolnshire County Council funding for street lighting shall be restricted to publicly maintainable adopted highway.

4.2.3. Requests for the addition, removal or replacement of street lights from individuals or community groups will be required to be directed through the relevant Parish, Town, City or Borough Council.

4.2.4. Where Lincolnshire County Council does not own the street lighting on existing highway, requests for the addition, removal or replacement of the street lights will be forwarded to the owner of the lighting.

4.2.5. Subject to Lincolnshire County Council having funding available, any all-night footway lighting may be converted to part night in areas nominated by the relevant Parish Council.

4.3. Street Lighting to Improve Road Safety

4.3.1. Improvements will be considered (subject to budget constraints) where there is a night to day accident ratio greater than 2:1 and

- There is a proven accident record over the last three years bearing in mind the causes of the accidents and
- Where there have been a minimum of three separate night time injury accidents within 1km of road and
- Simpler engineering alternatives have been tried and have not been successful

4.3.2. Improvements to street lighting for road safety purposes will be subject to the availability of finance from road safety budgets.

4.4. Street Lighting for New Roads and Road Improvements

- 4.4.1. Subject to environmental and cost considerations Street Lighting may be provided on new sections of road where an economic assessment carried out in accordance with the DfT standard “TA 49/07 Appraisal of New and Replacement Road Lighting” determines that there will be a cost benefit in terms of accident savings.
- 4.4.2. Where the application of this standard determines that lighting is not required then a separate risk assessment shall then be applied to adjacent connecting junctions, roundabouts and all other road features to ascertain lighting requirements.
- 4.4.3. Where street lighting is justified on a new section of road (excluding development roads) the hierarchy described in Section 4.2.1 A of this volume shall be followed.

4.5. Street Lighting for Development Roads

- 4.5.1. Street Lighting will normally be provided by the developer and adopted by Lincolnshire County Council under the terms of section 38 or section 278 of the Highways Act 1980 or section 106 of the Town and Country Planning Act 1990. On section 38 schemes, street lighting shall be part-night lit.
- 4.5.2. In accordance with highway adoption procedures, lighting installations on proposed highway will be adopted concurrently with the rest of the adoption.
- 4.5.3. The developer will be responsible for all repairs, maintenance and energy charges prior to the adoption date.
- 4.5.4. Lincolnshire County Council as The Highway Authority may approve installations of decorative street lighting equipment where such lighting forms part of a system of highway lighting and proposed schemes are of comparable efficiency to standard road lighting.
- 4.5.5. Victorian period style or contemporary styled equipment may be approved where architectural or environmental issues need to be addressed in order to maintain the character of the locality.
- 4.5.6. Where a developer has chosen to depart from normal standards and this departure would ultimately lead to Lincolnshire County Council incurring higher than normal maintenance costs, Developers will be charged a commuted sum.
- 4.5.7. Calculation of a commuted sum will be in accordance with HAT 40.
- 4.5.8. The developer shall pay electricity charges for road lighting and illuminated signs until adopted by Lincolnshire County Council.

4.6. Adoption of Street Lighting from Other Local Lighting Authorities

- 4.6.1. Where a local authority requests Lincolnshire County Council to adopt existing street lights it shall be considered subject to budgetary constraints and formal agreement. The condition of the existing street lights will also be taken into account and may require a payment to cover the cost of bringing them up to serviceable, current standards.
- 4.6.2. Additional street lights on the existing highway that are financed by other local councils in Lincolnshire may be adopted and maintained by Lincolnshire County Council without a commuted sum, unless they are surrounded by an existing lighting scheme currently owned by another authority, in which case they will be approached to take ownership.

4.7. Shared Services Provision

- 4.7.1. The street lighting service has been identified as one in which service provision can be shared between participating authorities.
- 4.7.2. A service level agreement relating to “Maintenance of Unmetered Open Space Lighting” has been established pursuant to and subject to the conditions set out in the Collaboration Agreement dated 4 September 2008 made by the Lincolnshire Shared Services Partnership.
- 4.7.3. Participating authorities may be District, Parish, Town, City or Borough councils within Lincolnshire.
- 4.7.4. Participating authorities will retain ownership of their street lights, pay energy charges, meet the full cost of maintenance and replacements, and meet full cost of providing additional lights including connection charges and commuted sums.
- 4.7.5. Should they resolve to invest in the installation of communication nodes on their street lights participating authorities may also have their lights controlled by the Lincolnshire Central Management System as and when one is implemented.

4.8. Passive Safe Lighting Columns

- 4.8.1. A passive safe lighting column is designed to yield when it is struck by an errant vehicle thus making the collision less severe.
- 4.8.2. Passive safe columns shall be used in individual circumstances where a detailed risk assessment has taken place and there is an increased likelihood that the column may be struck by an errant vehicle.
- 4.8.3. In the interest of road safety the option of not replacing columns at vulnerable locations shall be considered.

5. Inspections

5.1. Introduction

5.1.1. The regime of street lighting inspection is in accordance with the budget priorities set out in 2011 (core offer review) and the one man working proposal for street lighting. This forms part of an asset management strategy intended to reduce cost, stay within the law and apply common sense. They comprise:

- Immediate attention to any damage or defects which could result in exposed electrical conductors, unsafe lighting column structures or components hanging loose of by its wires that is liable to fall to the ground.
- Night time patrols to identify unlit lamps.
- Repair of faulty lights
- Routine maintenance inspections and electrical tests.

5.2. Inspection Frequencies

5.2.1. The table below shows Lincolnshire County Council's inspection frequencies for Street Lighting.

Night Time Patrols	Every 4 Weeks
Lantern (internal and external)	Lantern cleaning is coincidental with routine maintenance inspections
Routine Maintenance	The routine maintenance frequency is commensurate with the core offer and is 6 years. A general condition inspection of the whole unit is carried out at the same time and the lamp is changed if appropriate
Electrical and Structural Testing	Upon commissioning, Street Lighting units are electrically tested in accordance with BS7671 and periodically tested at routine maintenance intervals. Street lighting cable networks will have their electrical earth loop impedance tested at each exit point. Structural defects are noted at the time of routine maintenance. Further non-destructive structural testing may be necessary
Response to Faults	<p>The response time is "within 2 hours".</p> <p>Lamp failure or similar non urgent faults are attended in accordance with 5.3 below.</p> <p>Electricity supply faults are restored by the electricity company, the service level is 21 working days from the time the fault is notified to the Electricity Company to the date when the said company advise that the supply has been restored</p>

5.2.2. As far as reasonably practicable there is a need to maintain streetlights and illuminated signs to ensure that they are electrically safe, structurally sound, random lamp failures are minimised and to maintain the lumen output of the lamps. The following regime has been adopted in accordance with the core offer.

Lamp Type	Description	Bulk Change Interval	
		Expected Burning Hours	Bulk Change Interval
Low Pressure Sodium	SOX+, SOX PSG, SOX HF, SOXE 35w and 55w	16,000	25,000
Low Pressure Sodium	90w, 135w, 180w	12,000	25,000
LED	Light Emitting Diode	60,000	60,000
High Pressure Sodium	SONT, SONE, SONI, SONC, PIA	16,000	25,000
Low Pressure Mercury	MCF/E	12,000	25,000
Compact Fluorescent	PLT PLL PLS	12,000	25,000
Subway Installations	LED	60,000	60,000
Cosmopolis	COP	16,000	25,000

5.2.3. Routine Maintenance for Street Lighting consists of inspection, cleaning, lamp change where applicable, visual structural inspection, reporting and electrical testing.

5.3. Defects

Category 1A Emergency Defects	Attend within 2 hours
<p>These defects are defined as electrical, structural or lighting defects that present an immediate danger to the highway user.</p> <ul style="list-style-type: none"> • Accident damage/vandalism where live cables/voltage may be exposed or cause a column to become live. • Doors open or missing from street lighting columns, illuminated signs or feeder pillars and wires are exposed. • Lighting point structural defect caused by, RTA, vandalism or bad weather conditions. • Call out by the police to a road traffic accident • Column or illuminated sign post collapse or in imminent danger of collapse 	
Category 1B Defects	Next working day response
<p>These defects that require attention where there is no immediate danger; Respond next working day from contractor's receipt of notification.</p>	

<ul style="list-style-type: none"> • Doors open or missing from street lighting columns, illuminated signs or feeder pillars no wires exposed. • Illuminated traffic bollard down or missing. • Lanterns on street lighting Columns or illuminated signs hanging by the supply cable. • Lantern Bowl hanging. 	
Category 2 Defects	Non routine repairs
<p>Repairs are scheduled into routes and reports of failures are dealt with on the next scheduled visit to the area. Each repair route is visited every two weeks. The average time for repair is 5 working days from the time and date that the contractor receives notification.</p> <p>Permanent replacement of “knocked-down” accident damaged equipment is replaced in accordance with the term contract processes. The normal procurement period is 90 days from when the contractor receives the order. National Guidance is for installation of a complete unit of apparatus to be completed within 20 working days (“Well Lit Highways”) Lincolnshire County Council’s 90 day response is a deviation due to the term contract processes.</p>	
Category 3 Defects	Repair or report within 24 hours of the contractor's receipt of an instruction
<p>Category 3 defects are those which are less serious than an emergency and in the case of lighting faults it would be un reasonable to expect the job to be serviced during the hours of darkness.</p> <ul style="list-style-type: none"> • Both lights on a set of Belisha Beacons inoperative. • A bowl missing from a Belisha Beacon. • All lighting out on normally lit street of three or more. • Five or more consecutive lights out on a road. • A request for service that comes from within the Council as a result of an action request or Members Enquiry. • Any reasonable request by the Council that requires a fast response. • Both flashing lights on a single post of a school patrol inoperative. • Both lens of school flashers broken • Regulatory sign missing or facing in the wrong direction. 	

5.4. Cleaning Cycles

5.4.1. Cleaning and inspection of street lighting units coincide with the 6 year routine maintenance intervals.

Design Equipment Category	Cleaning Intervals (Months)
Street Lighting Units	72
Traffic Sign Lighting Units	72
Illuminated Traffic Bollards	12

5.5. Illuminated Traffic Signs and Internally Lit Traffic Bollards

5.5.1. The primary objective is to keep illuminated traffic signs legible, visible and effective. The maintenance regime for illuminated signs and illuminated bollards shells is indicated in the Table below:

Night Scouting for Illumination	In conjunction with Street Lighting inspections
Routine Maintenance	Interval in accordance with the core offer is 6 years (see 5.2.1). 24 hour burning lamps within illuminated bollards are changed every year except for LED lights which burn to extinction.
Inspections, Cleaning and Electrical Testing of Illuminated Signs and Bollards	Takes place during routine maintenance operations.
External Cleaning of Illuminated Bollards	Takes place during routine maintenance operations and annually. Additional cleaning may be dictated by condition.
Replacement and Repair of Damaged Signs and Bollards	Respond according to the degree of danger in accordance with 5.3 above.

Appendix A – Asset Condition Requirements

The following tables set out the nature of contributions made by each element of the network towards safety, serviceability and sustainability.

	Network Safety	Network Serviceability	Network Sustainability
Overall Condition Requirements	<ul style="list-style-type: none"> • complying with statutory obligations; and • meeting users' needs for safety. 	<ul style="list-style-type: none"> • ensuring availability; • achieving integrity; • maintaining reliability; • resilience; and • managing condition 	<ul style="list-style-type: none"> • minimising cost over time; • maximising value to the community; and • maximising environmental contribution
Condition of Carriageways	<ul style="list-style-type: none"> • nature, extent and location of surface defects • nature and extent of edge defects • nature and extent of surface skidding resistance 	<ul style="list-style-type: none"> • nature and extent of surface defects • ride quality of the surface • resilience of the network 	<ul style="list-style-type: none"> • surface noise attenuation characteristics • nature and extent of surface defects • nature and extent of carriageway deflection • usage and verge creep
Condition of Footways	<ul style="list-style-type: none"> • nature, extent and location of surface defects • nature and extent of kerb and edging defects 	<ul style="list-style-type: none"> • nature and extent of surface defects • extent of encroachment and weed growth • the level of friction provided by the surface • the quality of the surface • integrity of the network 	<ul style="list-style-type: none"> • convenience and ease of use • nature extent and location of surface defects • extent of damage by over-running and parking • rural footways being lost to grass ingress
Condition of Cycle Routes	<ul style="list-style-type: none"> • nature, extent and location of surface defects • nature and extent of kerb and edging defects 	<ul style="list-style-type: none"> • nature and extent of surface defects • extent of encroachment and weed growth • the level of friction 	<ul style="list-style-type: none"> • convenience and integrity of the network • nature extent and location of surface defects

		<p>provided by the surface particularly with regard to ironwork</p> <ul style="list-style-type: none"> the quality of the surface integrity of the network 	<ul style="list-style-type: none"> extent of damage by over-running and parking cycle routes being lost to grass ingress/verge creep due to usage
Condition of Highways Drainage System	<ul style="list-style-type: none"> accumulation of water on carriageways, footways and cycle routes 	<ul style="list-style-type: none"> accumulation of water on carriageways, footways and cycle routes 	<ul style="list-style-type: none"> polluted effluent from clearing of highway drainage should not be directed into watercourses authorities have a duty to prevent nuisance and danger to adjoining landowners by flooding and should also work with others in the wider community to minimise the future risk of flooding inadequate drainage of the highway structure will reduce effective life and increase maintenance liability integrity of systems, root ingress, blockage / collapse, exceedance
Condition of Embankments and Cuttings	<ul style="list-style-type: none"> risk of loose material falling to injure users or damage facility 	<ul style="list-style-type: none"> risk of damage or service interruption 	<ul style="list-style-type: none"> damage or loss of habitat interruption or pollution of watercourse extent of damage and reduced life integrity of structure
Condition of Landscape Areas and	<ul style="list-style-type: none"> obstruction to user visibility and 	<ul style="list-style-type: none"> potential for service 	<ul style="list-style-type: none"> landscape conservation

<p>Trees</p>	<p>legibility of traffic signs</p> <ul style="list-style-type: none"> fallen trees or overgrown vegetation that physically obstructs part of the highway falling branches from trees leaf fall from trees causing slippery surface root growth affecting surface regularity 	<p>interruption</p> <ul style="list-style-type: none"> quality of user experience 	<ul style="list-style-type: none"> mitigation of climate change effects support for habitat and biodiversity problems of root growth for surface, structure and highway drainage maintaining healthy trees, root severance, ivy clearance
<p>Condition of Fences and Barriers</p>	<ul style="list-style-type: none"> integrity and location of safety fencing for vehicles, pedestrians and all road users 	<ul style="list-style-type: none"> risk of livestock disrupting traffic 	<ul style="list-style-type: none"> appearance and condition of fencing
<p>Condition of Traffic Signs and Bollards</p>	<ul style="list-style-type: none"> identification of risk to users separation of potential traffic conflicts 	<ul style="list-style-type: none"> contributes to ease of use contributes to network integrity 	<ul style="list-style-type: none"> support of sustainable transport mode contribution to local economy heavy traffic routing can optimise maintenance
<p>Condition of Road Markings and Studs</p>	<ul style="list-style-type: none"> route delineation, particularly in darkness and poor weather potential for damage and injury if loose 	<ul style="list-style-type: none"> ease of use, particularly in darkness and bad weather 	<ul style="list-style-type: none"> support of sustainable transport modes edge delineation to reduce edge damage movement of wheel tracking to reduce localised damage
<p>Regulatory Functions</p>	<ul style="list-style-type: none"> risk to users and adjoining property 	<ul style="list-style-type: none"> minimising and signing of obstruction 	<ul style="list-style-type: none"> inconvenience to disabled people structural damage from parked heavy vehicles

Appendix B – Response Times

Lincolnshire County Council's response times are based on the Council's classification of hierarchy taking into account the risk matrix laid out in *Well-Maintained Highways* which is illustrated below, assuming that a high impact defect on a lower hierarchy road will have the same potential impact but a much lower probability of causing this impact. This also correlates with the inspection frequencies of the network. The risk matrix has been taken from the previous Code of Practice *Well-Maintained Highways*, and has been updated to match Lincolnshire County Council good practice in line with the latest Code of Practice, *Well-Managed Highways Infrastructure*.

Probability →	Very Low (1)	Low (2)	Medium (3)	High (4)
Impact ↓				
Negligible (1)	1	2	3	4
Low (2)	2	4	6	8
Noticeable (3)	3	6	9	12
High (4)	4	8	12	16
Response	Category 2 (L)	Category 2 (M)	Category 2 (H)	Category 1

Risk Matrix for Lincolnshire County Council

Lincolnshire County Council's Category 1 and Category 2 defects are defined in the table below:

Lincolnshire County Council Standard
<p>Category 1</p> <p>Category 1 defects should be corrected or made safe at the time of the inspection, if reasonably practicable. In this context, making safe may constitute displaying warning notices, coning off or fencing off to protect the public from the defect. If it is not possible to correct or make safe the defect at the time of inspection, which will generally be the case, repairs of a permanent or temporary nature should be carried out within a period of 24 hours. Permanent repair should be carried out within 28 days.</p>

Category 2

Category 2 defects are those which, following a risk assessment, are deemed not to represent an immediate or imminent hazard or risk of short term structural deterioration. Such defects may have safety implications, although of a far lesser significance than Category 1 defects, but are more likely to have serviceability or sustainability implications. These defects are not required to be urgently rectified, and those for which repairs are required shall be undertaken within a planned programme of works, with the priority as determined by risk assessment. These priorities together with access requirements, other works on the road network, traffic levels, and the need to minimise traffic management, should be considered as part of the overall asset management strategy. The programmes of work for their rectification should be part of the HIAMP.

Category 2 defects are categorised according to priority with maximum response times of 7 days, 28 days, 90 days or potential planned programme, based on the risk probability and its likely impact.

Emergency Response

The following is a list of response times relating to Highway maintenance activities, that includes but is not limited to items covered in safety inspections. This table forms Lincolnshire County Council's risk assessment for intervention levels and response times but in all cases is subject to on-site professional judgement. In all cases these are maximum response times. Any reference to days is Calendar days unless otherwise stated.

In the notes field, some defects are identified as emergencies. These particular defects have been singled out as particularly high risk, and will be dealt with expeditiously but in all cases within 24 hours. They have been identified taking into account the likely risk; risk management always needs to take account of particular circumstances therefore it is possible other situations could be considered as emergencies. Defects notified by the emergency services are also considered to require an urgent response which complies with guidance in the previous Code of Practice *Well Maintained Highway Infrastructure*. Although the new Code of Practice no longer stipulates these requirements, Lincolnshire County Council still considers them to be good practice.

Escalation Process

These timescales commence at the point in time that the Council has knowledge of the defect. The Highways officer then undertakes a risk assessment and as a consequence categorises the defect. The HO has the opportunity to escalate a defect to a 1 or 2 hour make safe. The Highways Officer further has the opportunity to escalate or de-escalate a defect through a risk-assessment, and will be required to evidence the reasoning behind the changes made. Timescales are designed to enable highway defects to be, wherever practicable, actioned by a permanent repair.

The table outlining the timescales will at all points be referring to calendar days, not working days.

Carriageways*

Categories (mm = depth/height)	Major Road Network	Hierarchy 1	Hierarchy 2	Hierarchy 3	Hierarchy 4	Hierarchy 5	Hierarchy 6	Hierarchy 7	Hierarchy 8
Ironwork collapsed / missing / broken	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours
Ironwork raised / sunken greater than 25mm adjacent a hierarchy 1 and 2 footways	24 hours	24 hours	7 days	7 days	28 days	90 days	90 days	Potential Planned Programme	Potential Planned Programme
Ironwork raised / sunken greater than 40mm	24 hours	24 hours	7 days	7 days	28 days	90 days	90 days	Potential Planned Programme	Potential Planned Programme
Ironwork raised/sunken less than 25mm	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Pothole greater than 25mm adjacent a hierarchy 1 or 2 footway	24 hours	24 hours	7 days	7 days	28 days	28 days	90 days	Potential Planned Programme	Potential Planned Programme
Pothole greater than 40mm	24 hours	24 hours	7 days	7 days	28 days	28 days	90 days	Potential Planned Programme	Potential Planned Programme
Pothole less than 40mm	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Other abrupt level difference greater than 40mm	24 hours	24 hours	7 days	7 days	28 days	28 days	90 days	Potential Planned Programme	Potential Planned Programme
Edge damage greater than 40mm breaking edge white line	24 hours	24 hours	7 days	7 days	28 days	90 days	90 days	Potential Planned Programme	Potential Planned Programme
Edge damage greater than 40mm encroaching more than 100mm into metallised surface (no white line)	24 hours	24 hours	7 days	7 days	28 days	90 days	90 days	Potential Planned Programme	Potential Planned Programme
Edge damage less than 40mm	Potential	Potential	Potential	Potential	Potential	Potential	Potential	Potential	Potential

	Planned Programme	Planned Programme	Planned Programme	Planned Programme	Planned Programme	Planned Programme	Planned Programme	Planned Programme	Planned Programme
Missing/Defective road studs	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Severe loss of chippings on carriageway surface	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Surface issues (non-winter maintenance)	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme

*Highways Officers' decision to instigate the make safe process = 1 or 2 hour(s) response for all response times. Officers will be given the opportunity to escalate or de-escalate a defect dependant on a risk-assessment (see above).

Footways*				
Categories	Hierarchy 1	Hierarchy 2	Hierarchy 3	Hierarchy 4
Ironwork Collapsed/missing/broken	24 hours	24 hours	24 hours	24 hours
Pothole greater than 25m	24 hours	24 hours	24 hours	24 hours
Ironwork raised/sunken greater than 25mm	24 hours	24 hours	24 hours	24 hours
Trip greater than 25mm	24 hours	24 hours	24 hours	24 hours
Loose/Rocking/missing kerb stone	24hours	7 days	7 days	28 days
Pothole Less than 25mm	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Trip less than 25mm	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Ironwork raised/sunken less than 25mm	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme

Obstruction*									
Categories	Major Road Network	Hierarchy 1	Hierarchy 2	Hierarchy 3	Hierarchy 4	Hierarchy 5	Hierarchy 6	Hierarchy 7	Hierarchy 8
Fuel spillage or hazardous material on the highway	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours
Fallen tree/dangerous branch on the highway	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	7 days
Road Traffic Collision	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours
Visibility splays	7 days	7 days	7 days	7 days	28 days	90 days	90 days	90 days	Potential Planned Programme
Overgrown trees/hedges	28 days	28 days	28 days	28 days	28 days	90 days	90 days	90 days	Potential Planned Programme

**Highways Officers' decision to instigate the make safe process = 1 or 2 hour(s) response for all response times. Officers will be given the opportunity to escalate or de-escalate a defect dependant on a risk-assessment (see above).

Drainage*									
Categories	Major Road Network	Hierarchy 1	Hierarchy 2	Hierarchy 3	Hierarchy 4	Hierarchy 5	Hierarchy 6	Hierarchy 7	Hierarchy 8
Standing Water: over half carriageway	24 hours	24 hours	24 hours	24 hours	24 hours	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Standing Water: under half carriageway	7 days	7 days	7 days	7 days	28 days	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme

*Highways Officers' decision to instigate the make safe process = 1 or 2 hour(s) response for all response times. Officers will be given the opportunity to escalate or de-escalate a defect dependant on a risk-assessment (see above).

Signs/Lines*

Categories	Major Road Network	Hierarchy 1	Hierarchy 2	Hierarchy 3	Hierarchy 4	Hierarchy 5	Hierarchy 6	Hierarchy 7	Hierarchy 8
Missing / damaged non illuminated Stop, One Way, No Entry, Give Way sign	7 days	7 days	7 days	7 days	28 days	90 days	90 days	90 days	Potential Planned Programme
Missing / damaged non illuminated other sign	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Damaged / missing non-illuminated street furniture (LCC asset)	7 days	7 days	7 days	7 days	28 days	90 days	90 days	90 days	Potential Planned Programme
Give Way / stop line deteriorating	7 days	7 days	7 days	7 days	28 days	90 days	90 days	90 days	Potential Planned Programme
Markings deteriorating	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme	Potential Planned Programme
Offensive graffiti / vandalism to street furniture (LCC asset)	90 days	90 days	90 days	90 days	90 days	90 days	90 days	Potential Planned Programme	Potential Planned Programme

*Highways Officers' decision to instigate the make safe process = 1 or 2 hour(s) response for all response times. Officers will be given the opportunity to escalate or de-escalate a defect dependant on a risk-assessment (see above).

Verges

Categories	Major Road Network	Hierarchy 1	Hierarchy 2	Hierarchy 3	Hierarchy 4	Hierarchy 5	Hierarchy 6	Hierarchy 7	Hierarchy 8
Collapsed verge	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	24 hours	Potential Planned Programme	Potential Planned Programme

*Highways Officers' decision to instigate the make safe process = 1 or 2 hour(s) response for all response times. Officers will be given the opportunity to escalate or de-escalate a defect dependant on a risk-assessment (see above).

Appendix C – Future Maintenance Factors

This Table provides factors to consider by designers during the design process, to ensure that adequate consideration is given to future maintenance requirements of schemes. The list is not exhaustive but includes a number of key issues that may need to be addressed.

Issue	Check	Action
Scope and Scale		
Intended life of scheme	Is the scheme long life or 'temporary' and likely to be affected by future redevelopment?	Choose materials and products relevant to the life of scheme.
Nature of scheme	Is the scheme a 'unique' prestige project or a 'routine' standard one?	Choose materials and products relevant to the type of scheme.
Scope of scheme	Has the scheme been 'value-managed' to consider all possible marginal benefits?	All 'significant' schemes should be value managed.
Use of scheme	Is the scheme likely to be subjected to particularly 'heavy duty' traffic use with high rates of wear?	Select design and materials to mitigate these affects so far as possible.
Cost of scheme	Have the costs of future maintenance been calculated and included in future budgets?	Identify any extraordinary maintenance costs and report these alongside construction costs.
Design Aspects		
Pedestrians and cyclists	Do footways and cycle routes fit the actual paths used?	Redesign to reflect actual paths to avoid erosion and later replacement.
Heavy goods vehicles	Is footway paving likely to be over-ridden by HGV or other parked vehicles?	Where necessary use heavy duty paving or prevent over-riding to avoid frequent costly replacement.
Grassed and planted areas	Are grassed and planted areas of a size and position to be effectively maintained?	Redesign or remove where necessary to avoid future poor appearance and later resign.
Trees	Have trees been selected and positioned to avoid future problems with roots, obstruction or leaf fall?	Reselect or reposition where necessary to avoid potentially expensive future problems.
Traffic signs	Are traffic signs required to be illuminated or can they be reflectorised?	Maximise use of reflective signs to reduce energy costs.
Maintenance Operations		
Maintenance regime	Does the scheme require specialist maintenance regime?	Identify cost of specialist regime and, where appropriate, consider cheaper alternatives.

Cleansing	Does the scheme require specialist cleansing regime?	Identify cost of specialist regime and, where appropriate, consider cheaper alternatives.
Traffic management	Will maintenance require special traffic management?	Identify traffic management costs and minimise wherever possible, possible through co-ordination with other works.
Maintenance access	Is there safe and convenient access for plant and personnel?	Redesign scheme to provide safe and convenient access.
Materials and products		
Specialist materials	Are the materials used for the scheme of standard or specialist nature?	If specialist materials used ensure availability of future replacements.
Durability of materials	Does the durability of the materials provide substandard, oblique, sufficient or excessive life?	Select materials relevant to the intended life and nature of the scheme.
Failure mechanism	How will material/product approach the failure condition – slowly/quickly?	Programme safety and service inspections on basis of risk assessment.
Life extension	Are there any processes which could be used to extend useful service life at economic cost?	Investigate cost benefit of using life extension products.
Replacement practicability	Are there likely to be any difficulties in replacing failed sections?	Undertake risk assessment and plan for the likely difficulties.
Replacement cost	Is the cost of replacement likely to be disproportionately high?	Consider alternative materials or products.
Reuse and Recycling		
Practicability of reuse	If the scheme is a short life scheme what is the scope reusing materials and products?	Choose re-useable materials and products wherever possible.
Practicability of recycling	What is the scope for recycling materials and products?	Where re-useable materials and products are not appropriate, use recyclable wherever possible.

Appendix D – Glossary

For the purposes of the Highways Infrastructure Asset Management Plan, publically understood definitions are used for the major parts of the highway. There are also various differences in definitions across the various legal systems in the UK that would be inappropriate to repeat at length. In such cases the English term is used. The table below highlight the main relevant definitions.

Term	Definition
Highway	Road or Street
Carriageway	Facilities used by motorised vehicles
Footway	Part of a highway over which the public have a right of way on foot only, e.g. segregated surfaced paths used by pedestrians. Commonly understood as the term pavement
Pavement	Footway
Remote Footway	A footway which is not immediately adjoining a carriageway
Housing Footway	Footways that predominantly serve housing areas which may be unadopted as public highways but have established public rights of access and may be maintained separately by the housing authority
Footpath	Known as majority of Public Rights of Way (PROW)
Cycle Route	Facilities used by cyclists. These include cycle lanes on carriageways, cycle tracks adjacent to or away from carriageways, on carriageway provision with cycle symbols and shared use facilities
Running Surface (Industry term)	All hardened surfaces within the highway, including carriageways, footways and cycle routes
Pavement (Industry term)	Construction of running surfaces, particularly carriageways
Safety Inspections	Designed to identify all defects likely to create danger or serious inconvenience to users of the network or the wider community. The risk of danger is assessed on site and the defect identified with an appropriate priority response. Lincolnshire County Council combines its Safety and Service inspections into one overlapping inspection regime.
Service Inspections	Contains detailed inspections tailored to the requirements of particular highway assets and elements to ensure that they meet requirements for serviceability. These inspections also include inspections for network integrity intended to maintain network availability and reliability.
Condition Surveys	Recommended to identify deficiencies which, if untreated, are likely to adversely affect long term performance, serviceability and safety. Survey data is processed through a bespoke Lincolnshire decision support system which can provide evidence of future life expectancy and for when intervention may be appropriate.
Bridge	A structure with a span equal to or greater than 1.5m spanning and providing passage over an obstacle, e.g. watercourse, railway, road, valley. This category also covers subways, footbridges and underpasses
Cantilever Road Sign	A structure with a single support that projects over the highway in order to carry a traffic sign
Cellar or Vault	An underground room or chamber with a maximum plan

	dimension of 1.5m or more
Culvert	A drainage structure with a span or diameter greater than or equal to 0.6m but less than 1.5m passing beneath a highway embankment that has a proportion of the embankment, rather than a bridge deck, between its uppermost point and the road running courses. Culverts are normally rectangular or circular in cross section
Drainage	Span or diameter less than 0.60m
Retaining Wall	A wall associated with the highway where the dominant function is to act as a retaining structure, and with a minimum retained height of 1.35m
Road Tunnel	A tunnel with an enclosed length of 150 metres or more through which a road passes
Sign/Signal Gantry	A structure spanning the highway, the primary function of which is to support traffic signs and signalling equipment
General Inspection (Structures)	A visual inspection of representative parts of the structure. These are carried out on all structures regardless of ownership
Principal Inspection (Structures)	A close inspection (within 1m) of all visible parts of the structure. Specialist access equipment may be required in some cases. Carried out on all County owned structures with a span greater than or equal to 5m. Structures with spans less than 5m will be subject to a risk assessment.
Special Inspection (Structures)	These include a programme of bridges to be monitored following an assessment failure or where there is some on-going movement. In addition there is a programme of diving inspections where structures are known to be at risk from the effects of scour.
Acceptance Inspection (Structures)	A Principal Inspection which includes the identification of any permanent access provisions and features affecting the safety and security of the structure. It further outlines the identification and handover of all the necessary records, maintenance and operating manuals which have an impact on the future management of the structure; and shows an agreement of the date on which the authority takes over responsibility for the structure.

Appendix E – Legislation and Guidance

Vol 0 – Overarching Principles

Legislation and Guidance	Definition
Health and Safety at Work Act 1974	Provide a requirement for highway, traffic and street authorities to carry out work in a safe manner and establish arrangements for the management of construction works.
Construction (Design and Management) Regulations 2015	Provide a requirement for highway, traffic and street authorities to carry out work in a safe manner and establish arrangements for the management of construction works.
Localism Act 2011	Provides local authorities the power, with certain limitations, to do anything that individuals generally may do for the benefit of the authority, its area, or persons resident or present in its area. It also introduced measures such as the community right to challenge.
Local Government Act 2000	Duty of best value and aims to improve local services in terms of both cost and quality. The following points must be taken into consideration: <ul style="list-style-type: none"> • Statutory basis Local Government Act 1999 • Best Value Performance Plans • Reviews of all services on five year cycle • Statutory Inspection by Audit Commission • Statutory Framework of Best Value Performance Indicators
Highways Act 1980	Sets out the main duties and powers of Highway Authorities.
Section 41	Duty to maintain highways maintainable at public expense. Almost all claims against authorities relating to highway functions arise from alleged breach of this section
Section 58	Defence against action relating to alleged failure to maintain
Traffic Management Act 2004	Sets out a number of provisions including Highways England Traffic Officers, local authority duty for network management, permits for work on the highway, increased control of utility works, and increased civil enforcement of traffic offences
New Roads and Streetworks Act 1991	Provides a legislative framework for street works by undertakers (including utility companies) and gives various companies and agencies statutory powers and obligations to work in the highway
Countryside and Rights of Way Act 2000	Authorities are required to maintain records and ensure that ways are adequately signposted, maintained and free from obstruction.

Road Traffic Regulation Act 1984	Provides the powers to regulate or restrict traffic on UK roads , in the interest of safety
Traffic Signs Regulations and General Directions 2016	Prescribes the design and conditions of use of traffic signs on or near roads in England, Scotland and Wales.
Road Traffic Act 1988	Provides a duty for Highway Authorities to promote road safety, including a requirement to undertake accident studies and take such measures as appear appropriate to prevent accidents occurring
Road Traffic Reduction Act 1997	Imposes a duty upon local authorities to make reports about traffic levels and anticipated growth in those levels in order to set targets for traffic reduction or at least a reduction in the growth rate
Flood and Water Management Act 2012	Aims to reduce the flood risk associated with extreme weather. Provides for better, more comprehensive management of flood risk for people, homes and businesses
Transport Act 2000	Designation of quiet lanes or a home zones
Wildlife and Countryside Act 1981	Environmental and countryside issues with which highways operations must comply
Environmental Protection Act 1990	Provides the statutory basis for other environmental issues, in particular waste management, with which highway maintenance operations must comply
Clean Neighbourhoods and Environment Act 2005	Provides local authorities with more effective powers to tackle poor environmental quality and anti-social behaviour
Equality Act 2010	Legally protects people from discrimination in the workplace and in wider society
Criminal Justice and Public Order Act 1994	
Human Rights Act 1998	Sets out the fundamental rights and freedoms that everyone in the UK is entitled to
Freedom of Information Act 2000	Provides public access to information held by public authorities, who are obliged to publish certain information about their activities. Also members of the public are entitled to request information from public authorities
Civil Contingencies Act 2004	Delivers a single framework for civil protection in the UK

Some definitions taken from <http://www.legislation.gov.uk>

Vol 1 - Highways

Legislation and Guidance	Definition
Highways Act 1980	Sets out the main duties of Highway Authorities in England and Wales
Section 41	Duty to maintain highways maintainable at public expense
Section 58	Defence against action relating to alleged failure to maintain
Section 102	Provision of works for protecting highways against hazards of nature
Section 130	Duty to assert and protect the rights of the public
Section 150	Duty upon authorities to remove any obstruction of the highway resulting from 'accumulation of snow or from the falling down of banks on the side of the highway, or from any other cause'
Section 154	Empowers the authority to deal, by notice, with hedges, trees and shrubs growing on adjacent land which overhang the highway, and to recover costs
Section 239	Acquisition of land for construction, improvement etc. of highway: general powers
Section 240	Acquisition of land in connection with construction, improvement etc. of highway: further general powers
Section 250	Land acquisition powers to extend to creation as well as acquisition of rights
Traffic Management Act 2004	Duty for all local traffic authorities in England to manage the network effectively to keep traffic moving
New Roads and Street Works Act 1991	Provides a legislative framework for street works by undertakers (including utility companies) and works for road purposes – to the extent that these must be co-ordinated by street authorities.
Roads (Scotland) Act 1984	Duty for local roads authorities to keep a list of 'public roads' and to maintain and manage them
Section 34	A road authority shall take such steps as it considers reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads
Sections 88 and 92	Give roads authorities the responsibility to remove projections which impede or endanger road users, and provide restrictions on planting of trees near carriageways
Railways and Safety Transport Act 2003	To make provision about railways, including tramways; to make provision about transport safety; and for connected purposes.
Roads (Northern Ireland) Order 1993 SI	

1993/3160 (NI 15)	
Article 10	Duty for the Department for Infrastructure to remove snow, soil etc which has fallen on a road
Section 9	Enables the authority to take such action as it considers reasonable to prevent snow or ice interfering with the safe passage of persons and vehicles using the road
UKRLG Highway Infrastructure Asset Management Guidance	
The Weeds Act 1959	Empowers DEFRA to serve notice requiring an occupier of land to take action to prevent the spread of certain specified weeds
Wildlife and Countryside Protection Act 1981 – Section 14	This makes it an offence, liable to a fine, to plant or otherwise cause to grow in the wild, certain specified weeds
Section 53	Duty to keep the Definitive Map & Statement up to date
Countryside Act 1968 (Section 27)	Duty to signpost public rights of way

Some definitions taken from <http://www.legislation.gov.uk>

Vol 2 – Structures

Legislation and Guidance	Definition
Highways Act 1980	Sets out the main duties of Highway Authorities in England and Wales
Section 41	Duty to maintain highways maintainable at public expense
Section 55	Adoption by the strategic Highway Authority of all private bridges for Trunked roads
Section 75	Where any part of a highway is carried by a bridge over a railway, canal, inland navigation, dock or harbour or forms the approaches to such a bridge, the powers conferred by this section shall not be exercised in relation to that part without the consent of the railway, canal, inland navigation, dock or harbour undertakers concerned.
Section 91	Construction of bridge to carry existing highway maintainable at public expense.
Section 92	Reconstruction of bridge maintainable at public expense.
Section 93	Power to make orders as to reconstruction, improvement, etc., of privately maintainable bridges
Section 94	Powers of highway authorities and bridge owners to enter into agreements
Section 95	Supplemental provisions as to orders and agreements under sections 93 and 94

Section 106	Orders and schemes providing for construction of bridges over or tunnels under navigable waters
Section 110	Power to divert non-navigable watercourses and to carry out other works on any watercourse
Section 167	Powers relating to retaining walls near streets
Section 176	Licences for bridges over the highway
Section 179	Control of construction of cellars etc. under street
Section 180	Control of openings into cellars etc. under streets, and pavement lights and ventilators
Section 271	Provisions with respect to transfer of toll highways to highway authorities
Local Government Act 1972	Advises limited flexible powers for local authorities to provide certain archives services
Section 111	Bridges under the highway
Trunk Roads Act 1946 – Section 7	Adoption by the strategic Highway Authority of all private bridges for Trunked roads
The Transport Act 1968 – Part VIII	Bridges and level Crossings etc
Traffic Signs Manual Chapter 4	Signing Guidance
The Railway Bridges (Load Bearing Standards) (England and Wales) Order 1972 (SI 1072 No. 1705)	
ADEPT/Network Rail Protocol	Minimising risk of bridge strikes
BS EN 1991-2	Models of traffic loads for the design of road bridges, footbridges and railway bridges
Road Traffic Regulation Act 1984 – Section 1 and 2	Weight Restriction Orders
The Road Vehicles (Construction and Use) Regulations 1986 or the Road Vehicles (Authorised Weight) Regulations 1998	
BD 21 and BA 16	Weak Bridge warning signs and other appropriate mitigating solutions Guidance Document
Roads (Scotland) Act 1984 – Section 66	Maintenance of vaults and cellars etc
Coast Protection Act 1949 as amended by Section 36 of the Merchant Shipping Act 1988	Safety of navigation
Food and	Deposits in the sea

Environmental Protection Act 1985 Part II	
Party Wall Act 1996	Requires the issue of statutory notices when work affects adjacent properties within 3 metres of any construction works or within 6 metres if affecting foundation support
Climate Change Act 2008	Sets national targets for the year 2050 for the reduction of greenhouse gas emissions
Planning (Listed Building and Conservation Areas) Act 1990	Requires each authority to compile a list of buildings of special interest, either historic or architectural

Some definitions taken from <http://www.legislation.gov.uk>

Vol 3 – Street Lighting

Legislation and Guidance	Definition
Highways Act 1980	Empowers Lincolnshire County Council to light any highway or proposed highway however does not have a duty to provide lighting for highway
Section 38/278	Street Lighting will normally be provided by the developer and adopted by Lincolnshire County Council. On section 38 schemes, street lighting shall be part-night lit
Public Health Act 1961	
Section 45	Attachment of street lamps to buildings
Section 81	Summary recovery of damages for negligence
Roads (Northern Ireland) Order 1993 – Article 44	Grants the Department for Infrastructure the power to provide road lighting, where the Department considers that any road should be illuminated.
Roads (Scotland) Act 1984 – Section 35	Empowers a local roads authority to provide lighting for roads, or proposed roads, which are, or will be, maintainable by them and which in their opinion ought to be lit.
New Roads and Street Works Act 1991	Enabling act setting out the duties of Street Authorities to coordinate and regulate works carried out in the highway
Electricity Safety, Quality and Continuity Regulations 2002	Recording of all underground cables
Code of Practice for Recording of Underground Apparatus in Streets.	Recording of all underground cables
Clean Neighbourhoods and Environment Act 2005 – Section 102	States that artificial light is a potential statutory nuisance
Conservation (Natural Habitats, &c)	Protected species on artificial lights receive protection under these legislations. Care needs to

Regulations 1994 2007 European Protected Species of Plants and Animals	be taken not to disturb the animals themselves or their roosts and habitats. Guidance is available from the Bat Conservation Trust and the Institution of Lighting Professionals.
Traffic Management Act 2004	Local Authorities have a duty to enforce network management for the maintenance of records and information (e.g. including records and locations of apparatus) and to inspect the records
Climate Change Act 2008	Empowers the government to set national targets for the year 2050 for the reduction of greenhouse gas emissions and to encourage energy users to meet the objectives of the Act, such as reducing such emissions or removing greenhouse gas from the atmosphere. The Act also introduces legally binding carbon budgets, which set a ceiling on the levels of greenhouse gases that can be emitted into the atmosphere. The ensuing Carbon Reduction Commitment was renamed to CRC Energy Efficiency Scheme.
Crime and Disorder Act 1998 – Section 17	Duty to consider crime and disorder implications. The Crime and Disorder Act does not apply to Scotland or Northern Ireland.
Traffic Signs Regulations and General Directions 2016	Prescribes the design and conditions of use of traffic signs on or near roads in England, Scotland and Wales.
Civic Amenities Act 1967	Gave legislative control to the protection of conservation areas which are defined as - ‘an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.’
Electricity at Work Regulations 1989	Requires all systems to be constructed, maintained and operated as is reasonably practicable to prevent danger.
BS 7671 Requirements for Electrical Installations	States that installations which conform to the standards laid down in BS 7671:2008 are regarded by HSE as likely to achieve conformity with the relevant parts of the Electricity at Work Regulations 1989
Regulation 16 of the Electricity at Work Regulations	States that “No person shall be engaged in any work activity where technical knowledge or experience is necessary to prevent danger or where appropriate, injury, unless he possesses such knowledge or experience, or is under such degree of supervision as may be appropriate having regard to the nature of the work”

Some definitions taken from <http://www.legislation.gov.uk>

Appendix F – Action Plan

Outstanding actions	Implementation	Completion
<i>Develop Carriageways Hierarchies</i>	The potential for an Urban/Rural Split will continue to be developed. Hierarchy 4, 5, and 6 could be further split up to improve capability of targeted approach, with Data-analysis to be undertaken to evidence any need for change	October 2019
<i>Develop Footway Hierarchies</i>	Further development of Hierarchies which could be included into prioritisation programme as part of our move towards a risk-based approach.	January 2019
<i>Boundary Alignment</i>	Lincolnshire County Council will continue to engage with all neighbouring authorities to ensure all surrounding authorities are aware of the boundary roads and each other's response times.	October 2018
<i>Adjust Inspection Regime</i>	In line with Hierarchy changes, ensure Inspection regime is matched up to the new Hierarchy system.	October 2018
<i>Response Times Development</i>	Continually monitor suitability of current response times and deal with any requests for change.	October 2018
<i>Adapting the Winter Maintenance Plan</i>	Create a new Severe Weather Plan which creates a 'Triage' of response during a Severe Weather event and includes all CoP recommendations.	October 2018
<i>Resilient Network</i>	Create a Resilient Network which is the first step in the 'Triage' of response during a Severe weather event with engagement from Stakeholders and	October 2018
<i>Standards and Enforcement Plan</i>	Continue to develop a Standards and Enforcement Plan to be included within the current Network Management Plan	April 2019

<i>Adjust Safety/service inspections</i>	Utilising confirm to establish a risk-assessment throughout the inspection regime which enables a more evidence-based approach that outlines our decision-making from an Asset Management point of view.	April 2019
<i>Develop a data management Strategy</i>	Develop a robust evidenced plan of how the Service manages data in terms of security and what the Highways Service utilises all data for.	October 2019
<i>Drainage Asset collation</i>	Continuing ongoing work of completing a full-scale inventory list and developing a subsequent system which entails a more targeted approach to Drainage and gully cleansing.	April 2019
<i>Street Lighting</i>	Highlight and work towards the consequences of the implementation of the LED programme, and demonstrate within the HIAMP.	April 2019
<i>Update Highways Asset Management Policy & Strategy</i>	Ensure both Policy & Strategy are updated to align itself with the implemented changes within the HIAMP	April 2019

Summary of Changes – HIAMP 2018

Vol 0 - Overarching Principles

- Risk-based approach through
 - Hierarchy review – 4.3. (p. 14)
 - Response time review – Appendix B (p.100)*
 - (de-)escalation process – Appendix B (p.101)

Vol 1 - Highways changes

- Condition Inspections vs. Safety & Service Inspections. Safety and Service inspections combined – Section 4/5 (p.35 – p.60)
- Quantified Tree Risk Assessment – 4.4.5. (p.44)
- Weed Treatments – 2 treatments a year – 4.4.6. (p.46)
- Route-based reviews for Signs – 4.4.7. (p.47)
- Area-based Inspections for Public Rights of Way (PROW) – 5.8. (p.56)
- Programming – Scheme Selection Lincolnshire Condition Indicator created for prioritisation of planned and programmed maintenance – 6.4. (p. 62)

Vol 2 - Structures Changes

- Acceptance inspections – 5.1.10 (p.73)
- Increase corrugated steel pipe and concrete pipe (from 0.6m diam to 1.499m diam) inspections from two yearly to six yearly – 5.2. (p.74)

- Culverts over 600mm but less than 1.5m to be defined as structures – 5.2. (p.75)
- Diving inspections – 5.2. (p.76)
- Most critical structures to be included in the Resilient Network (Winter Maintenance Plan)

*** Response time changes –**

- Missing/Defective Road Stud – 24 hours to Potential Planned Programme – not a safety defect, would be classed as a pothole therefore use pothole response times.
- Severe loss of chippings – 24hrs to Potential Planned Programme
- Edge damage greater than 40mm – new H5/6 28 days to 90 days
- Ironwork raised / sunken greater than 25mm adjacent a hierarchy 1 and 2 footways – new H5/6 28 days to 90 days
- Ironwork raised/sunken greater than 40mm- new H5/6 28 days to 90 days
- Pothole greater than 25mm adjacent a hierarchy 1 or 2 footway – old H5 new H6 28 days to 90 days
- Pothole greater than 40mm - old H5 new H6 28 days to 90 days. New H7/H8 green lane potholes to potential planned programme
- Other abrupt level difference greater than 40mm - old H5 new H6 28 days to 90 days
- Visibility Splays – new H5/6 from 28 days to 90 days
- Overgrown Trees/Hedges - new H5/6 from 28 days to 90 days
- Standing Water over/under half carriageway – new H5/6 from 28 days to Potential Planned Programme
- Investigate Flooding - no longer required as Network Management does not see this as a potential safety defect, would use the standing water response times
- Missing/damaged non illuminated Stop, One Way, No Entry, Give Way sign –old H5 new H5/6 from 28 days to 90 days
- Damaged / missing non-illuminated street furniture (LCC asset) - old H5 new H5/6 from 28 days to 90 days
- Give Way / stop line deteriorating - old H5 new H5/6 from 28 days to 90 days
- Offensive graffiti / vandalism to street furniture (LCC asset) – 7 days to 90 days – agreed that this is not a safety defect

Adjacent Authorities

5 other Authorities were looked at to compare with Lincolnshire County Council's response times. The below table shows the response times for various categories of routes and the respective depth of the surface defect (pothole) to which they would respond to.

National standard	Authority A	Authority B	Authority C	Authority D	Authority E	Lincolnshire County Council
Strategic Routes (LCC MRN, H1)	24hr >100mm, else within 28 days	5 days >50mm, else within 4 months	24 hrs >40mm, else planned programme	5 days >40mm from moment it is inspected, or 21 days if inspection deems it low risk	2 days >75mm, 5 days >50mm, 20 days >25mm, planned programme <25mm	24 hrs >40mm, else planned programme. Officer can (de-)escalate if evidenced on risk
Main Distributor (LCC H2)	24hr >100mm, else within 28 days	5 days >50mm, else within 4 months	7 days >40mm, else planned programme	5 days >50mm from moment it is inspected, or 21 days if inspection deems it low risk	2 days >75mm, 5 days >50mm, 14 weeks >25mm, planned programme <25mm	7 days >40mm, else planned programme. Officer can (de-)escalate if evidenced on risk

National standard	Authority A	Authority B	Authority C	Authority D	Authority E	Lincolnshire County Council
Secondary Distributor (LCC H3)	24hr >100mm, else within 28 days	5 days >50mm but only for roads with speed Limit >30mph, else within 4 months	7 days or 28 days >40mm, else planned programme	5 days >50mm from moment it is inspected, or 21 days if inspection deems it low risk	2 days >100mm, 5 days>50mm, 14 weeks >25mm, planned programme <25mm	7 days or 28 days >40mm, else planned programme. Officer can (de-)escalate if evidenced on risk
Link Road (LCC H4,H5)	24hr >100mm, else within 3 months	5 days >75mm, else within 4 months	28 days >40mm, else planned programme	5 days >40mm from moment it is inspected, or 21 days if inspection deems it low risk	5 days >100mm, 10 days>50mm, else planned programme	28 days >40mm, else planned programme. Officer can (de-)escalate if evidenced on risk
Local Access (LCC H6)	24hr >100mm, else within 3 months	6 days >75mm, else within 4 months	Planned Programme	5 days >40mm from moment it is inspected, or 21 days if inspection deems it low risk	5 days >100mm, 10 days>75mm, 20 days>50mm, else planned programme	90 days >40mm, else planned programme. Officer can (de-)escalate if evidenced on risk
Minor Routes (LCC H7,H8)	Planned Programme	Planned Programme	Planned Programme	5 days >80mm from moment it is inspected, or 21 days if inspection deems it low risk	10 days >100mm, 20 days>75mm, 14 weeks>50mm, else planned programme	Planned Programme. Officer can (de-)escalate if evidenced on risk

**Open Report on behalf of Richard Wills,
Executive Director for Environment and Economy**

Report to:	Highways and Transport Scrutiny Committee
Date:	10 September 2018
Subject:	Winter Service Plan 2018

Summary:

This report sets out the proposed amendments to the existing highways Winter Maintenance Plan issued October 2017, to take account national guidance in Well Managed Highway Infrastructure – Code of Practice.

A copy of the Winter Service Plan dated August 2018, along with a summary of changes from the previous Winter Maintenance Plan, are attached for consideration.

Actions Required:

- (1) To consider the attached decision report and to determine whether the Committee supports the recommendations to the Executive Councillor for Highways, Transport and I.T.
- (2) To agree any additional comments to be passed to the Executive Councillor for Highways, Transport and I.T in relation to the Winter Service Plan 2018.

1. Background

- 1.1. The Winter Service Plan should be read as a supplement to the Highways Infrastructure Asset Management Plan, and sets out the policy and procedures required for winter service management.
- 1.2. Although sometimes termed “Winter Maintenance”, the particular network management requirements during winter are not “maintenance”, in the traditional sense, but specialist operational services. The term “Winter Service” has been adopted by this plan, as a change to last year's plan.
- 1.3. The statutory basis for Winter Service in England and Wales is Section 41 (1A) of the Highways Act 1980 which places a duty on highway authorities

to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

- 1.4. Lincolnshire County Council carries out precautionary and snow clearance treatments on the road network in accordance with this policy across the County. The policy only provides for roads for which the Local Authority has responsibility. Trunk roads (the A1, A52 west of Grantham and A46 County Boundary to Carholme Road Roundabout Lincoln) within Lincolnshire and their respective winter treatment are the responsibility of Highways England.
- 1.5. The revised Winter Service Plan takes into account the changes suggested by the "Well Managed Highway Infrastructure – A Code of Practice" document published in October 2016. This document, commissioned by the Department for Transport, provides local authorities with guidance on how to develop a highways maintenance policy based on best practice.
- 1.6. The latest Winter Service Plan makes a number of operational changes to its policy. These changes have been put to the Scrutiny committee throughout the year to ensure knowledge of the issues. The proposed changes are to reflect the move towards the use of Treated Salt, the formalisation of a Resilient Network within our Severe Weather Response through a Triage of escalation and the reforms with our Grit Bin Policy.
- 1.7. The document further outlines its approach towards resilience of the network in more detail, in line with the Code of Practice expectations. However, the Gritting routes have not been altered this time, as the road network has encountered no changes over the last year.
- 1.8. The Authority has the capability of calling upon 43 gritters strategically placed around the county, with 4 spare gritters utilised as back-ups. Treatment time of the entirety of the Precautionary Salting Network will take a maximum of 3 hours, as dictated within the policy. This Precautionary Salting Network will be treated based on the Route Based Forecasting system. This system uses weather forecasts and measures the predicted impact on the road network, highlighting where the essential needs for salting treatment, if required, are located.
- 1.9. The Plan outlines that a minimum of 25,000 tonnes of salt should be in stock at the start of the winter season, with a minimum of 15,000 tonnes available at any time across the county. This has been changed from 35,000 tonnes last year in line with the implementation of Treated Salt and an improved Stock management System. These salt stocks are kept under cover within our local highways depots.
- 1.10. At this moment in time, the Authority has carried out 121 precautionary salting runs (gritters deployed to 'run' their designated routes) with 4 snow days occurring within the season, leading to 15 plough runs within that time. The Authority has utilised 37,897 tonnes of salt this winter. During the 2016/2017 season, the Authority carried out 63 precautionary runs, and utilised 13,374 tonnes of salt. During the 2015/2016 season, 55

precautionary runs were also carried out, but only 10,010 tonnes of salt was used. In the 2014/2015 season, 91 precautionary runs were undertaken and 24,009 tonnes of salt was used, due to the presence of 2 snow days within that season.

- 1.11. A Winter Rally is scheduled to be undertaken in the last week of September, as part of the final preparation for the Winter Season. This Winter Rally entails training and re-acquainting the Gritter drivers with the vehicles and the route, optimising the vehicles and performing final checks on the equipment used throughout the process.

2. Proposed Changes

Treated Salt

- 2.1. Lincolnshire County Council last season utilised a system called pre-wetting to treat its salt before spreading it on the roads. The pre-wetting system sprays a high quality white marine salt with brine solution which facilitates the de-icing process. The brine for this process is made by brine making facilities installed in winter maintenance depots around County.
- 2.2. Based on spread rates alone, it is economical to use pre-wet salt. However to run a pre-wet operation a number of precursors are needed. These are;
 - Brine making facilities at each Depot
 - High purity White Marine salt for brine production
 - Water source to mix with salt
 - Storage facilities for the Brine
 - Pre-wet tanks and modifications on the gritting vehicles
- 2.3. Lincolnshire's Brine Making facilities are over 20 years and are becoming expensive to maintain and operate. Over the next 5 years they will all need to be replaced as maintenance costs become prohibitive.
- 2.4. The industry has developed a number of technological advancements over the last few years. One of these is the development of Treated Salt, an English variation now utilised by a number of Authorities around the County. This is brown salt which has been treated with a natural agricultural by product such as "Safecote" which provides similar advantages to pre-wet salt but without having to invest in Brine Facilities or gritter modifications. Furthermore, it is more cost-effective to purchase brown salt than White Marine Salt.
- 2.5. Therefore Lincolnshire County Council will tender for this salt ready for use this year. It is the expectation that half the fleet will run with the new salt, the other half will run down and use the remaining white salt stock. Once this has been achieved and treated salt is considered to be effective, then the decision to roll out this method of working will be rolled out throughout the county for the 2019/20 Winter Season. The Plan reflects this change.

Salt Storage

- 2.6. It was the County Council's policy to have 35,000 tonnes of salt stored in its depots at the start of a winter season. The move towards Treated salt provides the opportunity to change that policy to 25,000 tonnes. The Treated Salt purchase will come alongside a more effective stock management system, where the provider will stock up every depot with 500 tonnes of salt once 500 tonnes of salt has been utilised.
- 2.7. This "little and often" methodology for Treated Salt will come at no additional cost to the Authority and allows for this move towards a minimum of 25,000 tonnes at the start of the season. This number still exceeds the minimum requirements set out by National Guidelines which outline a need for salt availability at the start of the season for at least 40 County-wide runs, which this number will cover without additional risk.

Resilient Network

- 2.8. Within the new 'Well-Managed Highway Infrastructure' Code of Practice it was highlighted and recommended that each Local Authority should have a Resilient Network, described as a road network which "receives priority through maintenance and other measures in order to maintain economic activity and access to key services during disruptive events."
- 2.9. The proposal accepted in the previous Scrutiny meeting outlined the need to use this concept of a Resilient Network to formalise a Triage system integrating the resilient network for gritting in severe weather events. The Resilient network (minimum winter network) will be the first priority to be made safe during a severe weather event. The Precautionary Salting Network is the subsequent priority and Severe Weather routes will be considered as a third priority.

Grit Bin Review

- 2.10. In terms of Grit bins, the following proposals on requests for new grit bins have been integrated into the Winter Service Plan. First, a responsible body shall be defined as a parish or town council, residents association or educational establishments. Additionally, Lincolnshire County Council will now only accept requests from those who would act as a responsible body.
- 2.11. Secondly, the non-gritted network will have a decreased influence on the grit bin scoring criteria. More specifically, this entails a more focused approach towards identifying suitable locations for grit bins. The location of a Grit bin will have more of an effect than that this grit bin request is solely on the non-gritted network.
- 2.12. Finally, to increase the influence the severe network has on the grit bin scoring criteria. Our severe network will get gritted in the event of a longstanding severe weather event once our Resilient network and

Precautionary Salting Network are suitably salted. This network serves as a network that demonstrates the key routes towards local communities, and this will be taken into consideration in the new scoring mechanism.

- 2.13. On grit bin filling, the Authority proposed to arrange for all grit bins to be checked and filled once in advance. During the winter season the Winter Service will only arrange grit bin refills as and when requested based on the maintenance area, with no additional county-wide refills to be undertaken. This helps avoid excessive demands on the service, promotes efficiency and likely reduces the number of refill requests received.

3. Conclusion

Following consideration of the report, the Highways and Transport Scrutiny Committee is requested to consider whether it supports the recommendations in the Appendix 1 and whether it wishes to make any additional comments to the Executive Councillor for Highways, Transport and IT.

4. Consultation

a) Have Risks and Impact Analysis been carried out?

Yes

b) Risks and Impact Analysis

5. Appendices

These are listed below and attached at the back of the report	
Appendix 1	Winter Service Plan Executive Councillor Report

6. Background Papers

Document title	Where the document can be viewed
Well Managed Highways Infrastructure	http://www.ukroadsliaisongroup.org/en/codes/

This report was written by Vincent Van Doninck, who can be contacted on 01522 550625 or Vincent.VanDoninck@lincolnshire.gov.uk.

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Open Report on behalf of Richard Wills, Executive Director for Environment and Economy

Report to:	Councillor R G Davies, Executive Councillor for Highways, Transport and IT
Date:	Between 12 September 2018 and 21 September 2018
Subject:	Winter Service Plan 2018
Decision Reference:	I016424
Key decision?	Yes

Summary:

This report sets out proposed amendments to the existing highways Winter Maintenance Plan issued October 2017 to take into account national guidance and the recommendations from the Highways and Transport Scrutiny Committee.

Recommendation(s):

That the Winter Service Plan dated August 2018 attached as Appendix A to this report is approved.

Alternatives Considered:

Not to update the Plan and continue to operate to the October 2017 version. This could potentially impede the operational decision-making process for the Network Resilience Team in charge of the Winter Service. The Plan would not reflect the change, separately approved, to the Treated Salt approach, savings identified through the proposed grit bin review and Resilient network would not be achieved, and the Winter service would come under budgetary pressure.

Reasons for Recommendation:

The Winter Service Plan is updated annually so as to:

- Develop robust standards
- Further implement proposed changes in national standards and best practice where appropriate
- Update with the current operational service as undertaken by our new Network Resilience team.
- Streamline the document to reflect current practice.

1. Background

- 1.1. The Winter Service Plan should be read as a supplement to the Highways Infrastructure Asset Management Plan, and sets out the policy and procedures required for winter service management.
- 1.2. Although sometimes termed “Winter Maintenance”, the particular network management requirements during winter are not “maintenance”, in the traditional sense, but specialist operational services. The term “Winter Service” has been adopted by this plan, as a change to last year's plan.
- 1.3. The statutory basis for Winter Service in England and Wales is Section 41 (1A) of the Highways Act 1980 which places a duty on highway authorities to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.
- 1.4. Lincolnshire County Council carries out precautionary and snow clearance treatments on the road network in accordance with this policy across the County. The policy only provides for roads for which the Local Authority has responsibility. Trunk roads (the A1, A52 west of Grantham and A46 County Boundary to Carholme Road Roundabout Lincoln) within Lincolnshire and their respective winter treatment are the responsibility of Highways England.
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product such as "Safecote" which provides similar advantages to pre-wet salt but without having to invest in Brine Facilities or gritter modifications. Furthermore, it is more cost-effective to purchase brown salt than White Marine Salt.

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3. Legal Issues:

Equality Act 2010

Under section 149 of the Equality Act 2010, the Council must, in the exercise of its functions, have due regard to the need to:

- * Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act
- * Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it
- * Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; and sexual orientation

Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:

- * Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic
- * Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it
- * Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to tackle prejudice, and promote understanding

Compliance with the duties in section 149 may involve treating some persons more favourably than others

The duty cannot be delegated and must be discharged by the decision-maker. To discharge the statutory duty the decision-maker must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision making process

The Equality Act has been taken into account in this instance and an Equality Impact Analysis is attached at Appendix C. This review of the Winter Maintenance Plan is considered to have an impact as the strategy is at a high level of generality and is positive in its impact on people with a protected characteristic when compared with people who do not share that characteristic. Please review the Equality Impact Analysis in Appendix C for more information.

Joint Strategic Needs Analysis (JSNA and the Joint Health and Wellbeing Strategy (JHWS)

The Council must have regard to the Joint Strategic Needs Assessment (JSNA) and the Joint Health & Well Being Strategy (JHWS) in coming to a decision

The effect of revisions to the Winter Maintenance Plan on the JSNA and JHWS has been considered and deemed to have a positive impact. Our salting provisions are considered to be a means by which to ensure safety and subsequent health and wellbeing.

Crime and Disorder

Under section 17 of the Crime and Disorder Act 1998, the Council must exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area (including anti-social and other behaviour adversely affecting the local environment), the misuse of drugs, alcohol and other substances in its area and re-offending in its area

The duties under section 17 of the Crime and Disorder Act 1988 have been considered and it is deemed that the proposed changes to the Winter Maintenance Plan will have no direct impact.

4. Conclusion

Following consideration of the report by the Scrutiny Committee, the Executive Councillor is requested to consider whether to approve the changes implemented in the Winter Service Plan as set out in Appendix A. The new Winter Service Plan will then become operational from the 1st of October 2018.

5. Legal Comments:

The Council has the power to adopt the Winter Service Plan in the form attached at Appendix A. The decision is consistent with the Policy Framework and within the remit of the Executive Councillor.

6. Resource Comments:

There is sufficient resource within the currently approved revenue budget for this service to undertake the activity as set out in the proposed Winter Service Plan. The Council also holds sufficient resources in its reserve, to manage additional activity in the case of severe weather conditions.

7. Consultation

a) Has Local Member Been Consulted?

N/A

b) Has Executive Councillor Been Consulted?

Yes

c) Scrutiny Comments

The report will be considered by the Highways and Transport Scrutiny Committee at its meeting on 10 September 2018. Any comments from the Committee will be presented to the Executive Councillor for Highways, Transport and I.T.

d) Have Risks and Impact Analysis been carried out?

Yes

e) Risks and Impact Analysis

An EIA has been carried out and is attached in Appendix C.

8. Appendices

These are listed below and attached at the back of the report	
Appendix A	Winter Service Plan - August 2018
Appendix B	Winter Data Report
Appendix C	Equality Impact Analysis for the Winter Service Plan
Appendix D	Summary of Changes – WSP 2018

9. Background Papers

Document title	Where the document can be viewed
Well Managed Highways Infrastructure	http://www.ukroadsliaisongroup.org/en/codes/

This report was written by Vincent Van Doninck, who can be contacted on 01522 550625 or Vincent.VanDoninck@lincolnshire.gov.uk .

Winter Service Plan



October 2018

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1. General

1.1. Key Points

PRECAUTIONARY SALTING NETWORK

The Lincolnshire County Council prioritises 3,008 km of its road network in the form of a Precautionary Salting Network.

TRIAGE

A Triage of Escalation as a response to Severe Weather. The Resilient network (minimum winter network) will be the first priority to be made safe during a severe weather event. The Precautionary Salting Network is the subsequent priority and Severe Weather routes will be considered as a third priority.

ROUTE BASED FORECASTING

The Winter Service has moved away from solely temperature-based forecasting to a Route Based Forecasting system which improves efficiency and achieves better value for money. Innovations in forecasting technology now allow the Forecast Service Provider to provide a "route based forecast", which is effectively an individual forecast for each of the 43 precautionary salting routes, each of which is divided into multiple sections. Temperature, however, continues to form part of the decision-making process alongside Route Based Forecasting

SALTING STOCK

A minimum of 25,000 tonnes of salt should be in stock at the start of the winter season, with a minimum of 15,000 tonnes available at any time across the county. These salt stocks are kept under cover within our local highways depots.

PRE-WETTING SYSTEM AND TREATED SALT

*A system of Pre-Wetting has been used to facilitate better gritting of the roads by helping the salt stick to the road, making the salting process less dependent on weather conditions. The Pre-wetting system sprays the salt with a Brine solution which causes the salt to go into a chemical reaction which facilitates de-icing without the need for vehicles to drive over the salt.
Treated Salt will be utilised from the 2018/19 season. This consists of brown salt that has been treated with a natural agricultural by product such as "Safecote", and provides similar benefits to the pre-wetting system.*

1.2. Introduction

- 1.2.1. A Highway Infrastructure Asset Management Plan is produced and updated annually. This plan sets out standards, policy and objectives for the highway network. The Winter Service Plan is a supplement to the Highway Infrastructure Asset Management Plan.
- 1.2.2. Lincolnshire County Council carries out precautionary and snow clearance treatments on carriageways and footways in accordance with this approved policy across the County.
- 1.2.3. All Trunk Road treatment is carried out by Highways England's Contractors as part of the Area 7 agency, which is run by Highways England. The Trunk Road network includes the A1, A52 west of Grantham and A46 County Boundary to Carholme Road Roundabout Lincoln.
- 1.2.4. There are eight operational depots in the County. These are located at Sturton by Stow, Willingham Hall, Manby, Horncastle, Ancaster, Thurlby, Chainbridge and Podington.
- 1.2.5. All operations are carried out taking regard of National Guidance and Best Practice contained within the following documents:
 - Section 13 of *Well Managed Highway Infrastructure – A Code of Practice*
 - National Winter Service Research Group Practical Guide for Winter Service.
- 1.2.6. Winter Service will operate and prioritises on the basis of Safety, Serviceability, Sustainability and Customer Service.

2. Policy

2.1. Resilient Network

- 2.1.1. Within the new 'Well-Managed Highway Infrastructure' Code of Practice it was highlighted and recommended that each Local Authority should have a Resilient Road Network.
- 2.1.2. The Code of Practice describes a resilient network as a road network which "receives priority through maintenance and other measures in order to maintain economic activity and access to key services during disruptive events." This Road network includes crucial economic routes whilst taking into account repeat weather events and additional local factors.
- 2.1.3. Another element to generating a Resilient Network is defining a Minimum Winter Network linking into this road network. It is Lincolnshire County Council's policy to maintain a focus on the key parts of our road network when severe weather events arise by developing a Minimum Winter Network linked into the Resilient Network system.
- 2.1.4. Lincolnshire County Council's Resilient Network identifies all the critical routes within the County which are classed as priority in severe weather incidents. This takes into account connectivity to major communities, access to emergency services, links to all critical infrastructure and transport hubs, repeat weather events and additional local factors.
- 2.1.5. Lincolnshire County Council's Resilient Network consists of the statutory A and B Roads map layer and the drawn on routes within the main towns that consider the essential points which are included in the Code of Practice. The main elements to determine inclusion are:
 - connectivity between major communities;
 - links to the strategic highway network;
 - connectivity across authority boundaries where appropriate;
 - links to transport interchanges;
 - access to emergency facilities including Fire and Rescue, Police, Ambulance Services and hospitals;
 - links to critical infrastructure (ports, power stations, water treatment works etc);
 - principal public transport routes, access to rail and bus stations, and to bus garages and other depots; and
 - other locally important facilities.

- 2.1.6. Consultation on the Resilient Network has taken place between internal and external partners to determine the routes, with organisations such as Utility companies and Emergency Services being consulted.

2.2. Precautionary Salting Network

- 2.2.1. Winter Service operations will give priority to a 3,008 km network of priority routes, as shown in Appendix J, which have taken into account historical treatment and public awareness. This network is defined as:
- 1,200 km Lincolnshire Local Strategic Road Network which includes the A and B road network.
 - Links to all the County's main villages, as defined in Appendix A.
 - Where physically possible, treated links to within at least 500 m of all primary and secondary schools.
 - Links between all main NHS hospital and the treated network.
 - Links between all railway and bus stations and the treated network.
 - That the incorporation of certain combined public service/school bus routes into the priority network be considered. However their inclusion be based upon criteria taking into account historical accident data, pupil numbers and geographical risk factors. It should be noted that all public service/school bus drivers are professional PSV drivers trained to drive in winter weather conditions.
- 2.2.2. All treatments shall be carried out using appropriate action for the prevailing conditions in accordance with national guidance and best practice. Winter service operations comprise precautionary salting and snow clearance. It is not realistic to treat the entire county's 8,999 km road network and first call on resources is given to a 3,008 km network of priority routes.
- 2.2.3. All future requests for roads to be included into the Precautionary Salting Network will be evaluated against the above criteria. Where ever practicable there will be continuity with cross border routes. All requests for additions to the Precautionary Salting Network will be considered and rated against a set of objective criteria with the assistance of a Network Evaluation form. The findings will be summarised and a report presented to the Executive Councillor for Highways. This will be completed out of season as detailed in Appendix B.
- 2.2.4. Roads not on the Precautionary Salting Network and footways are not normally treated on a precautionary basis, the exception being at times of Severe or Extreme forecasts of snow as defined in [Section 2.2](#).

2.3. Severe Winter Weather and Extreme Winter Weather

- 2.3.1. Severe Winter Weather is defined as persistent widespread ice (rather than frost) or snow for more than 18 hours in a 24 hour period and a forecast not to rise above zero for a further 18 hours in the next 24 hours. Or a forecast, with a high confidence of significant snowfall resulting in accumulations of 5 cm or more or where drifting is expected and conditions are forecast to persist for at least 24 hours.
- 2.3.2. Extreme Winter Weather is defined as a period of widespread prolonged snow, following a period of Severe Winter Weather, of sufficient depth to cause disruption to both the treated and non-treated highway network. During periods of Extreme Winter Weather there may not be sufficient Lincolnshire County Council resources available to treat either the severe weather route network or the footway networks, in addition to keeping the Precautionary Salting Network open. In these circumstances additional resource will be considered. The Director of Environment and Economy, as a Category 1 Responder, will declare an Emergency under the Civil Contingencies Act 2004 and call for the setting up a Strategic Co-ordination Group ([see Section 3.6](#))
- 2.3.3. The definition of Severe and Extreme weather in a winter service context seeks to ensure consistency and define a standard when the public can expect the treatment of severe weather routes and footways to commence.

2.4. Severe Weather Routes

- 2.4.1. The Severe Weather Network for winter service operations contains routes that enable accessibility to important local services and villages. It consists mainly of carriageways leading to communities not covered by the Precautionary Salting Network.
- 2.4.2. The Severe Weather Network will only be gritted in times of severe or extreme weather, and after the security and accessibility of the Minimum Winter Network and Precautionary Salting Network has been assured by the Network Resilience Team.
- 2.4.3. The Network Resilience team will prepare a network of severe weather highway routes reflecting the above policy and will treat in whole or in part according to prevailing conditions.
- 2.4.4. Using the expertise and local knowledge from Local Highways Managers alongside effective Asset data regarding the County's road network, the Severe Weather routes will incorporate a set of defined carriageways leading to important local facilities.
- 2.4.5. For reasons of safety, normally roads on the Severe Weather Network will only be treated during the hours of daylight.

2.5. Treatment Priorities: Triage System

- 2.5.1. At times of Severe or Extreme Winter Weather and/or prolonged Winter Weather, as defined in section 2.2, Network Resilience will instigate a Triage System ensuring there is a robust approach in the way the road network is managed and the gritting routes are prioritised during severe winter weather. The treatment priorities will be as follows:
1. Minimum Winter Network, known as the Resilient Network defined in Volume 1
 2. Carriageways on the approved 3,008 km Precautionary Salting Network as defined in [Section 2.1](#).
 3. Carriageways on the Severe Weather Network as [Section 2.13](#).
 4. Footways in accordance with [Section 2.4](#).
- 2.5.2. The triage system will ensure the Minimum Winter Network routes; all included in the Resilient Network, are gritted and cleared as a first priority. The Precautionary Salting Routes will then be gritted as soon as the Resilient Network has been cleared and preserved. Following this and/or if the severe weather prevails Network Resilience will prompt the gritting on the Severe Weather Routes.
- 2.5.3. When dealing with snow bound or compacted ice on carriageways, treatments employing a mixture of salt and grit/sharp sand shall be first choice. In times of extremis and to aid traction, grit on its own should be considered for routes not on the Precautionary Salting Network and the Footway Network.
- 2.5.4. Variations in the above priorities may be necessary to suit local conditions and the efficient planning of treatment routes. Liaison between Districts will be undertaken prior to treatment of the Severe Weather Routes to ensure a consistent standard of service with adjacent areas when dealing with severe frost.
- 2.5.5. Remedial treatment decisions are based on the above priorities and knowledge of local conditions.

2.6. Footway Treatment

- 2.6.1. During periods of Severe or Extreme Winter Weather the treatment of footways will be considered when resources permit. Footways to be treated will reflect their importance in the County's footway hierarchy as defined in the Highways Asset Management Plan. The footway priority network for winter service operations, in descending order of importance, consists of:
1. Hierarchy 1a. Each Area will keep a list of footways in and around Transport Interchanges, including footways to main car parks, designated Hierarchy 1a. The designation 1a will be for winter service purposes only.
 2. Hierarchy 1 and 2 footways.
 3. Hierarchy 3 footways with gradients greater than 1 in 10 longitudinally, for longer than 50 metres.
 4. Other Hierarchy 3 footways.
 5. Hierarchy 4 footways.
- 2.6.2. When a period of Severe or Extreme Winter Weather, as defined in [Section 2.3](#), is experienced or forecast consideration will be given to treating Hierarchy 1a footways prior to the onset of these conditions.
- 2.6.3. Lincolnshire County Council has adopted the Midlands Service Improvement Group (Winter Maintenance) – Winter Service for Footways and Cycleways – Treatment Table as the winter service standard for footways and cycleways. See Appendix D.

2.7. Weather Stations

- 2.7.1. A system of local weather stations will be operated and used both to feed into the weather forecast model and to monitor local conditions. A professional forecasting service will be used to guide treatment decisions.
- 2.7.2. Lincolnshire County Council has, in conjunction with Highways England, installed 22 remote weather stations at sites which cover the different climatic zones within Lincolnshire, of which 12 are used for forecasting.
- 2.7.3. Information from these sites is supplemented by information from adjacent sites in other Counties and fed into the weather forecast model. It is also used to check on temperature (air and road), humidity and wind speed. The sites enable both improved local forecasts to be obtained and actual conditions monitored. All the information can be accessed using a desktop/laptop PC, or on smartphones/tablets.

2.8. Decision Making

2.8.1. During the winter service period of 1st October to 30th April, trained Lincolnshire County Council staff (Duty Officers) will monitor weather forecasts and weather conditions on a 24 hour basis. This will enable treatment decisions to be tuned to changing winter weather conditions. The Duty Officer is authorised to make certain winter service treatment decisions as detailed below:

- During the normal working day there will be a Duty Officer on duty who is authorised to make precautionary salting treatment decisions.
- In addition, the Duty Officer will control all footway and Severe Weather Route treatment and during times of snow will liaise with Local Highway Managers and the Incident Control Rooms.
- The Duty Officer will also be available for consultation at all times.

2.8.2. At all other times winter service operations will be monitored and controlled by the Winter and Emergency Duty Officer on shift. These officers are authorised to make precautionary salting treatment decisions only. They will consult with the Duty Officer to maintain an input to all actions.

2.8.3. All Staff making winter service decisions shall be suitably trained. Competence is demonstrated by the following:

1. Completion of the Met Office Road Weather Training Course
2. Completion of the Vaisala Winter Weather Scenario Training
3. Within a 5 year period, completion of one of either the above courses as a refresher.

2.8.4. Guidance on the decision making process is contained within flowcharts at Appendix E, Appendix F and Appendix G.

2.9. Response Times

- 2.9.1. The response required from the Term Contractor on the Precautionary Salting Network when an urgent precautionary salting call-out is notified is:
- Spreaders to be loaded and depart from operational bases within 1 hour.
 - All routes to be treated within four hours of spreaders leaving the depot.
- 2.9.2. Initial decisions are to be notified to the Highway Works Term Contractor by 12:00 every day. Where possible, longer notice is given to the contractor of the time when treatment is to be started.
- 2.9.3. The winter service contract includes for a 1 hour response time. The treatment time for all routes is less than 3 hours.

2.10. Grit Bins

- 2.10.1. Salt/Grit bins will be provided and maintained on request if the location meets criteria set out in Appendix C and a responsible body undertakes to:
- Spread salt/grit when necessary; and
 - Inform the Network Resilience Team when it needs refilling
- 2.10.2. Salt/Grit bins shall only be filled with a 50/50 mixture of salt and grit/sharp sand.
- 2.10.3. These bins are provided on a self-help basis to local communities to treat known local trouble spots on the public highway not covered by the Priority Route Network.
- 2.10.4. A responsible body shall be defined as a parish or town council, residents association or educational establishments. Lincolnshire County Council will only accept requests from those who would act as a responsible body.
- 2.10.5. Salt/Grit bins will not be provided at sites which are prone to vandalism or other damage or where they have waste put in them.
- 2.10.6. Evaluation for additional Salt/Grit Bins requests will be carried out before each winter season. All requests will be considered and rated against a set of objective criteria with the assistance of Grit Bin Evaluation Form. This will be completed out of season as detailed in Appendix C.

2.11. Budget

- 2.11.1. The Budget for winter service will be based on expenditure in an average winter with annual fluctuations catered for by the Adverse Weather Reserve Fund.
- 2.11.2. Winter service expenditure in any single financial year is subject to the vagaries of the winter weather. Hence there can be large unpredictable fluctuations between years. The normal practice has been that in a Severe/Extreme Winter for the excess expenditure over the budget to be financed from the reserve fund and in a mild winter the savings used to replenish the reserve.

2.12. Plant

2.12.1. To ensure it has sufficient resources for its winter service operations Lincolnshire County Council will provide as a minimum:

- 43 Front line pre-wet gritters
- 4 spare pre-wet gritters
- 1 snow blower attachment
- 47 snow ploughs
- 8 operational centres at which gritters and salt supplies will be based
- At the start of each winter season there will be a minimum of 25,000 tonnes of salt in stock.

2.12.2. The above resources will not always be needed but are the minimum deemed necessary to provide a reasonable level of service in all but the most severe conditions. At such times extra resources, including plant and labour, are hired in as necessary and as available.

2.12.3. Before the start of each winter season agreements are made with local farmers, hauliers and other contractors on such matters as plant and labour availability and hire rates.

2.13. Cross-Boundary Agreements

- 2.13.1. Lincolnshire County Council will enter into cross border agreements to maximise efficiency and consistency of treatment with adjacent authorities on reciprocal treatment arrangements on certain roads. Where this occurs each authority will treat the section of road concerned in accordance with their authority's winter service policy and in agreement with an exchange of letters under Section 8 of the Highways Act 1980.
- 2.13.2. [Section 3.10](#) contains a list of agreed cross boundary routes.

2.14. Road Not Gritted Signs

- 2.14.1. Lincolnshire County Council will not erect any additional permanent “Road not gritted” signs on the network.
- 2.14.2. Existing signs on the network will continue to be maintained.

2.15. Mutual Aid Arrangements

2.15.1. Mutual Aid arrangements shall be prepared, where possible, with all other Category 1 responders as defined under the Civil Contingencies Act 2004. These will come into operation during periods of Extreme Winter Weather as defined in [Section 2.2](#).

2.15.2. An agreement in principle has been reached with the local NHS Trust to maintain access to all critical hospital sites within the county, which include:

- Lincoln County Hospital
- Grantham Hospital
- Pilgrim Hospital Boston
- John Coupland Hospital, Gainsborough
- Louth Hospital
- Skegness Hospital
- Johnson Hospital Spalding.

2.15.3. The main access route into and through all of the above establishments will be maintained by a mainline gritter during this period if the local NHS Trust resources cannot cope. Salt may also be provided to enable the footways within the hospital grounds to be treated, with the NHS utilising its resources to maintain access on adjacent public highway footways. The above is subject to resource constraints at the time.

3. Procedures

3.1. Decision Making Process

- 3.1.1. The Duty Officer is in receipt of winter weather forecasts by approximately 11:00 daily and an instruction relating to precautionary salting normally will be passed to the Term Contractor by 12:00 on the same day. The instruction will be passed using the Bureau Service Provider's winter maintenance management software.
- 3.1.2. The Winter and Emergency Duty Officers will be responsible for decisions during any other time.
- 3.1.3. The decision relating to salting may take one of several forms:
- **Standby A:** Confirmed salting of all or specified routes where drivers and operators are to be given details of timings, salt loads and rate of spread.
 - **Standby B:** Confirmed stand-by for a possible requirement for salting of all or specified routes where drivers are to report to the operational centre and to be immediately available to perform duties as required by the Lincolnshire County Council.
 - **Standby C:** No action at present but drivers to remain available to go if required over the next 24 hours.
 - **Standby D:** Precautionary salting is unlikely to be required over the next 24 hours.
- 3.1.4. Response times are defined as the period between issuing instructions to carry out salting and the vehicles are loaded, manned and ready to leave the depot. On all salting operations, the response time shall not exceed one hour unless approved by the Duty Officer regardless of the time of day or night that the instruction is given. The Highway Works Term Contractor shall ensure that all manpower engaged upon these operations can achieve this specified response time.
- 3.1.5. Standby is a requirement for drivers and operatives to report at a specified time to the depot in readiness to carry out winter service operations. This item will also apply in the event of a precautionary salting run abandoned before vehicles have left the depot.
- 3.1.6. Decisions will only be made by members of staff who comply with the requirements in [Section 2.6](#).

3.1.7. Decisions will be made using the Precautionary Salting Flow Charts found at Appendix E, Appendix F and Appendix G and will take into account other factors including:

- Any expected residual salt level based on professional experience and utilising the grip factor readings from the roadside weather station system.
- Professional guidance from the Forecast Service Provider.
- Decision to treat only part of the priority network in marginal weather conditions can be taken utilising Route Based Forecast.

3.1.8. It is acknowledged, that on occasions, part(s) of the Precautionary Salting Network may experience localised isolated or limited extents of ice/hoar frost, such as bridge decks. This is due to local meteorological conditions. In these circumstances no treatment will take place; it is the primary responsibility of the motorist to take care of their own safety.

3.2. Salt, Salt Storage and Brine Making Facilities

- 3.2.1. Where possible all salt stocks will be kept under cover in salt barns. Where this is not possible, all external salt stocks will be kept covered using waterproof sheeting systems.
- 3.2.2. All salt will be regularly tested for compliance with standards set out by Lincs Laboratory.
- 3.2.3. Lincolnshire County Council utilises a combination of Treated Salt and a Pre-wetting system to grit its network.
- 3.2.4. The pre-wetting system sprays a high quality white marine salt with brine solution which facilitates the de-icing process. The brine for this process is made by brine making facilities installed in winter service depots around County. Brine making facilities are provided at Sturton by Stow, Manby, Ancaster, and Chainbridge depots. 23 Gritter + 2 spare Gritters will be utilising the pre-wetting system
- 3.2.5. Treated salt operates with brown salt that has been treated with a natural agricultural by product such as "Safecote". Such treatment causes the salt to adhere to the carriageway, making it less susceptible to losses from wind and allowing for lower spread rates. This product provides many of the advantages of pre-wet salt but without having to invest in Brine Facilities or modifications to gritters. Treated Salt will be stored in the Willingham Hall, Horncastle, Thurlby and Pote Hole Depots. 20 Gritters + 2 spare Gritters will be utilising the treated salt system.
- 3.2.6. The Treated Salt will be managed using a stock management system which will allow for regular topping up of the salt stock. It is Lincolnshire County Council's policy to top up its treated salt stock after the use of 500 tonnes of salt.

Ordinarily salt stocks shall be maintained to ensure a minimum of 15,000 tonnes is available at any one time across the county, with a minimum of 25,000 tonnes available at the start of the season. This has been altered recently in accordance with national standards/practices that have been developed for nationwide snow conditions.

- 3.2.7. All brine is made to a nominal 23% saturation. Facilities at Ancaster have the capacity to add a 10% mixture of an Agricultural Bi-product (Safecote) to the brine. This ABP causes the salt to adhere to the carriageway, making it less susceptible to losses from wind and allowing for lower spread rates. It also depresses the freezing action of salt below -7 degrees centigrade. In the past, ABPs have caused maintenance issues with the brine plant installed in Lincolnshire and so will not be used routinely, but considered in periods of severe or extreme weather. When Safecote is added to the brine mixture, treatments shall be amended as per the Precautionary Salting Flowcharts found at Appendix E, Appendix F and Appendix G.

3.3. Precautionary Salting

- 3.3.1. Roads off the Precautionary Salting Network are not normally treated on a precautionary basis. They may only be treated due to localised factor such as a burst water main or standing water due to field runoff.
- 3.3.2. Precautionary salting may also be carried out on Severe Weather Routes when prolonged low temperatures, with attendant risk of icy roads, or persistent frosts occur in accordance with [Section 2.2](#) and [Section 2.13](#).
- 3.3.3. 43 dedicated front-line gritters shall be utilised for precautionary salting.
- 3.3.4. 4 spare gritters shall be utilised as back-ups to front line gritters, located strategically at depots across the County.
- 3.3.5. Treatment time shall be a maximum of 3 hours.
- 3.3.6. Any Precautionary Salting Route not completed when road temperatures rise above 1 degree Centigrade will be reviewed by the Winter and Emergency Duty Officer and a decision made whether or not to stop salting.
- 3.3.7. Network Resilience staff will have access to the Bureau Service Provider's Management system and the Forecast Service Provider's systems.
- 3.3.8. In the event of uncertain weather forecasts, decisions should be weighted in favour of salting.
- 3.3.9. The winter service season is divided into two periods:
 - High Risk - November to March
 - Low Risk - October and April(Instructions are only issued when salting is required).
- 3.3.10. Lincolnshire County Council will not respond to requests for treatment off the gritted network by the Police, unless as detailed in 3.3.1.
- 3.3.11. Precautionary spreading operations are carried out utilising pre-wet treatments at a ratio of 70/30 dry salt to brine.

3.4. Treatments for Snow, Ice and Freezing Rain

3.4.1. Lincolnshire County Council has a statutory duty under Section 150 of the Highways Act 1980 to remove obstructions. Snow is considered to be an obstruction when it impedes the use of the road network.

3.4.2. The Forecast Service Provider will provide National Weather Warnings if any sizeable accumulations of snow are expected.

3.4.3. The following are treatments timings for snow and ice:

Timing of Treatment	Treatment Type
Before snowfall and freezing rain	Salt spreading
During freezing rain, or where there are minor accumulations of ice	Salt spreading
After snowfall when there is slush on the road	Ploughing Salt spreading
After snowfall when there is compacted snow or ice on the road	Ploughing Salt spreading Salt and abrasives mixtures Abrasives only

3.4.4. When snow is forecast advanced salting at 20g/m² dry will take place on the Precautionary Salting Routes. Time permitting a further run may be carried out to increase salt coverage to 40g/m² dry. Pre-snow salting may be considered for Severe Weather Routes if time permits. This will provide a de-bonding layer and facilitate the breakup and dispersal of snow by subsequent treatments and traffic.

3.4.5. Depots which may be affected by the snow will be notified to Fleet Services, the external contractor responsible for the maintenance of the vehicles, to inform them of the impending falls. They will be asked to ensure that fitters will be available to change plough blades etc. at these depots when required.

3.4.6. If it is likely the snow blower will be required, the Network Resilience team will arrange for its use.

3.4.7. Snowfalls will be categorised into one of the following types:

- Heavy Snowfall – Over 100mm or moderate snowfall is drifting. Normally dealt with by ploughing.
- Moderate Snowfall – Over 25mm and up to 100mm. Normally will be dealt with by ploughing and salting

- Light Snowfall - up to 25mm. normally will be dealt with by additional salting unless drifting occurs.
- 3.4.8. It is impractical to spread sufficient salt to melt more than very thin layers of snow and ice. Ploughing is the only economical, efficient, effective and environmentally acceptable way to deal with all but light snow. Therefore when snowfalls are forecast that could create plough-able conditions (25mm or greater) the Highway Works Term Contractor will be contacted to fit ploughs to gritters and to arrange crews for clearing and salting footways.
- 3.4.9. Each vehicle will be given specific routes to plough.
- 3.4.10. The modern Schmidt Cirrion and equivalent snow ploughs with ceramic or steel blades fitted to the gritter fleet are designed to plough back to the carriageway surface (plough to black).
- 3.4.11. When Heavy Snowfall is forecast, the Network Resilience team will contact respective Contractors and farmers to arrange additional resources.
- 3.4.12. When prolonged falls are forecast, continuous ploughing to prevent snow build-up should commence. The ploughing can be combined with simultaneous salting at 20 – 40g/m² Dry (Abrasive mixture 50/50 mixture of sand/salt to be considered) so that a wet base can be maintained. Once the snow depth has reached 100mm or the snow is drifting, or the gritter is salting on a gradient it may be desirable to plough without salt. (The salt should still be loaded as it will aid the traction of the gritter to the maximum legal weight limit of the vehicle. (i.e. (as a general rule) if the plough is fitted then the vehicle can carry a full hopper load of salt provided that the brine tanks are empty of solution.)
- 3.4.13. Roads with vertical speed humps will not be ploughed. Vertical speed humps must be detailed on all route cards for the driver, as their presence constitutes a driving hazard whilst carrying out ploughing operations.
- 3.4.14. As snow melts due to the action of salt, slush may build up on the road. Ploughing may have to continue to remove this slush build up.
- 3.4.15. If conditions deteriorate to an extent that resources cannot maintain the Precautionary Salting Network then certain roads will have to be abandoned.
- 3.4.16. Resources can be redeployed to maintain essential roads and when necessary be used to assist the emergency services in particularly urgent/life threatening situations. In these conditions the snow room maybe set up in accordance with Lincolnshire County Council's Emergency Plan, at the Emergency Planning Centre.

3.4.17. When conditions improve such that the Precautionary Salting Network is satisfactorily cleared then resources will then be directed to clearing firstly severe weather routes and then other routes in order of importance. Crews will be directed to clear other footways only after hierarchy 1a footways have been cleared and treated as set down in [Section 2.4.](#)

3.4.18. Snow Clearance Priority:

1. Minimum Winter Network
2. Precautionary Network (including access to emergency services buildings)
3. Severe Weather Routes.
4. Other important locations (including essential industrial and military establishments, mainline stations, bus garages, shopping centres, schools and pedestrian areas).
5. Other Commuter routes.
6. Single accesses to villages, hamlets and rural communities.
7. Residential roads and footways.
8. Roads to single premises.

3.4.19. When snow clearing is in operation it is vitally important to liaise with neighbouring Districts and adjacent Authorities, particularly when moving from precautionary salting to snow clearing or vice versa, to avoid non-treatment of certain parts of the network. This is particularly important with reciprocal salting arrangements.

3.4.20. Priority should be given to footways in shopping areas and where there is a high proportion of pedestrian traffic, in accordance with [Section 2.4.](#)

3.4.21. The snow blower shall be based at strategic locations close to known trouble spots on strategic routes and will be brought into action as necessary on the instruction of network management. Snow blowers should never be used on level crossings.

3.4.22. Level Crossings – Network Rail or the appropriate rail authority should be contacted when ploughing starts by Local Highways Officers. This is to ensure that railway tracks at level crossings are not blocked by snow.

3.4.23. Post-snow action – The following work shall be given consideration after snow operations:

1. Clear all gullies and drainage outlets of obstructions.

2. Sweep significant accumulations of grit from the carriageway and footways as soon as possible.
3. Thoroughly wash down all vehicles and lubricate gritting equipment.
4. Check all equipment and repair or replace all worn parts on snow ploughs, and report on plant performance to the network manager.
5. Salt stocks level should be closely monitored and replenished as necessary.
6. Inspect roads for frost damage and carry out any remedial work necessary to make the carriageway free of safety defects
7. Inspect bridges and culverts liable to flooding to ensure that they are clear of debris.
8. Carry out a survey of badly affected locations reporting to network management including a generalised assessment of other frost/snow/flood damage.
9. Sign defects where appropriate, ensuring “flood” boards and other relevant signs are available.
10. Network Resilience Team to evaluate overall performance in consultation with Local Highways Teams and Term Contract and Fleet Services Contract staff, and recommending changes to procedures to be incorporated into this document.

3.5. Snow Clearance Protocol

- 3.5.1. Between 17:00 and 08:00 and at weekends and at bank holidays the Network Resilience Manager will be contacted by the Winter and Emergency Duty Officer when snow begins to fall. At other times the Duty Officer is to maintain close contact with the Forecast Service Provider when snow is forecast.
- 3.5.2. Out of Hours, the Duty Officer will contact the following staff as soon as it has been determined that ploughs are to be fitted:
 - Network Resilience Manager
 - Local Highways Managers
 - Term Maintenance Contractor
- 3.5.3. If it is considered before the event that ploughs may be needed during the night, the Network Resilience Manager and Local Highways Managers should be aware of such action.
- 3.5.4. Snow Clearing operations based on the non-Precautionary Salting Network will be coordinated by the Network Resilience team in liaison with Local Highways Managers. Operational instructions will be passed to the Term Maintenance Contractor who will be based at the operational depots, plus other Contractors.
- 3.5.5. The Network Resilience Manager will normally be in overall control of decisions such as when the Precautionary Salting Network is satisfactory for moving to Severe Weather Routes.
- 3.5.6. The Network Resilience Team are to ensure that the details of plant in use are recorded on a daily basis during periods of snow.
- 3.5.7. In the event of a Network Operations Room being opened for snow conditions as part of a Level 1 Emergency (as defined in the Incident Response Plan as part of the Emergency contingency planning within Lincolnshire County Council) a road condition report will be completed by the Network Operations Room staff and forwarded to the Network Resilience team as soon after 09:00 as possible daily.
- 3.5.8. As soon as possible after the end of each shift/period the Network Resilience team will agree with the Highway Works Term Contractor the labour and plant used and finalise a daily plan report. This will form the basis of an agreed measurement duly signed by both Client and Contractors. Note: All contract item numbers to be agreed at this stage.

- 3.5.9. The agreed report will also contain details of salt and grit used which should be used to update records of salt stocks.

- 3.5.10. During snow operations where Contractor Patrol Crews (a two man team from the Contractor) are employed between the hours of 19:00 and 06:00, although allocated to predetermined routes, the Winter and Emergency Duty Officer may be required to direct these crews to other locations within the County. A detail log of action should be emailed by the Winter and Emergency Duty Officer to the relevant Local Highways Manager by 06:00 the following day.

3.6. Snow Room (Multi – Agency Emergency)

- 3.6.1. The Executive Director for Environment and Economy, as a Category 1 Responder, will declare an Emergency under the Civil Contingencies Act 2004 and call for the setting up a Strategic Coordination Group – see [Section 2.2](#) for further details. This will be in accordance with the Lincolnshire Resilience Forum's Severe Weather Plan and Lincolnshire County Council's Incident Response Plan.
- 3.6.2. The following organisations may have representatives in the snow room when it is in operation:
 - LCC Highways & Transportation
 - Lincolnshire Police
 - Lincolnshire Fire Brigade
 - Health Authority Ambulance Service
 - District Councils
- 3.6.3. The Snow Room will be set up in the Civil Contingencies Centre at Fire & Rescue Headquarters.
- 3.6.4. The Police will inform Highways & Transportation, when the actual/expected levels of public calls become significantly greater than normal switchboard manning can handle or there is an increase in road traffic collisions.
- 3.6.5. The Winter and Emergency Duty Officer will transfer to and operate from the Snow Room.
- 3.6.6. Once the decision is made to open the snow room it should be activated as quickly as possible. This should be within 4 hours.
- 3.6.7. The main task of the Highways Representative once communications are established is to make contact with each Local Highways Manager to determine the initial status of the County's roads. This information is then plotted on the wall map in the snow room.
- 3.6.8. Once sufficient information is available and the public phone lines are in operation through the Customer Service Centre, these phone numbers are broadcast by local radio thus enabling the public to make contact. The Director of Environment and Economy is then informed that the snow room is "going public".
- 3.6.9. The primary task of the Highways Representative is to maintain a constant flow of up to date information to the other liaison officers and the public phone desks. Information is then circulated in the snow room.

- 3.6.10. Local knowledge of villages and the road network should be passed by Local Highways Staff to the Highway Representative.
- 3.6.11. The Highways Representative has no dealings in the operational role of controlling snowploughs, other vehicles or the control of the labour force except in an emergency situation (in agreement with relevant District).
- 3.6.12. The police will trace owners of abandoned vehicles and contact them.
- 3.6.13. A supply of forms and copies of "Winter Maintenance Route" maps are kept for reference purposes.
- 3.6.14. Police emergencies are mainly missing person problems. This is usually dealt with at Police Divisional level, but where a significant problem occurs then this is transferred to Police Headquarters. In both situations the police may request that the snow clearing vehicles are asked to keep a look-out for people or bodies on the highway in certain specific locations. This request is passed initially to the Network Manager who may authorise direct contact between snow clearing vehicles and the snow room for further updates.
- 3.6.15. Fire and medical emergencies usually concern blocked roads on the route to a life and death situation which requires Lincolnshire County Council to assist in clearing passage for vehicles to their destination and return. In this case it is the responsibility of the Network Manager to arrange reallocation of resources.
- 3.6.16. In an emergency situation, after the initial reaction has been dealt with, then the Director of Environment and Economy must be informed of any changes in the situation and the final outcome.
- 3.6.17. The callout of RAF/Army equipment (helicopters, ambulances, firefighting and snow clearance equipment) is in the hand of relevant emergency services and Chief Operating Officer (Development Services) or Executive Director (Environment and Economy). The Highways Representative in the snow room has NO authority to call upon this equipment, but when such equipment has been called upon then liaison is the same as above.
- 3.6.18. This process forms part of a Level 3 Response as defined in Lincolnshire County Council's Incident Response Plan as a Highways and Flood Authority. For smaller scale severe weather events, the Level 0, 1 and 2 processes in this document will be followed.

3.7. Media

- 3.7.1. Coverage by the media of winter service and particularly snow clearance is important in making the public aware of the service provided and what roads are open or closed.
- 3.7.2. Lincolnshire County Council will need to establish working arrangements with the local media to enable the presentation of timely and accurate information of which roads are open and which are closed. Local radio in particular considers this to be an important part of their broadcasting duties, and therefore provides an opportunity to build a good working relationship over wider issues.
- 3.7.3. It is important for Lincolnshire County Council to clarify and agree respective services and specialist responsibilities with people dealing with the media.
- 3.7.4. It is important to define and agree key contacts with the press and broadcasting media and also establish a clear understanding of the most effective timings for information to be provided in order to reach necessary audiences and broadcast schedules.
- 3.7.5. Information on costs, salt usage, plant usage, manpower etc. will be calculated by the Network Resilience Team.
- 3.7.6. In addition to supplying information to the press it is important to inform key stakeholders (these including emergency services, public transport operators, motoring organisations, key local organisations and County Councillors).
- 3.7.7. Lincolnshire County Council's Media Service, Customer Service Centre staff and the Winter and Emergency Duty Officer will utilise Twitter to engage with and disseminate treatment actions and issues to the travelling public via Smartphone technology.

3.8. Weather Forecast Service

3.8.1. Routine forecasts and updates will be issued by the Forecast Service Provider via their own web-based service and also displayed via the Bureau Service Provider's online management software in the following format:

- **11:00 Forecast**
 - A summary 24 hour forecast for the County.
 - Detailed forecast for each of the 43 Precautionary Salting Routes.
- **16:30 Evening Update**
 - An update for the overnight period of each of the 43 Precautionary Salting Routes.
- **Amendments**
 - If significant changes take place then the forecast is amended.

3.8.2. The Forecast Service Provider will amend the forecast at any time:

- If there is a change from "no frost" forecast to a "frost" or when the road minimum is between plus and minus 3 degrees Celsius and there is a sustained difference between the forecast and actual graphical curve of 2 degrees Centigrade or more.
- When there are significant changes to rainfall intensity and timing and road frost is expected or a significant change to snowfall is forecast.

3.8.3. As well as updating the Internet systems, the Forecast Service Provider will contact Network Resilience during working hours who will in turn contact Local Highways Teams (08:30 – 16:30), and the Winter and Emergency Duty Officer at all other times.

3.8.4. A 24 hour consultancy service is provided by the Forecast Service Provider, available to all staff.

NOTE: *In the event of the internet systems not operating, the above forecasts will be emailed to Network Resilience Staff by the Forecast Service Provider.*

3.9. Route Based Forecasting

- 3.9.1. In the past, the forecast provided to Lincolnshire was domain based, covering large geographical areas. This led to treatment instructions for whole areas, meaning that some roads may have been treated despite not actually reaching a temperature where a hazard could form.
- 3.9.2. Innovations in forecasting technology now allow the Forecast Service Provider to provide a "route based forecast", which is effectively an individual forecast for each of the 43 precautionary salting routes, each of which is divided into multiple sections.
- 3.9.3. The worst-case scenario for each of the routes is used for precautionary salting routes. If one section of the route is forecast to experience a hazard, the whole route will be treated.
- 3.9.4. Route-based forecasting allows for a much more efficient precautionary salting service, as on marginal nights (generally at the start and end of the winter season) many of the 43 routes will not need to be treated. This saves not only on salt, but on labour costs and maintenance of vehicles.
- 3.9.5. Route-based forecasting does not provide benefits in prolonged periods of very cold weather, as it is likely that all of the precautionary salting routes will have hazards forecast at some point overnight. The benefits are realised in mild winters, where traditionally the technology hasn't been available to avoid over-treatment.
- 3.9.6. In future, it is possible that further granularity in treatment of the network will become available through emerging technology. Lincolnshire County Council attends various national groups and monitors best practice and will continue to trial new options as they become available, to deliver the most efficient service possible.

3.10. Treatment Flowcharts

- 3.10.1. Decision making flowcharts have been produced, which should be utilised during the winter service decision making process. The flowcharts provide operational guidance, and professional judgement by competent decision makers should always be applied when coming up with treatments.
- 3.10.2. Dry or Damp Roads – Please see Appendix E
- 3.10.3. Wet Roads – Please see Appendix F
- 3.10.4. Snow Clearance – Please see Appendix G

3.11. Cross Boundary Agreements

- 3.11.1. Cross Boundary Agreements have been developed following liaison and communication with neighbouring authorities.
- 3.11.2. Liaison takes place with other local authorities responsible for winter service on roads within and adjacent to the county regarding their treated routes and treatment decisions. Additionally, there is an exchange of treatment action instructions.
- 3.11.3. Any road treated by an adjoining authority would be treated in accordance with that authority's policies for operational purposes and not the local highway authority's policies.
- 3.11.4. The current cross boundary agreements with neighbouring authorities are as follows:
- Cambridgeshire
 - Leicestershire
 - North Lincolnshire
 - North East Lincolnshire
 - Nottinghamshire
 - Peterborough
 - Rutland
- 3.11.5. **Roads gritted by North Lincolnshire on behalf of Lincolnshire County Council:**
- C227 from County Boundary to C228 High Street East in Scotter village.
 - A159 from County Boundary to junction with C228 High Street East in Scotter village.
 - B1211 from County Boundary to B1210 north for Brocklesby.
 - B1210 from County Boundary to B1211 north for Brocklesby.
 - B1400 from County Boundary south of Scallow Grove to County Boundary at Black Walk Nook.

- C221 from County Boundary to A159 junction in Scotter.

3.11.6. Roads gritted by Lincolnshire County Council on behalf of North Lincolnshire:

- A18 from County Boundary to junction with B1210.
- B1210 from County Boundary to junction with A18.
- A1084 from County Boundary to A18 roundabout in Brigg.
- B1434 from County Boundary to County Boundary.
- B1205 from County Boundary to County Boundary.

3.11.7. Roads gritted by Nottinghamshire on behalf of Lincolnshire County Council:

- A1133 length in Lincolnshire near Girton.
- A1133 from County Boundary to A57 at Newton-on-Trent.
- A57 from western junction with A1133 west to County Boundary.
- A631 from County Boundary over Gainsborough Bridge to A156.

3.11.8. Roads gritted by Lincolnshire County Council on behalf of Nottinghamshire:

- A17 from County Boundary west of Beckingham in Lincolnshire to the roundabout at the junction with C208 Beacon Hill Road/Stapleford Lane including the western side of the roundabout.
- C412 from County Boundary at Balderfield to B6326
- Spalford Road from County Boundary through Spalford to A1133
- In times of prolonged freezing:
 - C158 (C82) from Lincolnshire/Nottinghamshire boundary near North Scarle to the A1133 at Besthorpe.
 - C163 (C128) from Lincolnshire/Nottinghamshire boundary near Swinderby to the A1133 at Collingham.
 - C123 (C44) from Lincolnshire/Nottinghamshire boundary near Stapleford to the A17 near Coddington.

3.11.9. Roads gritted by Peterborough CC on behalf of Lincolnshire County Council:

- B1081 from County Boundary to A43.
- B1443 from A43 junction east to County Boundary.
- A43 from junction with B1443 to County Boundary.
- New A16 from new roundabout at A16/A1073 junction, Crowland to County Boundary.
- Existing A1073 from new roundabout at A16/A1073 junction, Crowland to County Boundary.

3.11.10. Roads gritted by Lincolnshire County Council on behalf of Peterborough CC:

- A15 from A16/ B1525 roundabout across County Boundary to A15/B1524 roundabout.
- B1524 from B1525 roundabout to A15 Maxey roundabout.

3.11.11. Roads gritted by Rutland on behalf of Lincolnshire County Council:

- A606 from County Boundary to the junction with B1081.
- B1081 from County Boundary to junction with A606.
- C432 from County Boundary to junction with C431 Station Road

3.11.12. Roads gritted by Lincolnshire County Council on behalf of Rutland:

- B1176 from County Boundary to A6121 north of Ryhall.
- A6121 from County Boundary to County Boundary through Ryhall.

3.11.13. Roads gritted by Lincolnshire County Council on behalf of Cambridgeshire:

- Bythorne Bank from Chapel Gate at County Boundary to Cross Drove
- B1166 from County Boundary at South Eau Bank crossing bridge to Marshall's Bank.

3.11.14. Roads gritted by Leicestershire on behalf of Lincolnshire County Council:

- C427 from County Boundary (north east of Normanton) to Long Bennington C418 Main Road.

3.11.15. Roads gritted by Lincolnshire County Council on behalf of Leicestershire:

- C440 from County Boundary to Harston village junction with Denton Lane.
- C492 from County Boundary to Harston village junction with Woolthorpe Lane.

3.11.16. Road gritted by North East Lincolnshire on behalf of Lincolnshire County Council:

- A1173 from County Boundary to junction with A18.
- Hatcliffe Road from B1203 to County Boundary.
- C243 Stallingborough Road from South Street to County Boundary

3.11.17. Roads gritted by Lincolnshire County Council on behalf of North East Lincolnshire:

- A46 from County Boundary going east to A46 roundabout.
- Old Main Road from A46 through Irby upon Humber to A46.
- A18 from County Boundary to C638 Whites Road.
- A16 from County Boundary to B1219 roundabout.
- A1031 from County Boundary to junction with B1219.

3.12. Public Self Help Guidance Literature

3.12.1. Based on national guidance issued by the Department for Transport, Lincolnshire has produced two self-help documents. These are:

- Clearing Snow off the Carriageway (Appendix H)
- Clearing Snow from Footways (Appendix I)

3.12.2. These will continue to be distributed to the public.

3.13. Use of rebated Diesel Oil (Red Diesel)

- 3.13.1. A snow clearing vehicle is an excepted vehicle (and thus can use red diesel) when it is being used or going to or from the place where it is to be or has been used for the purpose of clearing snow from public roads by means of a snow plough or similar device.
- 3.13.2. Agricultural vehicles are also not excluded, so that, for example a farm tractor with a snow plough fitted is entitled to use red diesel for clearing snow from the public road.
- 3.13.3. The law on gritting differs in that a qualifying vehicle must be constructed or adapted, and used, solely for the conveyance of machinery for spreading materials on roads to deal with frost, ice or snow.
- 3.13.4. Consequently, a farm tractor which is neither constructed nor used solely for such work is not entitled to use red diesel for gritting public roads.

3.14. Mutual Aid and Self Help Arrangements with Parish and District Councils

- 3.14.1. As part of a cross cutting action to engage with all communities within the county concerning how all parties could work together in times of emergency and crisis the following actions will be undertaken.
- 3.14.2. Highways staff will engage with all District Councils concerning mutual aid in times of severe weather. A memorandum of understanding should be developed with individual District Councils to outline mutual aid arrangements.
- 3.14.3. Highways staff will engage with Town/Parish Councils and other Community Groups to encourage participation in a programme of self-help and mutual aid. The aim being to provide a framework within which willing, locally based volunteers clear snow, primarily from footways, within key areas of their community. In return for agreed participation, Lincolnshire County Council undertakes to provide limited amounts of additional salt/grit in “1 tonne sacks” at agreed locations. Those wishing to take part will need to agree to the following points:
- Provide a contact point for the exchange of information
 - What are the priority footways that are intended to be cleared
 - Agree the quantity and location of additional salt supplies
- 3.14.4. Parish/Town Councils are encouraged to develop a Snow and Ice Plan as part of their Community Emergency Plan.

Appendix A - Main Villages in Lincolnshire

Main villages were defined in the County Structure Plan between 1981 and 1991 and updated on a later submission to the Secretary of State as the following villages:

Boston Borough

- Butterwick
- Kirton
- Old Leake
- Sutterton
- Swineshead

East Lindsey District

- Binbrook
- Burgh le Marsh
- Chapel St Leonards
- Grimoldby/Manby
- Holton le Clay
- Legbourne
- Mareham le Fen
- North Somercotes
- North Thoresby
- Sibsey
- Stickney
- Tetford
- Tetney
- Wainfleet
- Woodhall Spa
- Wragby

North Kesteven District

- Bassingham
- Billingham
- Branston
- Eagle
- Heckington
- Heighington
- Helpringham
- Metheringham
- Navenby

Winter Service Plan 2018

- Ruskington
- Skellingthorpe
- Swinderby
- Waddington
- Washingborough

South Holland District

- Cowbit
- Deeping St Nicholas
- Donington
- The Drovers (Gedney Hill, HolbeachDrove, Whaplode Drove, Shepeau Stow) *
- Gosberton
- Moulton
- Pinchbeck
- Weston
- Whaplode

South Kesteven District

- Ancaster
- Barrowby
- Baston
- Billingborough
- Caythorpe
- Claypole
- Colsterworth
- Corby Glen
- Great Gonerby
- Langtoft
- Long Bennington
- Morton
- Rippingale
- South Witham
- Thurlby

West Lindsey District

- Bardney
- Blyton
- Cherry Willingham
- Dunholme
- Ingham
- Keelby
- Nettleham
- North Kelsey
- Saxilby

Winter Service Plan 2018

- Scotter
- Sturton by Stow
- Sudbrooke
- Welton

These villages are considered as per section 2.1.1.

Appendix B - Network Evaluation Form

		Reference No.	
Requested by			
Location			
Road Name and Number			
Distance (m)			
Average Width of Road			
Obstructions to Gritting Observations (Speed Retarders, Access for Plough etc.)			

	Y/N	
1. Is the Road Suitable for Gritters (Width, ability to exit/turn without reversing etc.)?		If no - do not proceed
2. Is a Reasonable Alternative Treated Route Available?		If yes - do not proceed
3. Is Sufficient Capacity available on Relevant Route?		If no - do not proceed

Item	Points	Occ.	Road Speed	Total	
Public Service Bus Route (daily) <i>Service Provided at least 5 days/week</i>	20				
Public Service Bus Route (less than daily) <i>Service Provided at least 5 days/week</i>	10				
School Bus Route <i>Contract Route (16+ seater PCV Licence Required)</i>	20				
Injury Accident Record (last three years) <i>Ice & Snow related – 15 points per reported accident</i>	15				
Health Centre on Route <i>GP Practice</i>	15				
Railway / Bus Station on Route <i>15 points awarded for each</i>	15				
Bends <i>5 points each</i>	5			< = 30	
				31 - 50	
				51 >	
Junctions <i>1 point each</i>	1			< = 30	
			31 - 50		
			51 >		
Steep Gradient <i>10 points if 1 or more gradients (>1 in 15 over 50m)</i>	10				
Deep Drains or Water Course Adjacent to Road <i>10 points / side (over 2m from C/Way level to bed level)</i>	10				
Ditches <i>(5 points / side (within 1m of C/Way, less than 2m deep)</i>	5				
Only 1 Public Service or School Bus Scores to be Used. Road Speed: up to 30mph = x1, 31mph to 50mph = x2, 51mph and above = x3					
			Total Point Score		

Total Points Score		Divided by Road Length		= Final Score	
Engineering Comments					

Appendix C - Evaluation for Additional Grit Bins

LCC Grit Bin Evaluation		
Initial Check		
Requested by Responsible Body	Continue	Yes
	Do not continue.	No
Maintainable Public Highway	Continue	Yes
	Do not continue.	No
Suitable Location	Continue	Yes
	Do not continue.	No
Scoring		
Gradient	>1in25	50
	<1in25	0
Proximity of Existing Grit Bins	<50m	-150
	50-100m	-50
	101-200m	0
	>200m	20
Number of Premises (Only Access Route)	>50	20
	20-50	10
	<20	0
Community Facilities (<200m radius of proposed Grit Bin)	School	20
	Post Office/Local Shop	10
	Local Shopping Centre	20
	Community/Medical Centre	10
Winter Network (Location of proposed Grit Bin)	Precautionary	-150
	Severe	30
	Not on Winter Network.	0
Number of refill requests within last 12 months	0	-10
	1	0
	>=2	5
Total Score	Pass	>=50
	Fail	<50

Appendix D - Midlands Service Improvement Group – Winter Service for Footways and Cycleways

Category	Overnight Frost Conditions	Daytime Frost Conditions	Extended Ice Conditions	Snow Events
	Overnight forecast temperatures below zero but not extending beyond 8am	Overnight forecast temperatures below zero extending beyond 8am	Persistent widespread ice (rather than frost) for more than 18 hours in a 24-hour period and a forecast not to rise above zero for a further 18 hours in the next 24 hours.	
1a	No treatment	Precautionary treatment	Monitor and further treatment as required when resources permit. Treatment only during normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to complete clearance within 12 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
1	No treatment	No treatment	Monitor and treatment as required when resources permit. Treatment only during normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to commence clearance within 24 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
2	No treatment	No treatment	Monitor and treatment as required when resources permit. Treatment only during normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to commence clearance within 48 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
3	No treatment	No treatment	Reactive treatment not normally undertaken other than in response to specific circumstances. Treatment only during normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to commence clearance within 5 days of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
4	No treatment	No treatment		

Note: At all times priority will be given to the Precautionary Salting Network. Combined footway/cycleways are treated in accordance with footway hierarchy. Segregated cycleways are not treated.

Appendix E - Precautionary Salting for Dry or Damp Road Conditions Flowchart –Version 1

Network Resilience

Lincolnshire County Council, Highway Network Management

July 2018

Notes:

General

1. The treatment time should allow for all routes to be treated prior to ice forming - subject to residual salt.
2. The latest callout time in the morning to ensure completion of precautionary route network prior to the rush hour is 0300hrs.
3. Runs may be times to avoid rush hour traffic. This is to prevent low speeds and stop/start manoeuvres where spread patterns become ineffective.
4. All routes to be completed after rainfall. If rainfall occurs during the run the treatment should be suspended and recommenced once rain ceases. If rainfall is heavy reconsider treating the whole route again.
5. Decision Matrix based on guidance contained within Winter Service section of Well-Maintained Highways Code of Practice for Highway Maintenance Management issued 29th November 2011 and the NWSRG guides Treatments for Ice and Snow issues 25th January 2010. *(to be revised when information is available from well managed highways)*

Treatment Times

1. For situations of high or medium confidence forecast of a morning Hoar Frost, treatments can be made so that gritting runs are completed by 2330hrs the previous evening.

Treatment Rates

1. Dry salting – Note MAXIMUM spread rate 20g/m².
2. Treatment rates at specific depots may be altered to take account of moisture content of salt following laboratory tests. Maximum allowable moisture content is 4%.
3. Road temperatures for decision making to be based on domain text minimums and Route Based Forecast minimums. This is to take into account known frost hollows on the treated network.

Duration of Treatment

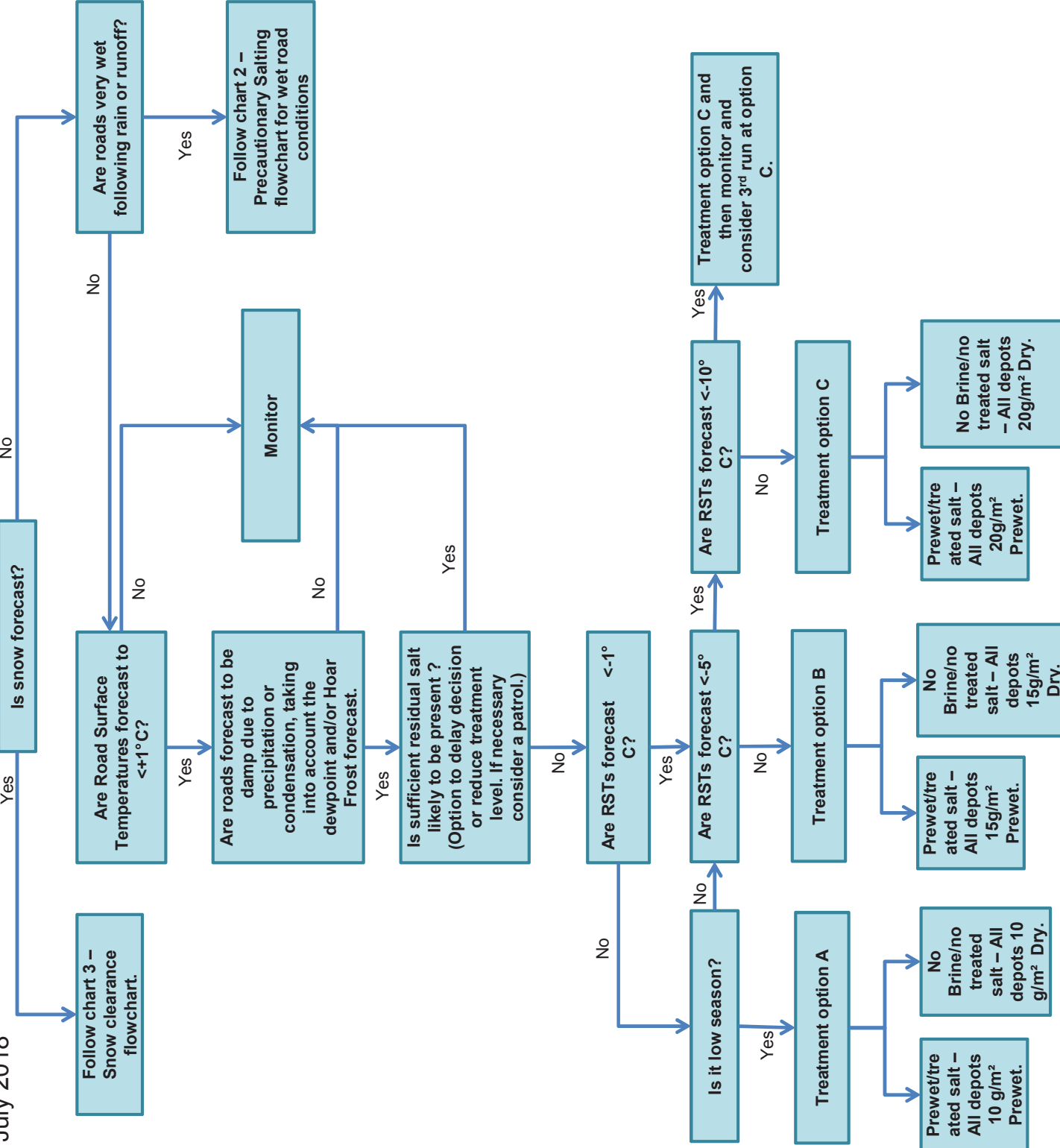
1. If period below freezing to exceed 8 hours then Grip Factor to be monitored and if necessary a second run to be considered.
2. Second runs carried out within 6 hours of initial treatment may be at 50% of the initial spread rates if no runoff water or ice present.

Marginal nights

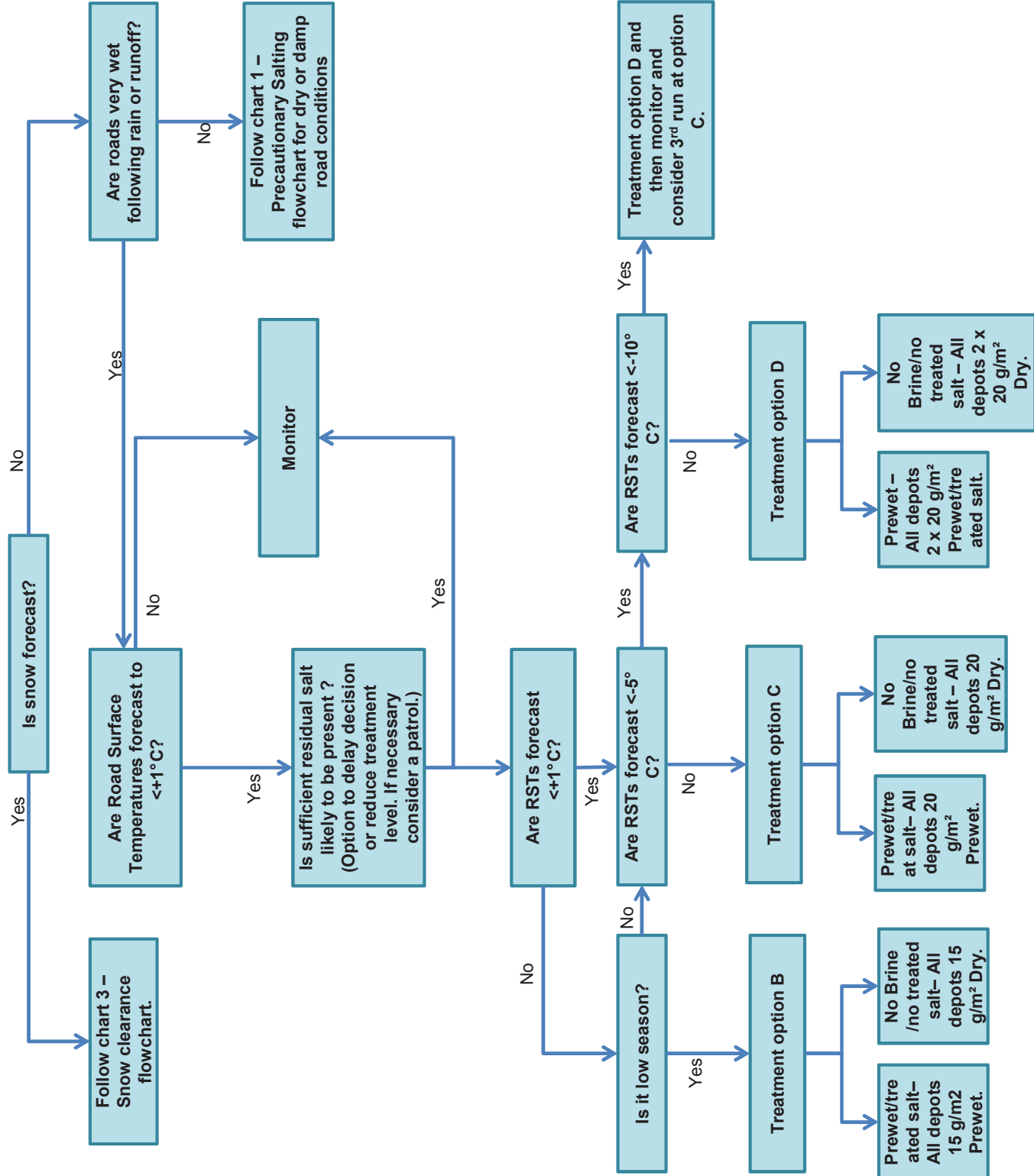
1. On marginal nights when RSTs are not forecast to go below -1 degrees Celsius individual depot runs to be considered based on the Route based forecasts from the Met Office.

Prolonged Spells of Ice/Snow

1. Consideration to be given to running routes in reverse during prolonged periods of continuous operations.



Appendix F - Precautionary Salting for Wet Road Conditions Flowchart--Version 1
 Network Resilience
 Lincolnshire County Council, Highway Network Management
 July 2018



Notes:
 General

- The treatment time should allow for all routes to be treated prior to ice forming - subject to residual salt.
- The latest callout time in the morning to ensure completion of precautionary route network prior to the rush hour is 0300hrs.
- Runs may be times to avoid rush hour traffic. This is to prevent low speeds and stop/start manoeuvres where spread patterns become ineffective.
- All routes to be completed after rainfall. If rainfall occurs during the run the treatment should be suspended and recommenced once rain ceases. If rainfall is heavy reconsider treating the whole route again.
- Decision Matrix based on guidance contained within Winter Service section of Well-Maintained Highways Code of Practice for Highway Maintenance Management issued 29th November 2011 and the NWSRG guides Treatments for Ice and Snow issues 25th January 2010. (to be revised when information is available from well managed highways)

Treatment Rates

- Dry salting - Note MAXIMUM spread rate 20g/m².
- Treatment rates at specific depots may be altered to take account of moisture content of salt following laboratory tests. Maximum allowable moisture content is 4%.
- Road temperatures for decision making to be based on domain text minimums and Route Based Forecast minimums. This is to take into account known frost hollows on the treated network.

Duration of Treatment

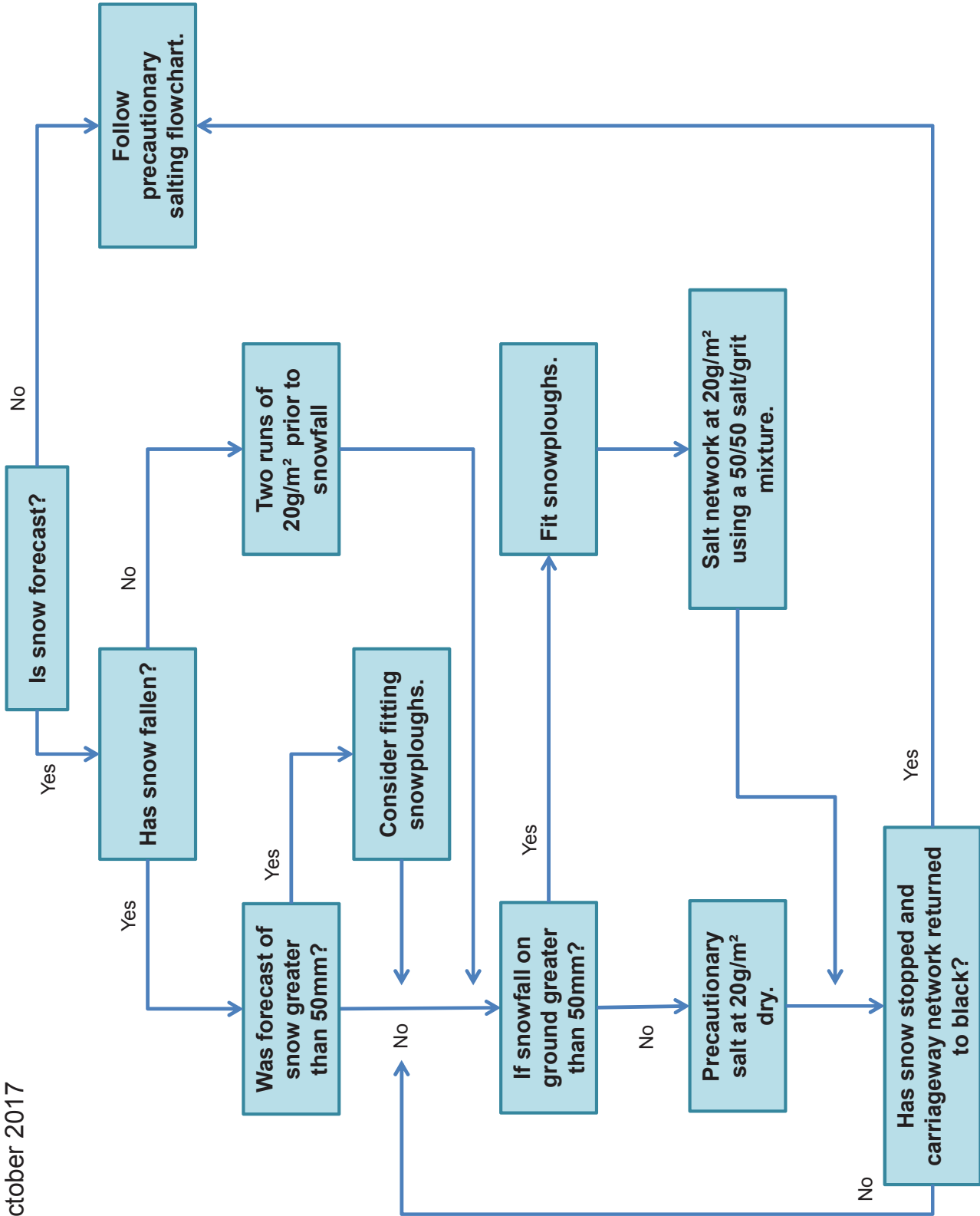
- If period below freezing to exceed 8 hours then Grip Factor to be monitored and if necessary a second run to be considered.
- Second runs carried out within 6 hours of initial treatment may be at 50% of the initial spread rates if no runoff water or ice present.

Marginal nights

- On marginal nights when RSTs are not forecast to go below -1 degrees Celsius individual depot runs to be considered based on the Route based forecasts from the Met Office.

Prolonged Spells of Ice/Snow

- Consideration to be given to running routes in reverse during prolonged periods of continuous operations.



Notes:

1. The treatment time should allow for all routes to be treated prior to ice forming – subject to residual salt.
2. The latest callout time in the morning to ensure completion of precautionary route network prior to the rush hour is 0300hrs.
3. Runs may be times to avoid rush hour traffic. This is to prevent low speeds and stop/start manoeuvres where spread patterns become ineffective.
4. If treatment is completed before 2200hrs and the forecast is for RST's -2 degrees Celsius or less, with moisture/hoar frost present and forecast is still below freezing for a further 10 hours or more, consider re-treatment to complete runs by 0700hrs.
5. Dry salting – If brine is not available then add 5g/m² to the above figures and dry salt. Note MAXIMUM spread rate 20 g/m².
6. Treatment rates at specific Depots may be altered to take account of moisture content of salt following laboratory tests. Maximum allowable moisture content is 4%.
7. At Horncastle and Willingham Hall depots when salt is sheeted down with Drystore the salt is considered to be covered. If the salt is not covered then note 6 will apply.
8. All routes to be completed after rainfall. If rain occurs during run the treatment should be suspended and recommenced once rain ceases. If rainfall is heavy then reconsider treating whole route again.
9. Decision Matrix based on research carried out by TRL for Highways Agency and the NWSRG as well as guidance contained within Well-Maintained Highways Code of Practice for Highway Maintenance Management.

Appendix H

Self-Help Tips

Clearing Snow off the Carriageway

- **DO** use purpose built snowploughs if available.
- **DO** skim the top of the snow off with a JCB/mechanical bucket to leave an inch of snow so you do not damage the road surface, remove "cat's eyes" or come into contact with ironwork.
- **DO NOT** scrape the road surface with a JCB/mechanical bucket.
- **DO** report any damage caused or found.
- **DO** operate with dipped beam headlights at all times.
- **DO** operate flashing/rotating amber beacons (where fitted) at all times.
- **DO** place the snow on the verge or grassed areas.
- **DO NOT** obstruct accesses or footpaths with the snow.
- **DO** keep in regular contact (minimum hourly) with operational base.

Vehicle operators/drivers are to have available and use:

- *Reflective jacket*
- *Emergency food and drink*
- *Mobile telephone or radio system*
- *Wear stout footwear*
- *Wear snow and ice grippers when walking outside of vehicle*

Appendix I

Self-Help Tips

Clearing Snow from Footways

- **DO** work from the footway at all times – working towards oncoming traffic wherever possible.
- **DO NOT** lift too much snow or ice at one time. Compacted snow can be very heavy.
- **DO NOT** use hot water to melt snow or ice – it may refreeze to form "black ice".
- **DO** place snow at the edges of footways next to the road. This helps to form a barrier between cars and pedestrians.
- **DO** put sand or ash down on cleared areas as it will give grip to walkers.
- **DO** use grit/salt from grit bins sparingly.
- **DO NOT** use grit/salt from highways grit bins on private property – this is theft.
- You **DO NOT** need to use a lot of salt – a teaspoon of salt per square metre will defrost ice patches.
- **DO NOT** work in blizzard conditions.

When working outside:

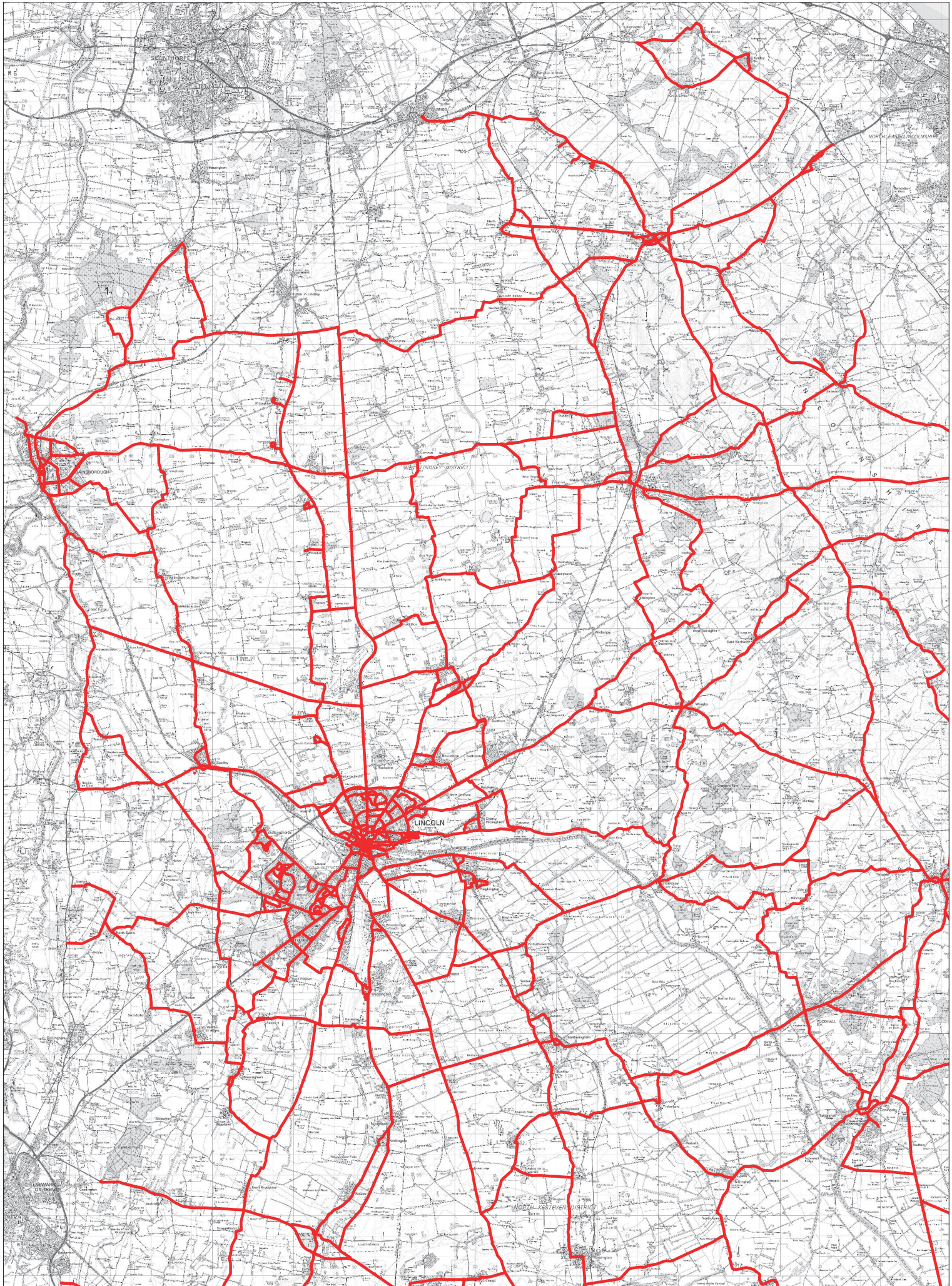
- *Wrap up warm*
- *Wear a reflective coat if available*
- *Wear stout footwear*
- *Wear snow and ice grippers when walking, especially when pushing snow*
- *Beware of hypothermia and wind chill effects*

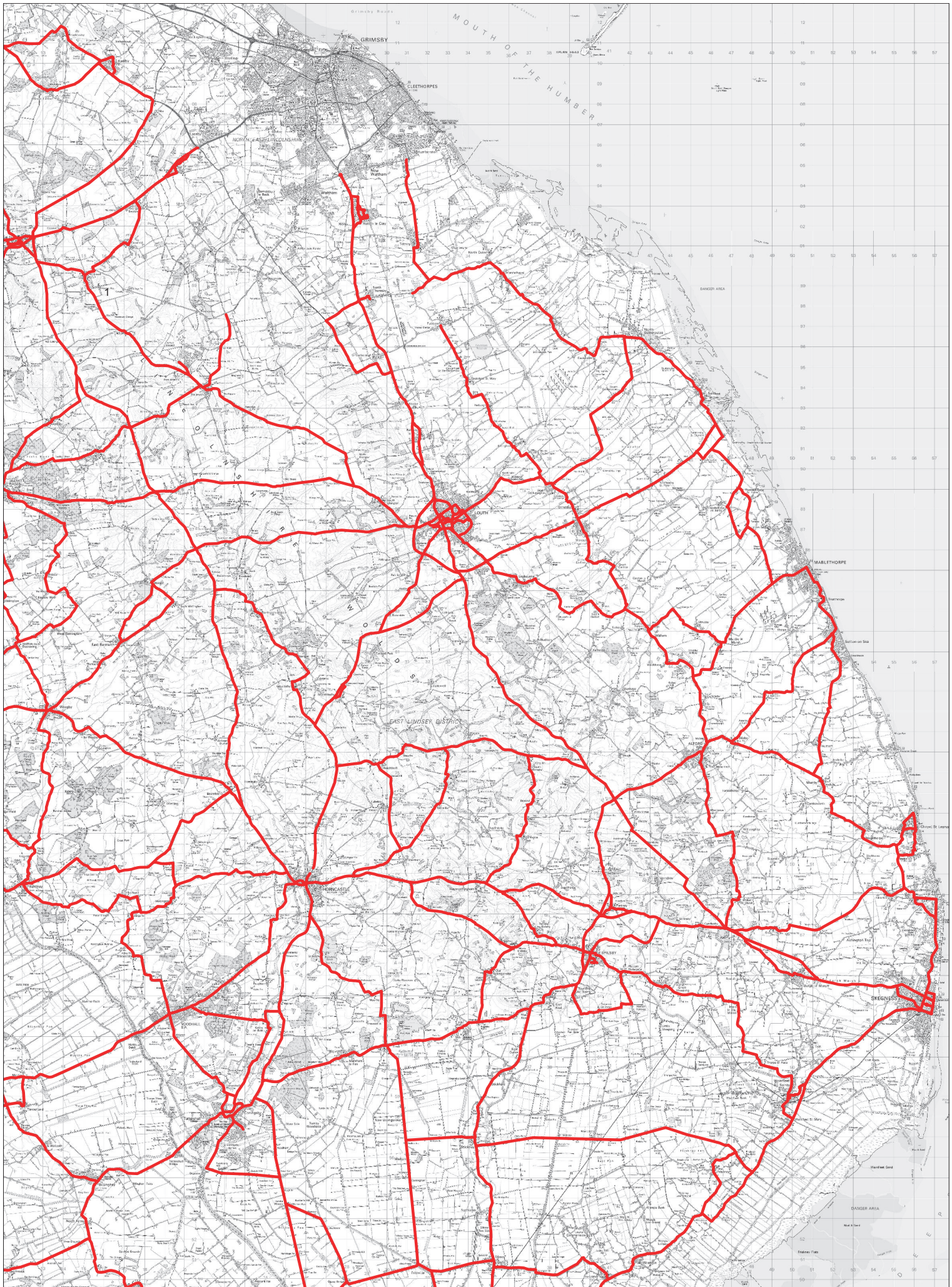
There is no law stopping you from clearing snow and ice on the pavement outside your property, pathways to your property or public spaces. This includes both public carriageways and footways.

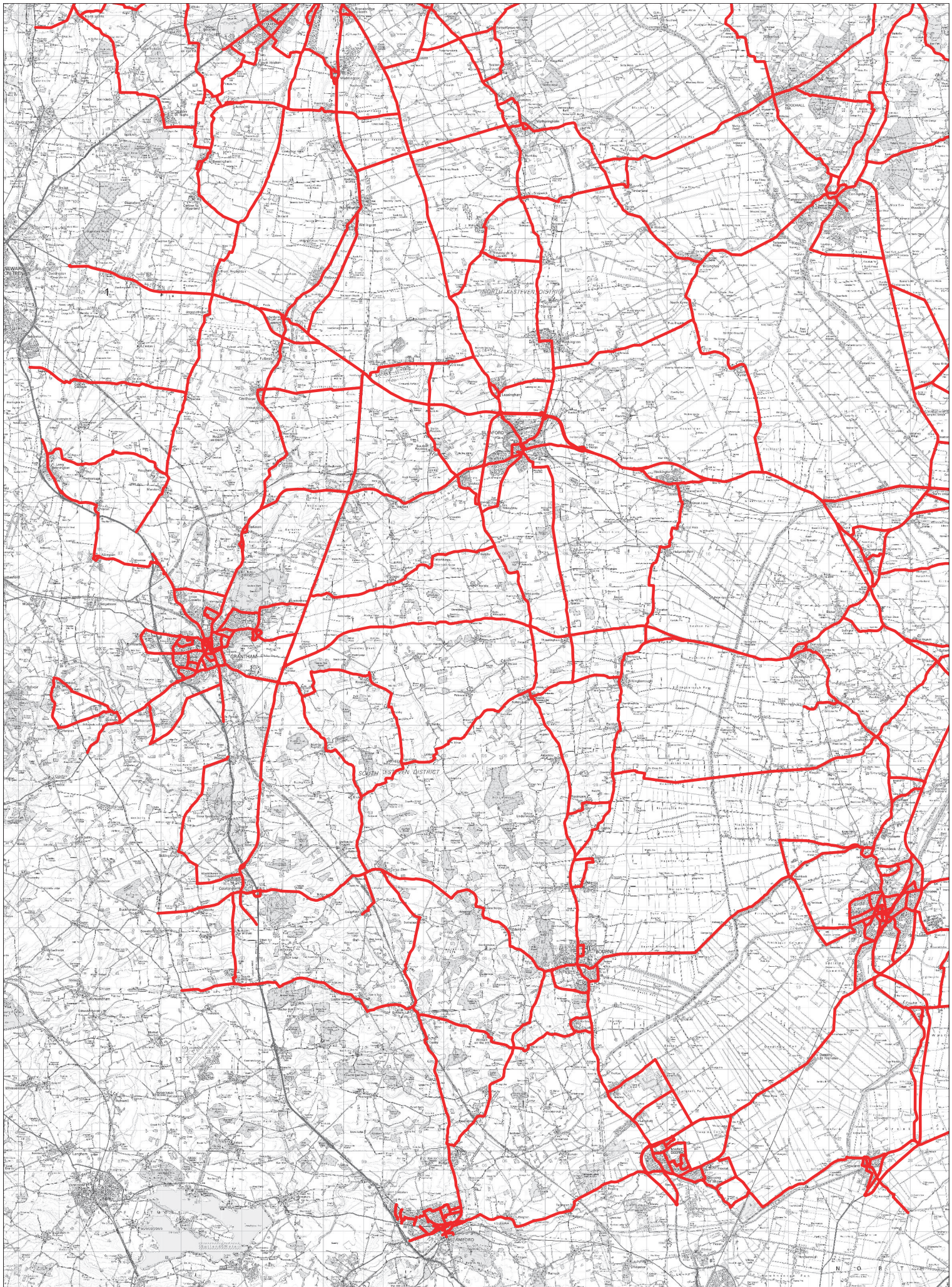
If an accident did happen, it is unlikely you would be sued as long as you:

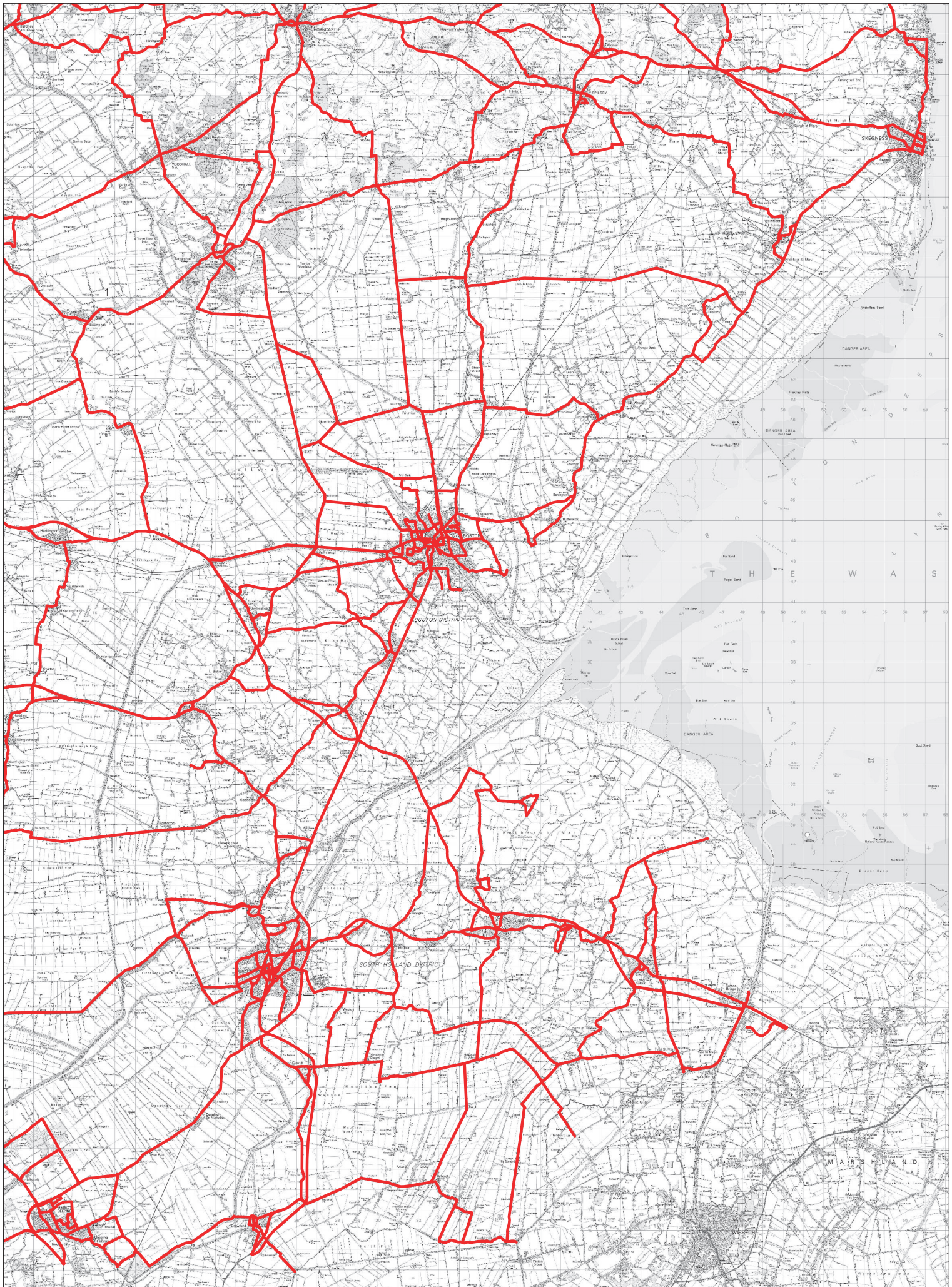
- *Are careful*
- *Use common sense to make sure that you do not make the pavement or pathway clearly more dangerous than before*

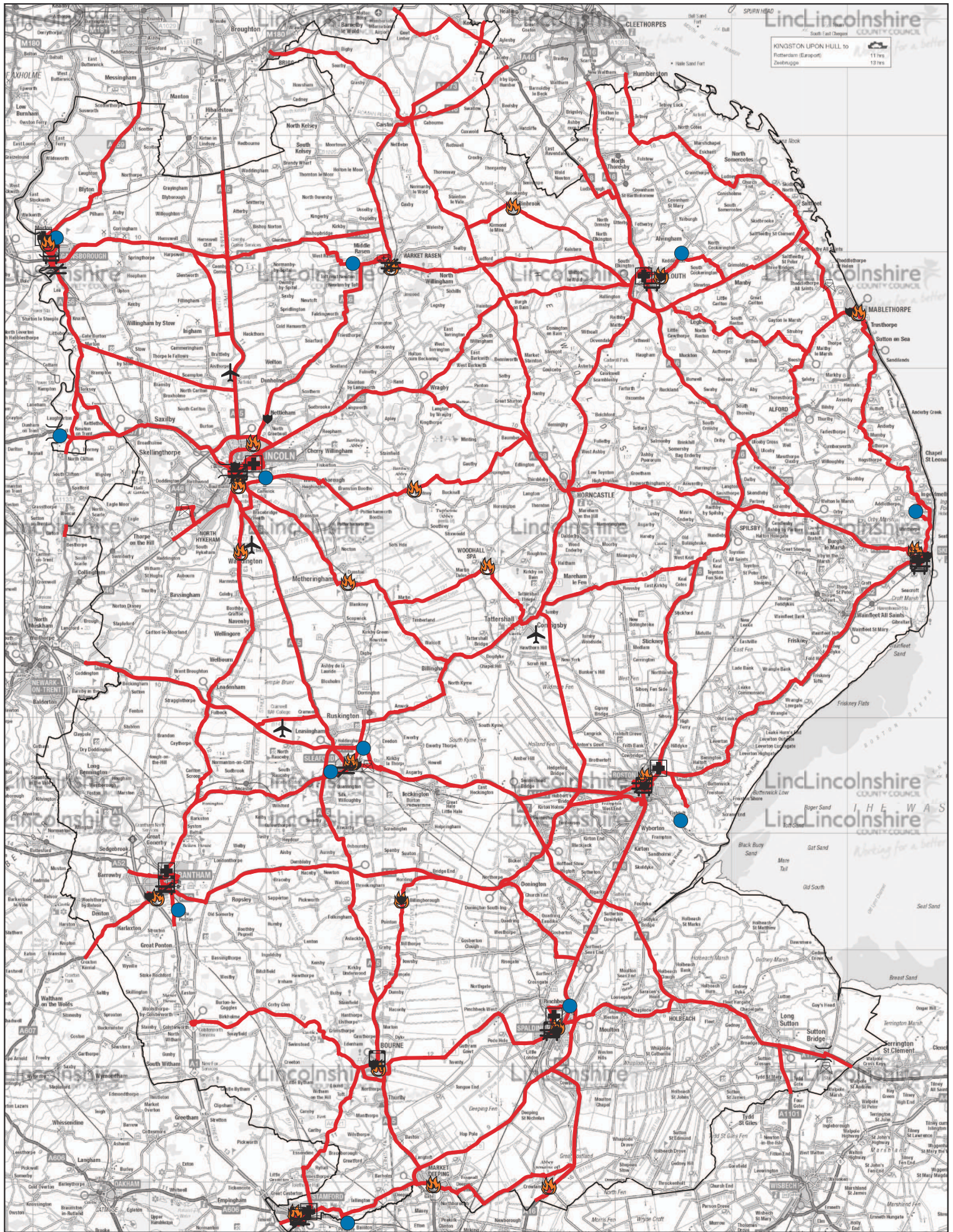
People using areas affected by snow and ice have a responsibility to be careful themselves.





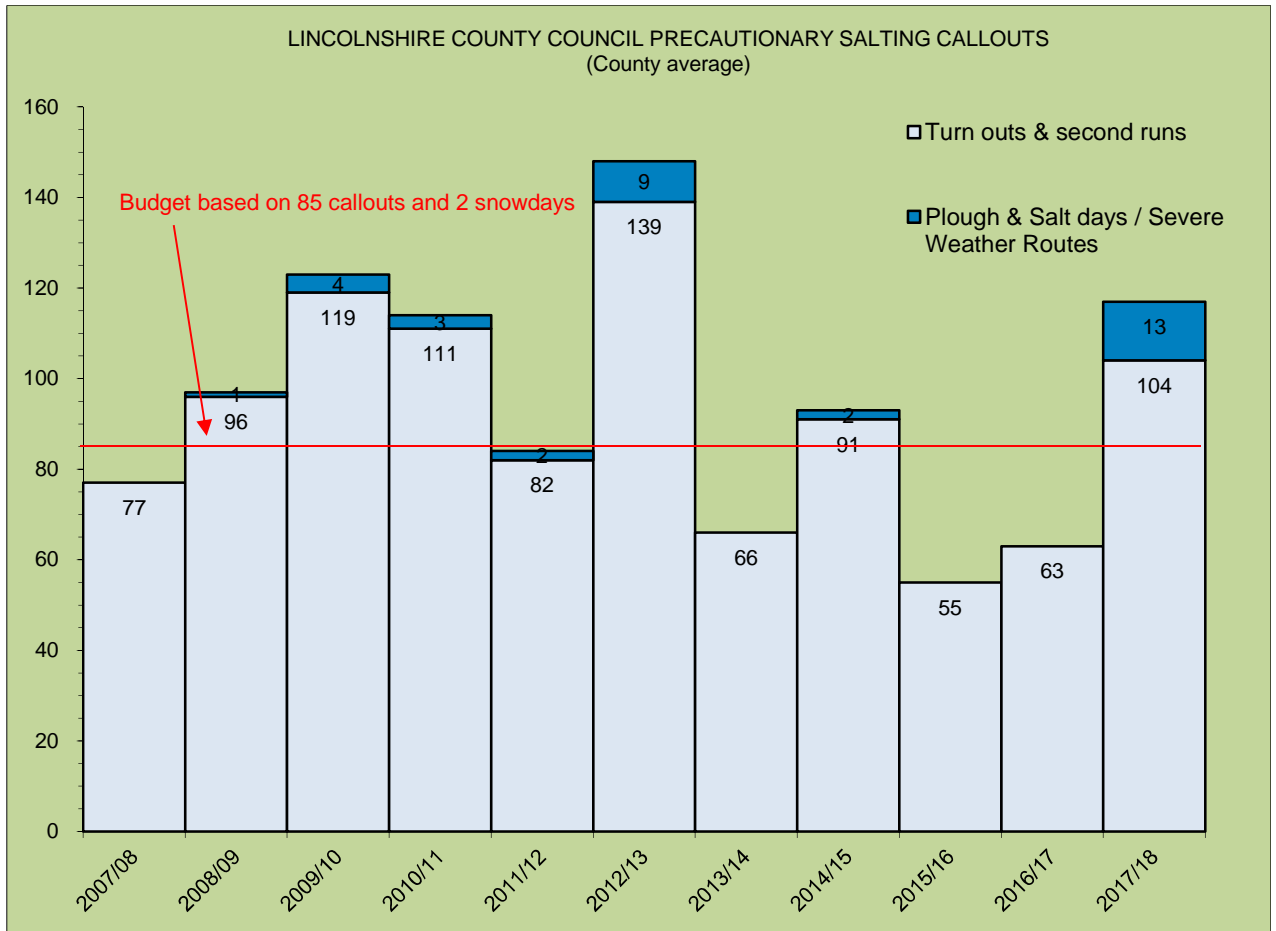




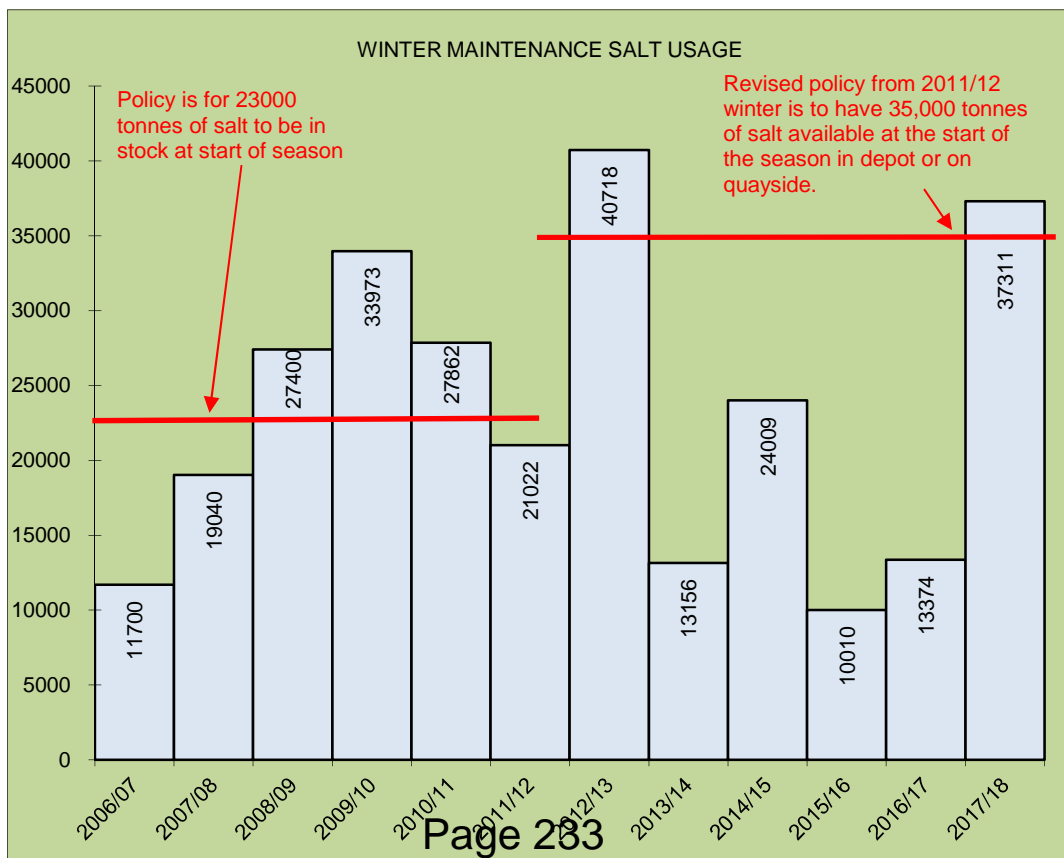


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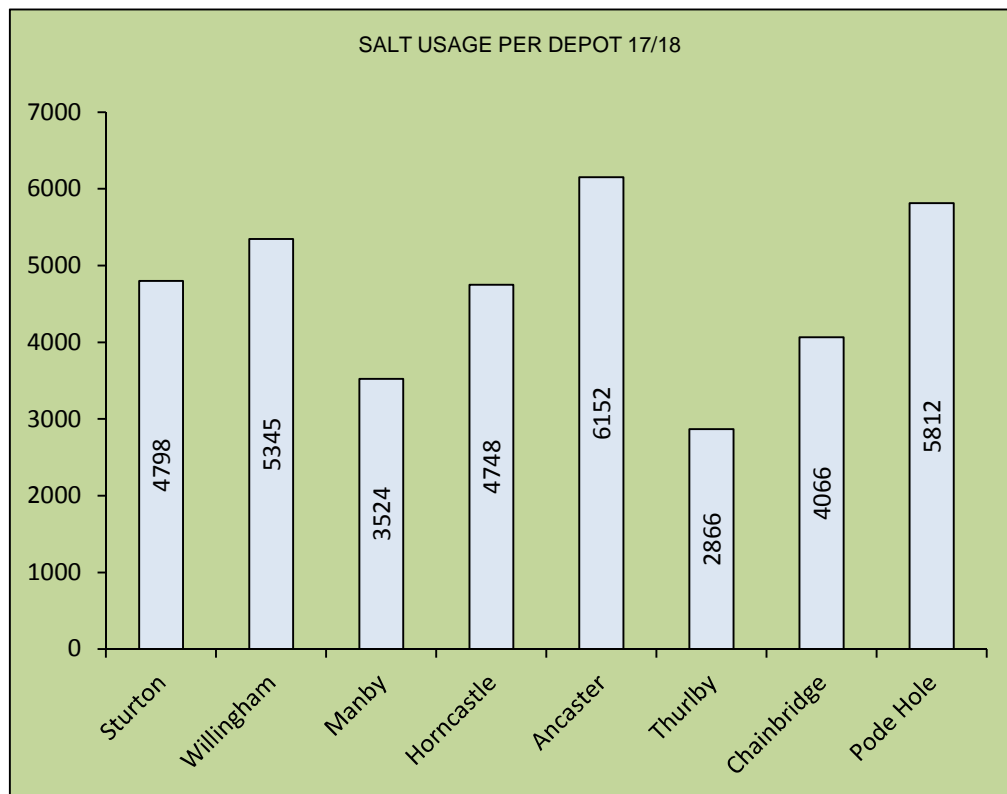
This graph shows how many precautionary salting callouts Lincolnshire County Council has undertaken, on average per winter, including current figure from 2017/18.



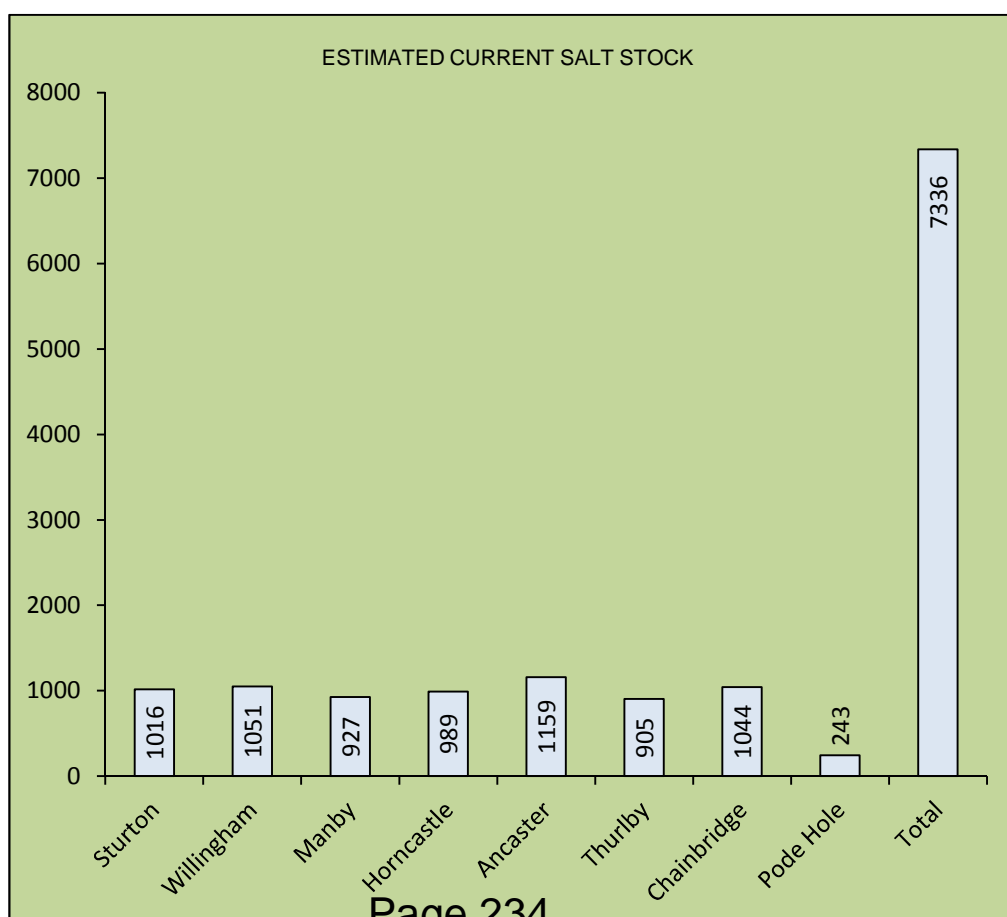
Below are the figures of how much salt Lincolnshire County Council has used per winter and where it has been in relation to the salt stock at start of season.



The below graph confirms the amount of salt we have used so far within the 2017/18 winter service period.



Lincolnshire County Councils estimated current salt stock at each depot are shown in the below graph. A salt delivery of 10,000 tonnes is expected to arrive at all depots except Sturton within the next week.



Equality Impact Analysis to enable informed decisions

The purpose of this document is to:-

- I. help decision makers fulfil their duties under the Equality Act 2010 and
- II. for you to evidence the positive and adverse impacts of the proposed change on people with protected characteristics and ways to mitigate or eliminate any adverse impacts.

Using this form

This form must be updated and reviewed as your evidence on a proposal for a project/service change/policy/commissioning of a service or decommissioning of a service evolves taking into account any consultation feedback, significant changes to the proposals and data to support impacts of proposed changes. The key findings of the most up to date version of the Equality Impact Analysis must be explained in the report to the decision maker and the Equality Impact Analysis must be attached to the decision making report.

****Please make sure you read the information below so that you understand what is required under the Equality Act 2010****

Equality Act 2010

The Equality Act 2010 applies to both our workforce and our customers. Under the Equality Act 2010, decision makers are under a personal duty, to have due (that is proportionate) regard to the need to protect and promote the interests of persons with protected characteristics.

Protected characteristics

The protected characteristics under the Act are: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation.

Section 149 of the Equality Act 2010

Section 149 requires a public authority to have due regard to the need to:

- Eliminate discrimination, harassment, victimisation, and any other conduct that is prohibited by/or under the Act
- Advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share those characteristics
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The purpose of Section 149 is to get decision makers to consider the impact their decisions may or will have on those with protected characteristics and by evidencing the impacts on people with protected characteristics decision makers should be able to demonstrate 'due regard'.

Decision makers duty under the Act

Having had careful regard to the Equality Impact Analysis, and also the consultation responses, decision makers are under a personal duty to have due regard to the need to protect and promote the interests of persons with protected characteristics (see above) and to:-

- (i) consider and analyse how the decision is likely to affect those with protected characteristics, in practical terms,
- (ii) remove any unlawful discrimination, harassment, victimisation and other prohibited conduct,
- (iii) consider whether practical steps should be taken to mitigate or avoid any adverse consequences that the decision is likely to have, for persons with protected characteristics and, indeed, to consider whether the decision should not be taken at all, in the interests of persons with protected characteristics,
- (iv) consider whether steps should be taken to advance equality, foster good relations and generally promote the interests of persons with protected characteristics, either by varying the recommended decision or by taking some other decision.

Conducting an Impact Analysis

The Equality Impact Analysis is a process to identify the impact or likely impact a project, proposed service change, commissioning, decommissioning or policy will have on people with protected characteristics listed above. It should be considered at the beginning of the decision making process.

The Lead Officer responsibility

This is the person writing the report for the decision maker. It is the responsibility of the Lead Officer to make sure that the Equality Impact Analysis is robust and proportionate to the decision being taken.

Summary of findings

You must provide a clear and concise summary of the key findings of this Equality Impact Analysis in the decision making report and attach this Equality Impact Analysis to the report.

Impact – definition

An impact is an intentional or unintentional lasting consequence or significant change to people's lives brought about by an action or series of actions.

How much detail to include?

The Equality Impact Analysis should be proportionate to the impact of proposed change. In deciding this asking simple questions “Who might be affected by this decision?” “Which protected characteristics might be affected?” and “How might they be affected?” will help you consider the extent to which you already have evidence, information and data, and where there are gaps that you will need to explore. Ensure the source and date of any existing data is referenced.

You must consider both obvious and any less obvious impacts. Engaging with people with the protected characteristics will help you to identify less obvious impacts as these groups share their perspectives with you.

A given proposal may have a positive impact on one or more protected characteristics and have an adverse impact on others. You must capture these differences in this form to help decision makers to arrive at a view as to where the balance of advantage or disadvantage lies. If an adverse impact is unavoidable then it must be clearly justified and recorded as such, with an explanation as to why no steps can be taken to avoid the impact. Consequences must be included.

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Proposals for more than one option If more than one option is being proposed you must ensure that the Equality Impact Analysis covers all options. Depending on the circumstances, it may be more appropriate to complete an Equality Impact Analysis for each option.

The information you provide in this form must be sufficient to allow the decision maker to fulfil their role as above. You must include the latest version of the Equality Impact Analysis with the report to the decision maker. Please be aware that the information in this form must be able to stand up to legal challenge.

Background Information

Title of the policy / project / service being considered	Winter Service Plan	Person / people completing analysis	Vincent Van Donincki
Service Area	Infrastructure Commissioning	Lead Officer	Vincent Van Doninck
Who is the decision maker?	Cllr Richard Davies	How was the Equality Impact Analysis undertaken?	Discussion between officers involved using guidance on Equality & Diversity.
Date of meeting when decision will be made	14/09/2018	Version control	V1.0
Is this proposed change to an existing policy/service/project or is it new?	Existing policy/service/project	LCC directly delivered, commissioned, re-commissioned or de-commissioned?	Commissioned
Describe the proposed change	The Winter Maintenance Plan does not outline any Level of Service changes as this was not deemed necessary. Rather, it reflects the new decision-making processes, the procedures around operational gritting decisions and the continued alignment with national guidance where considered appropriate for Lincolnshire.		

Evidencing the impacts

In this section you will explain the difference that proposed changes are likely to make on people with protected characteristics. To help you do this first consider the impacts the proposed changes may have on people without protected characteristics before then considering the impacts the proposed changes may have on people with protected characteristics.

You must evidence here who will benefit and how they will benefit. If there are no benefits that you can identify please state 'No perceived benefit' under the relevant protected characteristic. You can add sub categories under the protected characteristics to make clear the impacts. For example under Age you may have considered the impact on 0-5 year olds or people aged 65 and over, under Race you may have considered Eastern European migrants, under Sex you may have considered specific impacts on men.

Data to support impacts of proposed changes

When considering the equality impact of a decision it is important to know who the people are that will be affected by any change.

Population data and the Joint Strategic Needs Assessment

The Lincolnshire Research Observatory (LRO) holds a range of population data by the protected characteristics. This can help put a decision into context. Visit the LRO website and its population theme page by following this link: <http://www.research-lincs.org.uk> If you cannot find what you are looking for, or need more information, please contact the LRO team. You will also find information about the Joint Strategic Needs Assessment on the LRO website.

Workforce profiles

You can obtain information by many of the protected characteristics for the Council's workforce and comparisons with the labour market on the [Council's website](#). As of 1st April 2015, managers can obtain workforce profile data by the protected characteristics for their specific areas using Agresso.

Positive impacts

The proposed change may have the following positive impacts on persons with protected characteristics – If no positive impact, please state 'no positive impact'.

Age	Positive impact by gritting the routes that enable accessibility to schools, all main hospitals, medical centres and care homes.
Disability	Positive impact by gritting the routes that enable accessibility to schools, all main hospitals, medical centres and care homes.
Gender reassignment	No positive impact.
Marriage and civil partnership	No positive impact.
Pregnancy and maternity	Positive impact by gritting the routes that enable accessibility to all main hospitals.
Race	No positive impact.
Religion or belief	No positive impact.

Sex	No positive impact.
Sexual orientation	No positive impact.

If you have identified positive impacts for other groups not specifically covered by the protected characteristics in the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.

Adverse/negative impacts

You must evidence how people with protected characteristics will be adversely impacted and any proposed mitigation to reduce or eliminate adverse impacts. An adverse impact causes disadvantage or exclusion. If such an impact is identified please state how, as far as possible, it is justified; eliminated; minimised or counter balanced by other measures.

If there are no adverse impacts that you can identify please state 'No perceived adverse impact' under the relevant protected characteristic.

Negative impacts of the proposed change and practical steps to mitigate or avoid any adverse consequences on people with protected characteristics are detailed below. If you have not identified any mitigating action to reduce an adverse impact please state 'No mitigating action identified'.

Age	No perceived adverse impact of the Plan itself. The existence of ice and snow can impact disproportionately on older people as they may be less likely to venture out in such conditions. The Plan describes in general terms the standards, policy and objectives of winter service which mitigates as much as possible this adverse impact between those with this protected characteristic and people who do not share that protected characteristic.
Disability	No perceived adverse impact of the Plan itself. The existence of ice and snow can impact disproportionately on people with a disability as they may be less likely to venture out in such conditions. The Plan describes in general terms the standards, policy and objectives of winter service which mitigates as much as possible this adverse impact between those with this protected characteristic and people who do not share that protected characteristic.
Gender reassignment	No perceived adverse impact. The Plan describes in general terms the standards, policy and objectives of winter service. Its impacts are neutral between those with this protected characteristic and people who do not share that protected characteristic.
Marriage and civil partnership	No perceived adverse impact. The Plan describes in general terms the standards, policy and objectives of winter service. Its impacts are neutral between those with this protected characteristic and people who do not share that protected characteristic.
Pregnancy and maternity	No perceived adverse impact of the Plan itself. The existence of ice and snow can impact disproportionately on pregnant women or mothers of small children as they may be less likely to venture out in such conditions. The Plan describes in general terms the standards, policy and objectives of winter service which mitigates as much as possible this adverse impact-between those with this protected characteristic and people who do not share that protected characteristic.

Race	No perceived adverse impact. The Plan describes in general terms the standards, policy and objectives of winter service. Its impacts are neutral between those with this protected characteristic and people who do not share that protected characteristic.
Religion or belief	No perceived adverse impact. The Plan describes in general terms the standards, policy and objectives of winter service. Its impacts are neutral between those with this protected characteristic and people who do not share that protected characteristic.
Sex	No perceived adverse impact. The Plan describes in general terms the standards, policy and objectives of winter service. Its impacts are neutral between those with this protected characteristic and people who do not share that protected characteristic.
Sexual orientation	No perceived adverse impact. The Plan describes in general terms the standards, policy and objectives of winter service. Its impacts are neutral between those with this protected characteristic and people who do not share that protected characteristic.

If you have identified negative impacts for other groups not specifically covered by the protected characteristics under the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.

Stakeholders

Stake holders are people or groups who may be directly affected (primary stakeholders) and indirectly affected (secondary stakeholders)

You must evidence here who you involved in gathering your evidence about benefits, adverse impacts and practical steps to mitigate or avoid any adverse consequences. You must be confident that any engagement was meaningful. The Community engagement team can help you to do this and you can contact them at consultation@lincolnshire.gov.uk

State clearly what (if any) consultation or engagement activity took place by stating who you involved when compiling this EIA under the protected characteristics. Include organisations you invited and organisations who attended, the date(s) they were involved and method of involvement i.e. Equality Impact Analysis workshop/email/telephone conversation/meeting/consultation. State clearly the objectives of the EIA consultation and findings from the EIA consultation under each of the protected characteristics. If you have not covered any of the protected characteristics please state the reasons why they were not consulted/engaged.

Objective(s) of the EIA consultation/engagement activity

No consultation or engagement activity undertaken.

Who was involved in the EIA consultation/engagement activity? Detail any findings identified by the protected characteristic

Age	As detailed above. None identified.
Disability	As detailed above. None identified.
Gender reassignment	As detailed above. None identified.
Marriage and civil partnership	As detailed above. None identified.
Pregnancy and maternity	As detailed above. None identified.
Race	As detailed above. None identified.
Religion or belief	As detailed above. None identified.

Sex	As detailed above. None identified.
Sexual orientation	As detailed above. None identified.
Are you confident that everyone who should have been involved in producing this version of the Equality Impact Analysis has been involved in a meaningful way? The purpose is to make sure you have got the perspective of all the protected characteristics.	Yes.
Once the changes have been implemented how will you undertake evaluation of the benefits and how effective the actions to reduce adverse impacts have been?	

Further Details

Are you handling personal data?	<p>No</p> <p>If yes, please give details.</p>
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Actions required	Action	Lead officer	Timescale
Include any actions identified in this analysis for on-going monitoring of impacts.	Regular Review	Vincent Van Doninck	Continual Monitoring.
Signed off by	Paul Rusted	Date	05/09/2017

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Summary of Changes – Winter Service Plan

- Change of name from Winter Maintenance Plan to Winter Service Plan.
- Change of winter maintenance to winter service throughout the Winter Service Plan.

1. General

- Inclusion of Triage System as a key point. (p.3)
- Salting Stock reduced to minimum of 25,000 tonnes at start of season within key point. (p.3)
- Addition of Treated Salt information to Pre-wetting System key point. (p.3)
- Winter Service will operate and prioritises on the basis of Safety, Serviceability, Sustainability and Customer Service. Introduction 1.2.6. (p.4)

2. Policy

- Resilient Network. Point 2.1 (p.5/6)
- Severe Weather Routes section included as 2.4. instead of 2.13. (p.9)
- Treatment Priorities: Triage System – explanation of the triage system for gritting in times of severe weather. 2.5 (p.10)
- Grit Bins – Responsible Body definition 2.10.4 pg.15

3. Procedures

- Brine making facilities at only 4 depots. 3.2 (p.23)
- Inclusion of Treated Salt procedures to point 3.2. (p.23)
- Salt Stock Managing System. 3.2 (p.23)
- Salting Stock reduced to minimum of 25,000 tonnes at start of season 3.2 (p.23)

Appendix Changes

- Revised Grit Bin Evaluation Form (Appendix C)
- Updated Flowchart for Precautionary Salting Dry or Damp Roads (Appendix E)
- Updated Flowchart for Precautionary Salting for Wet Road Conditions (Appendix F)
- Updated Flowchart for Snow Clearance (Appendix G)
- Inclusion of Resilient Network Map (Appendix K)

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**Open Report on behalf of Richard Wills,
Executive Director for Environment and Economy**

Report to:	Highways and Transport Scrutiny Committee
Date:	10 September 2018
Subject:	Civil Parking Enforcement Annual Report 2017 to 2018

Summary:

The adoption of Civil Parking Enforcement (CPE) by Lincolnshire County Council requires the Council to submit an annual report on CPE related activities and a financial statement showing the cost of the operation, including any deficit or surplus. This is in accordance with the Statutory Guidance to Local Authorities on the Civil Enforcement of Parking Contraventions. The Lincolnshire County Council Annual Parking Report 2018 is attached at Appendix A.

Actions Required:

Members of the Highways and Transport Scrutiny Committee are invited to consider and comment on the contents of the annual report and support the report being published on the Council's website.

1. Background

The annual parking report covers the period from 1st April 2017 to 31st March 2018. It is a transparent document that allows the disclosure of various statistics related to enforcement and appeals. The report contains financial information on the cost of the service. The report also includes details of projects where parking enforcement has helped to contribute to parking schemes or the review of current parking restrictions. The report will be sent to the Department for Transport and PATROL (Parking and Traffic Regulation Outside London).

The report contains information on the following subjects:

- Cost of service provision
- Income from penalty charges
- Any surplus or deficit made
- The number of penalty charges issued
- The number of penalty charges paid
- The income raised from penalty charge payments
- The number of appeals
- The number of successful appeals

- The number of penalty charges cancelled, along with reason for cancellation.

2. Conclusion

Parking enforcement continues to contribute to the overall transport strategy by helping to reduce congestion, increase traffic flows and improve pedestrian safety.

The provision of free high street parking helps to contribute to the economic viability of local shops and services. Ensuring that the limited waiting times are adhered to by enforcing the restrictions increases the turnover of vehicles, allowing higher footfall and accessibility to local facilities and amenities.

The 2017/18 financial year saw the first deficit since parking enforcement was introduced to Lincolnshire in 2012. The table below highlights the past three financial years.

Financial Year	Costs	Income	Surplus / Deficit
15/16	£995,000	£1,300,000	£308,000 Surplus
16/17	£968,000	£1,036,000	£67,898 Surplus
17/18	£1,078,000	£1,031,000	£47,321 Deficit

3. Consultation

a) Have Risks and Impact Analysis been carried out?

N/A

b) Risks and Impact Analysis

N/A

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	The Lincolnshire County Council Parking Report 2017 to 2018

5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Matt Jones, who can be contacted on 01522 552110 or Matt.Jones@lincolnshire.gov.uk

Lincolnshire County Council Civil Parking Enforcement Report 2017 to 2018



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On line - Parking and Waiting Restrictions	6
Statistics and the Parking Account.....	7
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Introduction

As the Enforcement Authority, the Council is responsible for the enforcement of contraventions and the handling of appeals; both areas are legislated by the Traffic Management Act 2004 and Statutory Guidance from the Secretary of State for Transport.

The power to enforce on-street lies with the County Council; powers were delegated to the District and City Councils to enforce their off-street car parks.

One of the priorities of the Department for Communities and Local Government is to ensure that the enforcement of parking restrictions is transparent, consistent, and fair. Lincolnshire County Council recognises that openness and accountability is critical to gaining public support and by publishing our Annual Parking Report, we hope that our customers will be aware of our dedication to improving the parking regime for residents, businesses, and visitors to the County.

The Council continues to work hard to deliver a parking enforcement service that is fair and consistent. In so doing it aims to improve road safety, reduce congestion and tackle anti- social parking and affect improvement in air quality.

This report is part of the responsibilities that Lincolnshire County Council has as the Enforcement Authority for parking and waiting restrictions. It will detail the statistics for the period 1 April 2017 to 31 March 2018 along with explanations of how and why enforcement is carried out.

Why are parking restrictions enforced?

Parking and waiting restrictions serve a variety of purposes, ranging from road safety through to allowing loading and unloading. The restrictions are designed and implemented by the County Council's Highways teams, with the Traffic Orders Team ensuring that the legal underpinnings are in place to show that an Order exists.

The restrictions enable improved traffic flows, lower congestion and allow the public and businesses to gain access to services, businesses and retail areas.

Most drivers take parking restrictions into consideration when going about their day to day business and lives, however, on occasion some drivers decide to flout the restrictions or take a chance that they will not be caught out.

Without enforcement of the restrictions by the Civil Enforcement Officers, human nature would lead others to follow the example of those who ignore the restrictions. Thus the restrictions would be useless, negating the reason for designing and

implementing them and leading to confusion with the result that the public would be unable to access important services and facilities.

An example would be an area of limited waiting bays that allowed parking for 1 hour but no return to the bays for 2 hours. The bays have been requested by the owners of a row of small shops to help encourage visitors and to stop all day "commuter" parking.

If the restriction was implemented without enforcement it would soon become worthless as the original problem, all day commuter parking, could swiftly return. Enforcement of the restrictions helps to ensure compliance, allowing shoppers to visit the businesses and helping to keep the area vibrant.

Enforcement is a vital part of keeping the roads safe, traffic moving and allowing fair access for all to amenities, shops and services.

Enforcing parking restrictions in Lincolnshire

In November 2012 the contract for on-street enforcement was awarded to APCOA Parking Ltd. This contract was extended in November 2016 for a further 5 years with the possibility of a 3 year extension. The structure of the enforcement workforce is 1 manager, 1 data analyst, 3 supervisors and approximately 20 CEO's.

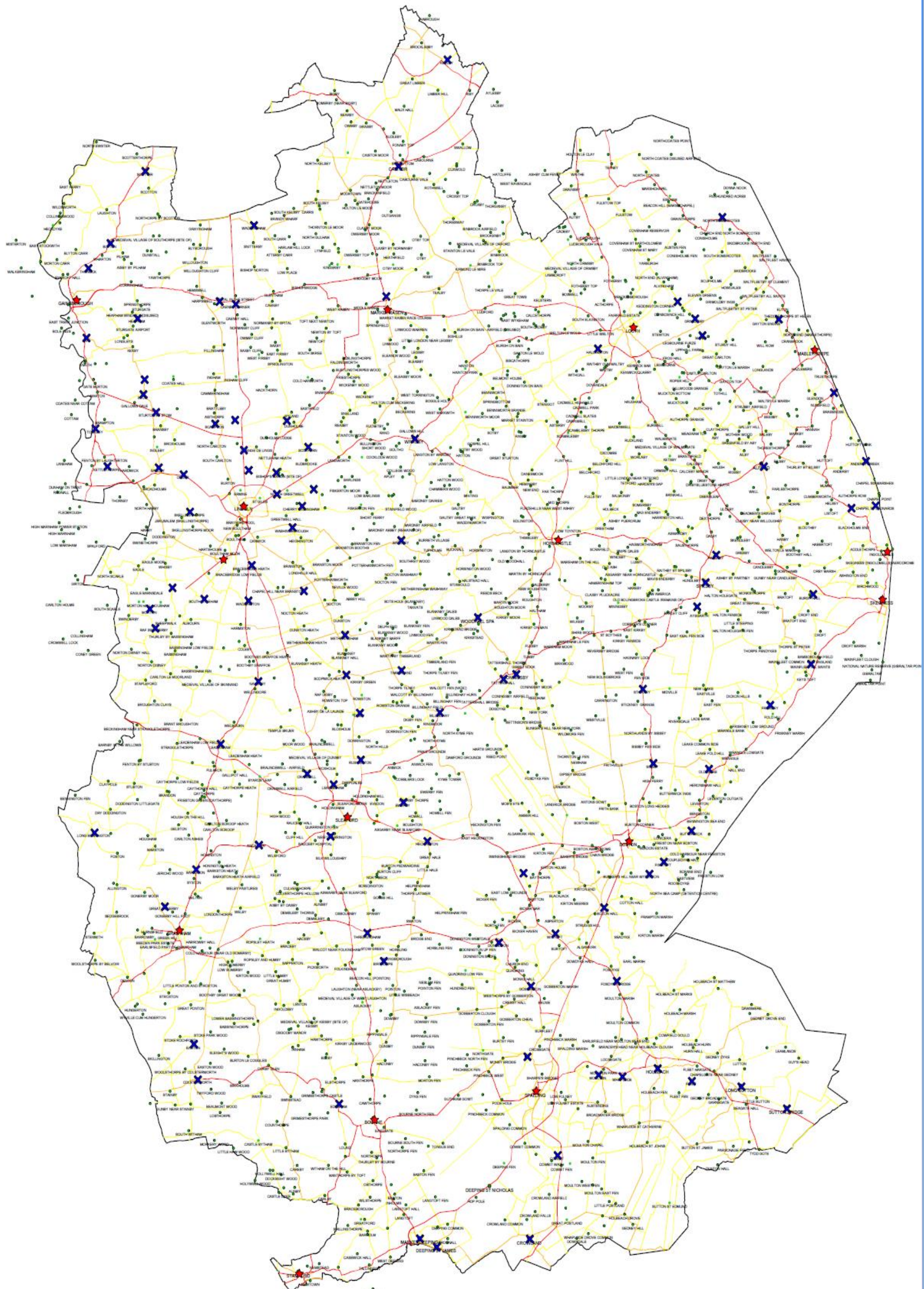
Lincolnshire has 9000km of road network within an area of 5921km² making our enforcement area amongst the largest in the country.

To cover this area with such a small team requires a proactive approach to patrol requirements, customer requests and the efficient use of transport.

For the purposes of enforcement, the County is split into 3 categories, A, B and C. Category A covers town and city centres, along with other high traffic density routes and locations. These locations are patrolled daily. Category B areas are for smaller towns and are patrolled once a week. Category C areas are all other areas, subject to parking restrictions, not covered by category A or B and are patrolled depending on resources available.

CEO's are allocated to a patrol location to meet the councils requirements, however category C areas are also patrolled using cars and scooters. These routes are planned so that the most efficient use of the CEO's time is made, along with lower transport and fuel costs.

The following map shows the locations in the county that have parking and waiting restrictions. The red stars ★ mark the category A locations and the blue X marks a location with one or more parking restrictions in a category B or C location:



What are the benefits of enforcing restrictions?

Parking and waiting restrictions are used to help regulate traffic flow, assist access, increase road safety and contribute to reduced traffic congestion. Uncontrolled parking can cause some serious problems by reducing road safety, denying access for visitors, delaying journey times and adding to air pollution.

It's not just about enforcement though, the CEO's are also seen as a point of contact, advising visitors on where to park, finding amenities and general information about the area.

Regular enforcement has also helped to highlight issues with parking schemes that are not apparent, helping to focus on unintended consequences. Parking schemes in Stamford, Grantham and Sleaford have previously been changed as the effect of enforcement becomes clear.

In addition to issuing Penalty Charge Notices, Civil Enforcement Officers also report any defective signs to be repaired or replaced and lines to be refreshed or re-lined as well as fulfilling an ambassadorial role for the council. Significant works were undertaken in Skegness and Mablethorpe towards the end of 2017 / early 2018 to ensure that parking areas were enforceable and compliant in the lead up to the 2018 summer season.

Partnerships

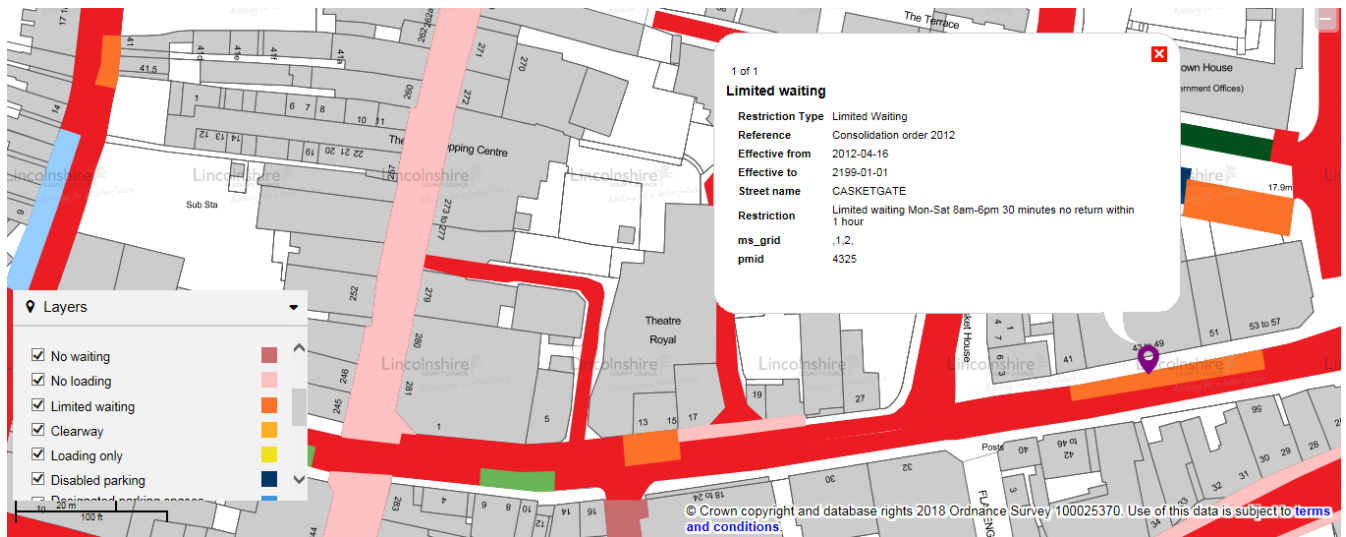
Lincolnshire County Council have continued to conduct and carry out a number of successful joint patrols involving Civil Enforcement Officers, Police Constables and Police Community Support Officers. Areas visited include Horncastle, Ingoldmells, Wainfleet, Alford and Lincoln. Public perception of these have been positive and comments were relayed through to Officers in Wainfleet and Alford when on foot patrol by members of the public stating how beneficial it was to see Officers working together creating a higher frequency of visible patrols, and when required offering words of advice to motorists.

On line - Parking and Waiting Restrictions

All of the on-street parking and waiting restrictions throughout Lincolnshire are mapped based; the restrictions are overlaid onto the map of the County's road network. We have used this information to provide the public easy access to all the on-street orders to help them check for restrictions before going to a location or to check for parking and waiting restrictions during the journey.

Towards the end of 2017, the Council's original mapped based TRO system Traffweb was replaced with Location Centre which has saved the Council in excess of £3,500 on annual maintenance / subscription costs

An example of the information can be seen below:



You can access the online traffic orders facility at:

<https://lincs.locationcentre.co.uk/internet/internet.aspx?articleid=YfmDQ6wYrkU~&preview=true>

Our hope is that the information will help drivers to find appropriate parking prior to their arrival and reduce journey times. This would benefit all residents and visitors, helping to reduce congestion, increase traffic flow and assist drivers to avoid parking in contravention of the rules.

Statistics and the Parking Account

Lincolnshire County Council publishes a monthly breakdown of penalty charge notices issued, appeals received and challenges accepted on our website, the information of which can be found via www.lincolnshire.gov.uk/parking.

The figures below reflect the penalty charges issued at each level, the number challenged and accepted, reasons for cancellation and the revenue from penalty charges for on-street contraventions:

Penalty charges are issued for contraventions of the parking restrictions. Under government legislation different types of contraventions are classed as higher (£70) or lower (£50) levels. The level is dependent on the seriousness of the contravention. If paid within 14 days, the penalty charge is reduced by 50%.

Issued	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Totals
Higher	1644	1620	1755	1842	1706	1462	1480	1741	1572	1502	1574	1463	19361
Lower	882	915	913	917	959	702	817	1069	858	981	930	698	10641
Total	2526	2535	2668	2759	2665	2164	2297	2810	2430	2483	2504	2161	30002

Paid PCNs - Total	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Totals
Lower - Discounted - £25	611	646	661	573	655	556	503	696	631	638	684	545	7399
Higher - Discounted - £35	1020	1041	1130	1233	1182	1056	1045	1171	1050	1007	1043	938	12916
Lower - Full - £50	84	83	81	102	97	97	79	67	104	116	70	80	20315
Higher - Full - £70	153	125	129	145	140	150	128	134	118	152	108	150	1632
Lower plus CC £75	29	36	25	30	33	45	36	28	27	42	41	33	405
Lower plus legal £82	1	2	0	0	0	0	0	0	0	0	0	0	2037
Lower plus legal £83	21	30	13	21	25	19	22	16	12	19	23	18	239
Higher plus CC £105	50	52	52	58	40	54	50	71	52	52	61	64	656
Higher plus Legal £112	4	1	0	5	2	1	1	0	0	0	0	0	895
Higher plus Legal £113	34	54	29	29	61	24	36	34	36	35	44	15	431
Total	2007	2070	2120	2196	2235	2002	1900	2217	2030	2061	2074	1843	46925

Paid PCNs - Value	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Totals
Lower - Discounted - £25	£15,275	£16,150	£16,525	£14,325	£16,375	£13,900	£12,575	£17,400	£15,775	£15,950	£17,100	£13,625	£184,975
Higher - Discounted - £35	£35,700	£36,435	£39,550	£43,155	£41,370	£36,960	£36,575	£40,985	£36,750	£35,245	£36,505	£32,830	£452,060
Lower - Full - £50	£4,200	£4,150	£4,050	£5,100	£4,850	£4,850	£3,950	£3,350	£5,200	£5,800	£3,500	£4,000	£53,000
Higher - Full - £70	£10,710	£8,750	£9,030	£10,150	£9,800	£10,500	£8,960	£9,380	£8,260	£10,640	£7,560	£10,500	£114,240
Lower plus CC £75	£2,175	£2,700	£1,875	£2,250	£2,475	£3,375	£2,700	£2,100	£2,025	£3,150	£3,075	£2,475	£30,375
Lower plus legal £82	£82	£164	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£246
Lower plus legal £83	£1,743	£2,490	£1,079	£1,743	£2,075	£1,577	£1,826	£1,328	£996	£1,577	£1,909	£1,494	£19,837
Higher plus CC £105	£5,250	£5,460	£5,460	£6,090	£4,200	£5,670	£5,250	£7,455	£5,460	£5,460	£6,405	£6,720	£68,880
Higher plus Legal £112	£448	£112	£0	£560	£224	£112	£112	£0	£0	£0	£0	£0	£1,568
Higher plus Legal £113	£3,842	£6,102	£3,277	£3,277	£6,893	£2,712	£4,068	£3,842	£4,068	£3,955	£4,972	£1,695	£48,703
	£79,425	£82,513	£80,846	£86,650	£88,262	£79,656	£76,016	£85,840	£78,534	£81,777	£81,026	£73,339	£973,884

	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Totals
Additional part payments of PCNs	£2,076	£2,157	£1,365	£2,691	£2,027	£1,194	£1,100	£1,261	£1,139	£1,242	£722	£1,235	£18,210

Challenges	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Totals
Reviewed	260	366	385	405	433	425	388	459	292	407	355	311	4486
Granted	77	133	130	149	169	145	140	167	92	121	98	80	1501
Percentage	29.62%	36.34%	33.77%	36.79%	39.03%	34.12%	36.08%	36.38%	31.51%	29.73%	27.61%	25.72%	33.46%

Cancelled for other reason	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Totals
Admin Error	1	0	0	0	1	2	7	0	0	2	0	1	14
Bankrupt (WO)	0	0	0	0	0	0	0	0	0	0	0	0	0
Foreign Vehicle	0	0	0	2	0	0	38	39	18	1	0	0	98
General Reason	8	15	4	18	6	17	13	8	12	11	11	7	130
Goodwill - Disabled Overstay	0	0	0	0	0	0	0	0	0	0	0	0	0
No Trace	69	24	1	325	71	2	2	187	51	72	29	21	854
Not Enforceable	0	0	0	0	0	0	0	0	0	1	0	0	1
NPAS - No Contest	3	1	1	1	1	1	0	5	3	5	3	1	25
P&D Machine Problem	0	0	0	0	0	0	0	0	0	0	0	0	0
PA Error	3	13	6	5	4	20	8	14	27	2	10	39	151
PCN not issued/served/spoilt	59	51	53	35	82	37	8	58	33	36	45	33	530
Proof of Loading	0	0	0	0	0	0	0	0	0	0	0	0	0
Test/Warning Notice	1	22	4	108	34	2	39	2	2	0	7	2	223
Valid ticket/permit	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Breakdown	0	0	0	0	0	0	0	0	0	0	0	0	0
	144	126	69	494	199	81	115	313	146	130	105	104	2026

	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Totals
Vehicles Immobilised	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicles Removed	0	0	0	0	0	0	0	0	0	0	0	0	0

Areas patrolled

The statistics below highlight how many patrols have been undertaken within a specific area.

Place	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Total Days
Alford	2	2	4	5	2	1	1	4	6	11	4	1	43
Ancaster				1				1		1	1		4
Anderby Creek				1		2		1					4
Bardney	1	1	2		1			1	1		1		8
Barkston	1		1	1				1	1	3	1		9
Billingborough				1	1					1			3
Billinghay		1			1			1		1	1		5
Blyton							1		1	1			3
Boston	27	31	28	31	31	30	30	30	28	30	27	26	349
Bourne	4	2	4	5	3	1	1	4	6	7	5	2	44
Bracebridge Heath	1				1						3		5
Branston	1		1	1	1		1			1	2		8
Burgh Le Marsh				2		1		1	1		3		8
Butterwick			1	1							1		3
Caenby Corner									1				1
Caistor	8	5	4	6	9	1		1	1	2			37
Chapel St Leonards	1		1	12	4	1		1			1	1	22
Cherry Willingham				1	1		1	2					5
Colsterworth	1						1	1		1			4
Coningsby		1			1			1		1	1	1	6
Cranwell	1			1	1	1				1	1		6
Crowland	2	1				1	2		1	2			9
Deeping St James	1					1	2	2	1	3			10
Digby	1		2	1	1		1			1	2		9
Donington		1		1		1	1		2	2	2		10
Easton	1						1	1		1			4
Edenham	1					1		1		1			4
Ewerby				1	1								2
Fishtoft			1	1							1		3
Fleet											1		1
Friskney	1	1		2				1	1		1		7
Gainsborough	25	27	25	25	27	22	17	14	18	19	15	10	244
Gosberton										1	1		2
Grange De Lings									1				1
Grantham	30	30	30	30	31	30	30	30	29	30	27	26	353
Great Gonerby	1		1	1			1	1		2			7
Grimoldby										1			1

Place	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Total Days
Heckington	1			1	1				1	1	1	1	7
Heighington		1			1			1	1				4
Hemswell Cliff									1	2			3
Hogsthorpe			1	1				1					3
Holbeach	8	4	6	6	5	4	2	1	8	9	8	3	64
Horncastle	4	5	5	6	5		2	5	5	5	5	1	48
Ingoldmells	1	1	2	16	9	5		1					35
Keelby									1	1			2
Kirton	1	1	1	1	1						2		7
Lea									1	2			3
Leasingham	1			1							1		3
Lincoln City	30	31	30	31	31	30	31	30	29	30	27	26	356
Long Bennington	1		1	1			1	1	1	3	1		10
Long Sutton						2	1	1	2	4	1		11
Louth	25	27	26	26	26	26	26	25	24	26	23	24	304
Mablethorpe	14	30	30	31	30	29	3	3	7	7	5	4	193
Market Deeping	2	1				1	2	2	1	4			13
Market Rasen	7	4	4	5	8		1	5	5	4	4	3	50
Metheringham	1		2	2	1	1	1			1	2		11
Morton									1	2			3
Moulton											1		1
Navenby	1			1	1						2		5
Nettleham	1			1	1	1	2	2	2	1	1		12
North Cockerington										1			1
North Hykeham	2	2	2	4	2	1	1	3	5	7	3	1	33
Old Leake			1	2							1		4
Pinchbeck										1	1		2
Quarrington				1	1					1			3
Reepham	1						1	2					4
Ruskington	1		3	3	2	1	1	1		1	2		15
Saxilby	1		1	2	1		1	2	1	1			10
Scampton					1	6			1				8
Scopwick	1		1	1	1					1			5
Scothern	1		1	1			2	2					7
Scotter									1	2			3
Sibsey				1				1			1		3
Skegness	30	31	30	31	31	28	31	30	27	30	27	26	352
Skellingthorpe	1		1	1	1		1	2	1	1			9
Sleaford	25	26	26	26	27	26	26	23	20	21	19	18	283
South Hykeham	1	1	1	1	1					4	2	1	12
Spalding	24	27	26	27	25	25	24	26	23	25	23	24	299

Place	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Total Days
Spilsby		2	4	4	2		1	4	6	11	4	1	39
Stamford	30	31	30	31	30	30	31	30	27	30	27	26	353
Stickney				1				1			1		3
Stow	1			1				1	1	1			5
Sutton Bridge		1						1			1		3
Sutton On Sea	7	29	29	29	30	26	3	3	6	5	4	5	176
Swineshead			1	1									2
Tattershall		1			1			1		1	1		5
Thorpe On The Hill	1		1		1								3
Timberland		1						1		1	1		4
Torksey	1	3		2		2	2	7	2	9	10	2	40
Toynton All Saints				1									1
Usselby					1				1	1			3
Waddingham										2			2
Waddington	1			1	1						1		4
Wainfleet All Saints		1		3				1	3		2		10
Washingborough	1	1			1			1	1		1		6
Welton	1		1		1		1		1	1			6
Willingham By Stow			1						1				2
Woodhall Spa	1	1		2	1			1		1	1		8
Wragby		1			1			1	2		1		6
Wyberton			1	1									2

Annual Account

The following account is for Lincolnshire County Council from 1st April 2017 to 31st March 2018 for on-street parking enforcement and the costs of running the service.

<u>Income</u>	
Penalty Charges	£992,094.00
District Council Operational Costs	£39,153.32
Total	£1,031,247.32
<u>Costs</u>	
Enforcement Contract	£804,758.52
Notice Processing Contract	£203,050.20
Council costs	£70,760
Total	£1,078,568.72
<u>Deficit</u>	£47,321.40
<u>Draw down from reserves</u>	£47,321.40
<u>Total</u>	£0

In line with the Traffic Management Act 2004, any surplus arising from on-street parking and enforcement is ring-fenced and can only be used for the provision of the enforcement service, supplying or making good parking facilities, transport projects, environmental projects or if the council feels that none of these are required, the funds can be set aside against potential losses for up to 5 years.

Lincolnshire County Council receives no income for on-street parking, preferring to provide free limited waiting parking in town centres, helping to support local businesses and services by encouraging more visitors.

Surplus income has previously been spent to help finance the CCTV Pilot enforcement scheme currently being undertaken outside of selected schools in Lincolnshire.

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**Open Report on behalf of Richard Wills,
Executive Director for Environment and Economy**

Report to:	Highways and Transport Scrutiny Committee
Date:	10 September 2018
Subject:	CCTV Trial Enforcement Report

Summary:

A comprehensive review report regarding the CCTV enforcement trial implemented outside eight schools within the County.

Actions Required:

Members of the Highways and Transport Scrutiny Committee are invited to:

- 1) Considers and comment on the outcome of the CCTV trial scheme and highlight any further recommendations to be considered by the Executive Member for Highways, Transport and IT.
- 2) To endorse that a decision be taken as to the future operation of the trial scheme for the trial be extended for a further 12 months until the end of 2019.

1. Background

The Highways and Transport scrutiny committee previously supported and recommended that Lincolnshire County Council implement a trial scheme involving a CCTV vehicle to be used outside of eight schools within Lincolnshire to monitor motorist's behaviour on school keep clear markings. The scheme was implemented in January 2017 and is currently ongoing.

The report contains information on the following subjects:

- How the CCTV enforcement system works
- The schemes implementation
- Statistics
- What occurs when the CCTV vehicle is not on site
- Results of patrolling nearby parking restrictions
- Financial information

2. Conclusion

The CCTV vehicle continues to contribute to the overall transport strategy by helping to reduce congestion, increase traffic flows and improve pedestrian safety. Further information is detailed within the report attached.

3. Consultation

a) Have Risks and Impact Analysis been carried out?

N/A

b) Risks and Impact Analysis

N/A

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	CCTV Pilot Scheme Trial Report September 2018

5. Background Papers

Document title	Where the document can be viewed
H&T Scrutiny Committee 18/04/16	http://lincolnshire.moderngov.co.uk/ieListDocuments.aspx?CId=492&MID=4518#A16642
H&T Scrutiny Committee 23/01/17	http://lincolnshire.moderngov.co.uk/ieListDocuments.aspx?CId=492&MID=4762#A18174
H&T Scrutiny Committee 11/12/17	http://lincolnshire.moderngov.co.uk/ieListDocuments.aspx?CId=492&MID=5097&Ver=4

This report was written by Matt Jones, who can be contacted on 01522 552110 or Matt.Jones@lincolnshire.gov.uk.

Lincolnshire County Council CCTV Trial Enforcement Report



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Introduction

In January 2017 Lincolnshire County Council introduced the CCTV enforcement trial scheme. This trial was implemented to monitor motorists parking habits on school keep clear markings outside eight schools within the County. Following advice from Area Highway Managers, the following sites were nominated to take part in the pilot scheme:

- William Alvey Primary School, Eastgate, Sleaford
- St Thomas' School, Wyberton Low Road, Boston
- Boston West Academy, Sussex Avenue, Boston
- National Junior School, Castlegate, Grantham
- Sir Francis Hill School, Bristol Drive, Lincoln
- The Priory Witham Academy, Shannon Ave, Lincoln
- Leslie Manser Primary School, Kingsdown Road, Lincoln
- Kingsdown Nursery School, Kingsdown Road, Lincoln

Additionally, an experimental Traffic Regulation Order was introduced and became operational on 30th January 2017. This Order remained in force for 18 months from its date of operation and will be experimental in the first instance to allow its impact to be monitored and assessed.

In December 2017 Highways and Transport Scrutiny Committee recommended that the trial be extended for a further 12 months and that a study took place to establish the pros and cons to increasing from one vehicle to two or using fixed point CCTV for enforcement outside of schools.

A new experimental order has been drafted to include provision for bus stands at William Alvey Primary School in Sleaford and Boston West Academy in Boston. The purpose of the new experimental order is to measure the possible beneficial effects on traffic flow and reducing congestion at school drop off and pick up times.

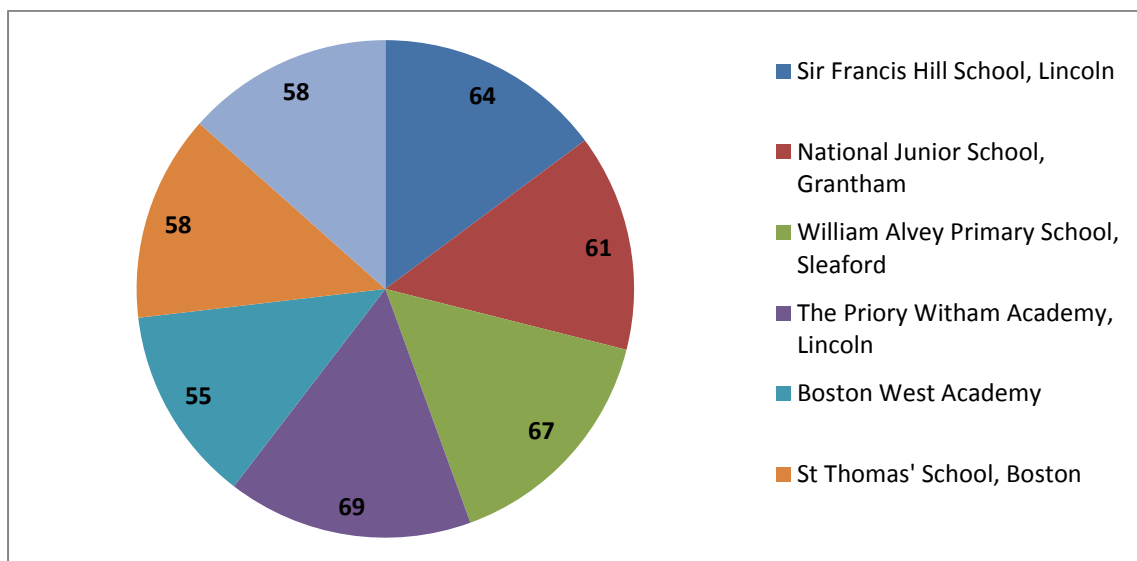
This report provides a comprehensive outline as to what impact the scheme has had on both motorist behaviour outside of each school whilst also identifying what difficulties have arisen when conducting enforcement its overall practicality.

Implementation

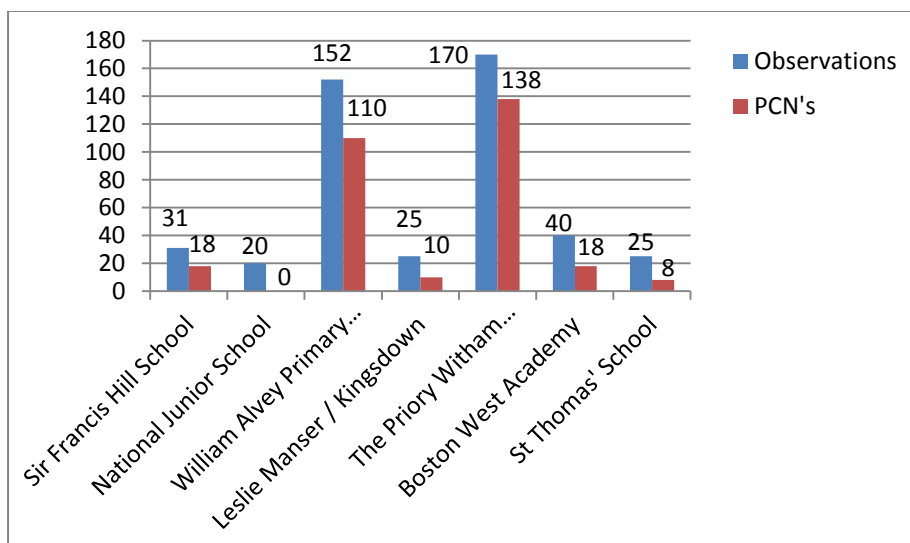
The implementation of the CCTV scheme was not straight forward, requiring numerous interventions which were magnified by having four separate entities handling various aspects of the data transfer process especially in the area of I.T and testing of the vehicle took far longer than initially expected.

Statistics

The chart below shows the number of visits and where the CCTV vehicle has been in attendance during the trial scheme.



The chart below shows the number of observations recorded outside each school and of those observations how many led to a Penalty Charge Notice being served to a motorist via the post.



What occurs when the CCTV vehicle is not present?

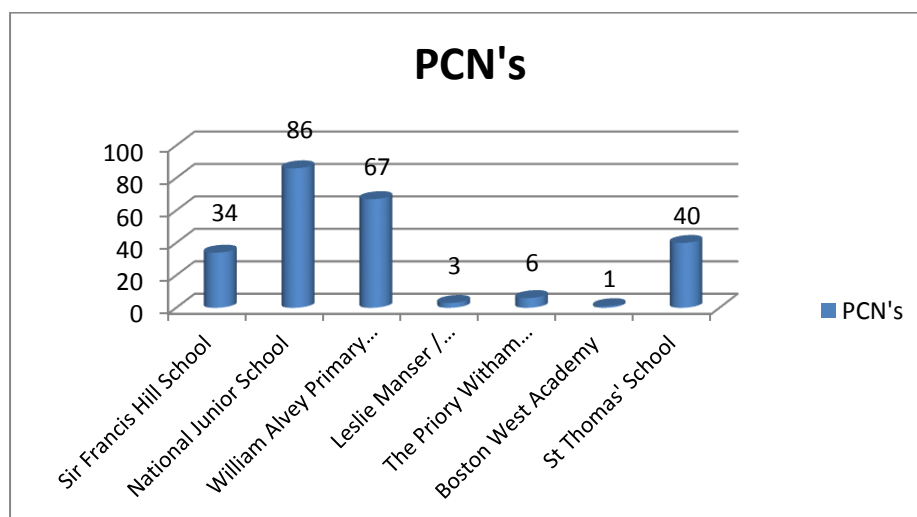
During the course of the trial we have monitored parking habits outside of each location to ascertain what parking practices occur when the vehicle is not on site. At each location when the vehicle has not been present nearly twice as many vehicles have been seen to be parking on the zig zag lines, a clear indicator that the vehicle itself acts as a visual deterrent to non-compliant parking.

An observation consists of an Officer observing a vehicle stopping on the zig zag lines for any given period of time.

Patrolling other nearby restrictions

As stated within previous reports leading up to the implementation of the trial scheme, the introduction of the Deregulation Act 2015 legislated how CCTV can be used for enforcement of parking contraventions. As a result CCTV can only be used in prescribed circumstances, such as at school keep clear zig-zags. In light of this, the No Waiting restrictions (single / double yellow lines) cannot be enforced using CCTV but would be patrolled by an attending enforcement officer.

The statistics below show the number of Penalty Charge Notices issued to vehicles contravening No Waiting / No Loading parking restrictions in close proximity to those schools taking part in the trial scheme.



Patrolling areas adjacent to the school keep clear markings has proven invaluable. The ability to utilise the CCTV vehicle and additionally an enforcement officer on a foot patrol has helped to carry out a firm but ultimately fair approach to parking enforcement.

Costs

APCOA provide Lincolnshire County Council with a CCTV vehicle and a trained Civil Enforcement Officer who operates the vehicle.

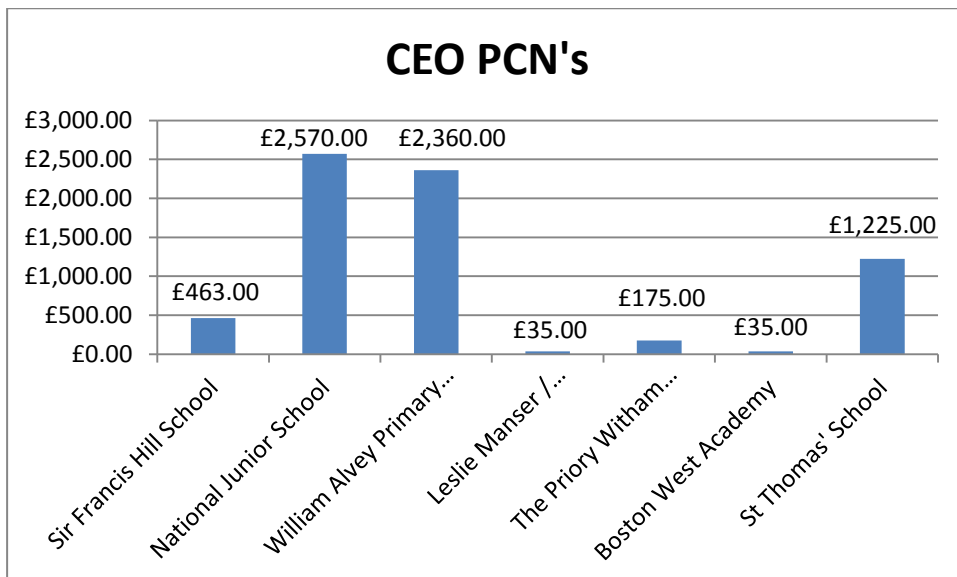
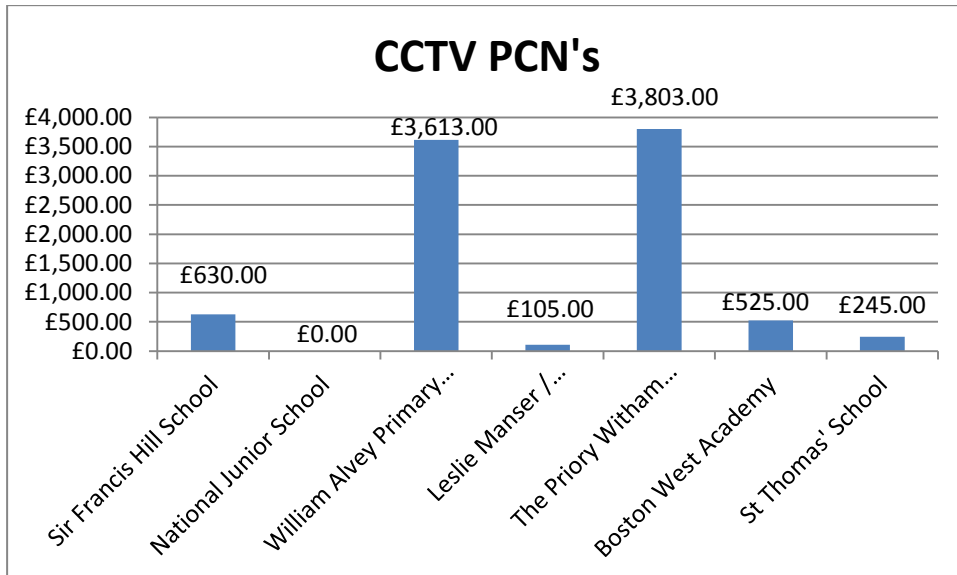
The daily charge for the CCTV enforcement vehicle when the trial began was set at £85.61 – whether the car was in use or not. However, when the trial was extended for a second year, the figure was re-negotiated and the daily charge for Year 2 was reduced to £70.00.

The table below shows the cost to each side of the enforcement process.

	Vehicle	CEO hours	Total
January	£2,170.00	£888.85	£3,058.85
February	£1,960.00	£705.01	£2,665.01
March	£2,170.00	£934.12	£3,104.12
April	£2,100.00	£452.83	£2,552.83
May	£2,170.00	£824.89	£2,994.89
June	£2,100.00	£913.14	£3,013.14
July	£2,170.00	£947.17	£3,117.17
Total	£14,840.00	£5,666.01	£20,506.01

Income

A total of £15,784.00 has been raised by PCN's issued in conjunction with the CCTV trial scheme. The charts below highlight the payments received by school location.



Future service provision

Installation of fixed cameras for sites across the county has been considered however the costs for six cameras for Year 1 would be in the region of £125,000.00. Additional

employment costs for Officers to monitor the cameras would also have to be taken into account and after further review the option to utilise camera enforcement in this manner would not be recommended. Covering costs via income from Penalty Charge Notices is doubtful and is not a solution to finance such a scheme.

We have considered the option of utilising a second CCTV vehicle however this will not be financially viable or practical given the number of sites that are part of the new experimental order.

Conclusion

Overall, the CCTV scheme is working well. When the CCTV vehicle is on site, the vast majority of road users adhere to the restrictions that are in place. Enforcement levels are relatively low and it has been found that most drivers comply with the parking restrictions that are in operation. No noticeable safety issues have been highlighted as a concern through the duration of the trial.

When the vehicle is not on site, it has been shown over the course of the trial that a proportion of road users return to old habits and more vehicles tend to pull up on the zig zag lines to allow passengers to board or alight from it. The statistics obtained since the trial began highlight this comprehensively.

A wider review of parking provision and restrictions may be required rather than relying on enforcement alone.

Recommendations

It is recommended that the trial be extended to coincide with the new experimental order being implemented and then to conduct a further review once the possible benefits and the effects on traffic flow can be seen.

**Open Report on behalf of Richard Wills
Executive Director for Environment and Economy**

Report to:	Highways and Transport Scrutiny Committee
Date:	10th September 2018
Subject:	Performance Report, Quarter 1 – (April 2018–June 2018)

Summary:

This report sets out the performance of the highways service including the Major Highway Schemes Update, Lincolnshire Highways Alliance Performance, Highways Service 2018 Value for Money Review and the Customer Satisfaction Information.

Actions Required:

The Committee is asked to consider and comment on the detail of performance contained in the report and recommend any changes or actions to the Executive Member for Highways, Transport and IT.

1. Background

This report draws together performance and update information on the whole of the highway service in Lincolnshire.

This performance report contains:

- Major Highway Schemes Update September 2018;
- Lincolnshire Highways Alliance Performance Report Year 9, Quarter 1;
- Lincolnshire County Council Highway Service 2018 Value for Money Review;
- Customer Satisfaction Information Q1.

Major Highway Schemes Update

There are five major highway schemes reported through the Council Business Plan:

- Lincoln Eastern Bypass
- Grantham Southern Relief Road
- Lincoln East West Link – now completed
- Spalding Western Relief Road
- Progress with North Hykeham Relief Road

There are a number of other major highway and other infrastructure projects which are of a significant scale and may have a major impact on the County and surrounding area. All of these schemes are included in the Major Highway Schemes Update September 2018 found as Appendix A to this report.

Lincolnshire Highways Alliance Performance

Introduction

The Lincolnshire Highways Alliance is an Alliance between the Council, Dynniq, WSP and Kier. The Alliance delivers the majority of highway services through the Traffic Signals Term Contract, the Professional Services Contract and the Highways Works Term Contract which all started on 1 April 2010.

Each of the Alliance contracts has been extended by 1 year to 31st March 2020, which means that the contracts are now at full term and work has commenced on options appraisal for their replacement.

Performance

Quarterly performance is reported through the Alliance management structure, with performance issues becoming the subject of an improvement action plan. A copy of the Lincolnshire Highway Alliance Performance Report for Year 9, Quarter 1 can be found in Appendix B. This covers the period of April to June 2018.

The Alliance partners have managed to achieve their targets for Quarter 4. The results per contract area are:

- Highways Works Term Contract Performance Indicators (Kier) – down from 91.4% to 90.4%
- Professional Services Contract Performance Indicators (WSP) – up from 81% to 82.4%
- Traffic Signals Term Contract Performance Indicators (Dynniq) – up from 95% to 100%
- Client Performance Indicators (LCC) – Down from 62% to 60%
- Alliance Key Performance Indicators (LCC/Kier/WSP/Dynniq) – Remains the same at 60%

There has been a slight dip in performance in some areas but good overall performance achieved in Quarter 1, especially in signals, suggests that the Alliance Indicators are set to remain at a high level for the remainder of Year 9.

Traffic Signals Term Contract

Dynniq continue to achieve high scores on the Contract Performance Indicators and deliver an excellent service to the County Council and the Highways Alliance.

99.5% of traffic signal faults and 100% of task orders are acted on and required works and actions are completed within contract timescales to ensure traffic signals are operating with the minimum of downtime. Our focus in this contract year will be to reduce the number of faults reported.

100% of annual safety and condition inspections have been completed in the current 3 month period.

100% of materials recovered from site are either reused or recycled.

The reduction in Carbon emissions target is significantly below the 117.6 tonnes target agreed for the current 3-month period, which is a 5% reduction on the agreed baseline of 123.77 Tonnes.

The introduction of the Fault Management System means that Engineers now have the ability to:

- work live on all faults, and provide clear details in real time;
- view on-street configuration data for the signal controllers and out-station units 24/7;
- complete electronic AI sheets;
- download and file any supporting documents & photos;
- complete electronic Risk Assessments.

Overall, the management of faults has improved considerably and this reflects in Dynniq's performance data.

The main ongoing analogue to digital out-station conversion project continues to progress. Currently 60% of sites are complete. Dynniq have recently brought their own mobile communications-based option for our remote pedestrian crossing facilities to the market. This has been trialled and is expected to be adopted as it offers additional key monitoring features for the same price as the devices installed to date. These are about to be installed to replace the previous model.

We are also about to trial an innovation, using available detection devices, to aid right turning vehicles at small single lane approach traffic signal junctions, where the right turners block traffic from proceeding ahead. This will help to keep vehicles moving at these locations.

Highway Works Term Contract

The main focus of work is to improve the carriageway condition. In Quarter 1 of Year 9 we have repaired 22,036 potholes, more than three times the amount repaired in Quarter 4 of Year 8. The first 3 months of the year saw pothole gangs stood down due to the operatives carrying out multiple gritting runs overnight which decreased productivity. In reaction to this, extra resource was brought in for pothole filling and along with the improved weather contributed to the much improved productivity. Wherever possible, potholes are now being saw cut, filled with hot material and sealed to provide a higher quality repair which has resulted in compliments from the public and whilst taking slightly longer per pothole should result in fewer repeat visits.

The surface dressing programme is well underway with around 334 miles of carriageway to be treated before winter. This will extend the life of existing roads and prevent potholes from forming.

21 different sites are being completely resurfaced this year, along with 108 patching schemes across the County. In addition, following successful treatment in recent years, there will be a further programme of in-situ recycling in 2018, spread over 19 sites which equates to around 13 miles of carriageway. This "retread" process is carried out on mainly rural, unclassified roads and is helping to maintain the condition of the unclassified network in a steady state, as well as providing environmental benefits over traditional techniques.

Some of the extra funding which has been made available is being used for a selection of 41 reconstruction schemes on residential roads. These sites are where the public begin and end their journey and the repairs will make a highly visible impact to the urban network and has been targeted at some of the roads with the highest number of pothole complaints.

93 footway and drainage schemes are planned throughout the 2018/19 financial year, with a programme of lining renewal taking place over the next two years for the whole of the A and B road network. This will provide a long-overdue refresh and significantly improve the condition of Lincolnshire's lining assets which will not only make the road network look tidier, but contribute to road safety at night.

The first grass cut of the season began in April, with weed spray following in May. Gully cleansing is ongoing using data from previous cycles to target the assets most in need of attention, whilst leaving some self-cleaning gullies on a longer cycle length. The verge biomass trial is underway, collecting 3000 tonnes of material for processing to provide energy. This is a source of national interest and the plant was specially commissioned and designed for Lincolnshire. Harvesting the cuttings rather than leaving them in-situ is also beneficial for the development of habitats for roadside flora and fauna.

Professional Services Contract

The Technical Services Partnership (TSP) continues to be engaged in the design and supervision of our major schemes, and a range of other internal and external commissions, traffic modelling and other consultancy work. TSP also has commissions for ongoing specialist services in Lincoln for signals, street lighting, structures, and signing & lining.

Ongoing works include support for the building of Lincoln Eastern Bypass, completing the design of Phases 2 and 3 of Grantham, the delivery of Spalding Western Relief Road including the planning application, input to the North Hykeham Relief Road and specialist activities such as the development of a multi-modal traffic model for Lincoln.

Highways Service 2018 Value for Money Review

Introduction

This report provides a summary and analysis of the independent Value for Money (VfM) Review completed in May 2018 for the Lincolnshire County Council Highways Service (LCCHS). The review was undertaken using the Proving VFM framework.

The assessment was completed through a half-day workshop. The participants were asked to consider a series of weighted VfM factors and agree the current factor performance and the opportunity for improvement. The comments and explanations associated with each score were captured and recorded as comments in the Value Analyser (Excel) Workbook. As this review was undertaken using a 'deep dive' approach, supporting evidence was obtained and reviewed for all highly weighted factors.

A confidence score was applied to each performance score. Factor performance was based on the views and explanations of workshop participants and validated by

reference to the supporting evidence. The factor set used for the VfM scoring has been developed through the Future Highways Research Club (FHRC) and represents the agreed and weighted criteria for evaluating a typical local authority highways service. The full LCCHS 2018 Value for Money Review can be found as Appendix C.

The review did have a limited exposure to customer views and perspectives and in the light of other available customer survey information this is an area, given public reaction and perceptions that needs addressing.

Summary Findings

Lincolnshire County Council Highways Service (LCCHS) provides sector leading value for money (VfM). LCCHS has recently introduced the Future Operating Model (FOM) with clear separation between commissioner and provider functions. It has underpinned this with a robust programme of continuous VfM improvement with each function subject to periodic, independent VfM review and with ownership and accountability for its own improvement plan. Consequently, LCCHS is now providing a highly economic and efficient service whilst delivering very good outcomes which positions LCCHS as a sector leader. This is evidenced by the plotted VfM position of LCCHS against other FHRC authorities, assessed by Proving within the last 15 months. The VfM Reviews will be the subject of a future report to this Committee.

Conclusions

This latest independent review indicates that LCCHS is very clearly providing sector leading value for money. It is suggested that there is much the sector could learn and benefit from through greater exposure to our operating model and achievements and this is being facilitated by exposure through the FHRC and LCCHS's role as lead pioneer.

Improvement opportunities are identified in priority order across all dimensions and we have plans to address these as part of the Highways 2020 re-commissioning exercise. Other relatively high priority areas, in particular around identifying any further income generation opportunities and better managing customer expectations will be addressed through our lead role in developing the FHRC 2018 research themes:

- Commercialisation
- Continuous Value for Money Improvement
- Effective Communications
- Effective Community Engagement
- Mutuality (Effective Collaboration)

In summary, there are no critical areas to address anywhere in the current Service and we have plans in place to continue to improve an excellent service.

Customer Satisfaction Information

Compliments relating to highways and transport stayed the same as the previous quarter but have decreased when compared to Q1 of 2017/18. These were for a range of reasons but with specific compliments about individuals related to the adverse weather events earlier in the year.

Customer Complaints relating to highways and transport have seen a slight decrease from the last quarter by around 4% but when compared to Q1 of 2017/18 there is a 17% increase. The increase is mainly related to a variety of highways issues with transport seeing a decrease when compared to Q1 of 2017/18.

The full Customer Satisfaction Information Quarter 1 April to June 2018 can be found as Appendix D.

2. Conclusion

The Lincolnshire highway service continues to perform at a high level with further external verification from the most recent Value for Money Review. Action is being taken to improve the perception of our highway service to ensure that it fully reflects this high performance.

The Committee is asked to consider and comment on the detail of performance contained in the report and recommend any changes or actions to the Executive Member for Highways, Transport and IT.

3. Appendices

These are listed below and attached at the back of the report	
Appendix A	Major Highway Scheme Update Report September 2018
Appendix B	Lincolnshire Highways Alliance Performance Report Year 9 Quarter 1 April to June 2018
Appendix C	Lincolnshire County Council Highways Service 2018 Value for Money Review
Appendix D	Customer Satisfaction Information Quarter 1 April to June 2018

4. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Paul Rusted, Infrastructure Commissioner, who can be contacted on 01522 553071 or paul.rusted@lincolnshire.gov.uk

Major Highways Scheme Update – September 2018

Lincoln Eastern Bypass

This is the county council's largest Highway scheme with an original budget of £99.6m and a DfT grant of £49.95m. In January 2018, Carillion announced that it had gone into liquidation and a decision was made to terminate this contract. Galliford Try has been awarded the remainder of the construction works package. The total cost of the project is now expected to be around £120m, with about half the new costs coming as a result of changing contractor and the remainder from additional archaeological spend, additional land acquisition costs and inflation.

The main works on site are currently focussed on installing the beams for the Market Rasen Rail Line Bridge and diverting utilities across the whole site. In addition, works have commenced on constructing temporary bridges over the River Witham to enable the major earthworks movement and construction of the River Witham permanent bridge. Topsoil stripping and other earthworks are also underway.

The archaeology excavation works are now completed resulting in a start of the post excavation investigations which will take several years to complete.

The Lincoln to Spalding Rail Line Bridge which Network Rail were constructing is complete and the site has been handed back to LCC.

Grantham Southern Relief Road

This scheme is a 3.5km road with a five span viaduct carrying the road over the East Coast Mainline railway and has a current budget of £81.5m and consists of three phases. The works will be funded from SLGF grant from the LEP, HCA grant and developer contributions with LCC forward funding the developer contributions.

The King 31 Phase 1 from the B1174 running towards the A1 is already complete.

The completed design for King 31 Phase 2 is based on the consented planning application for warehousing which was submitted to Highways England for technical approval. Technical approval was granted in principle on 19 December 2017. A planning application for a Designer Outlet Village (DOV) submitted on behalf of Buckminster Estates was granted by SKDC on 6 April 2018. The owners of Downtown submitted an alternative DOV planning application for their current site on 2 November 2017.

LCC have signed section 6 agreements with both the Department for Transport and Highways England to enable legal orders for the whole scheme to be published. The legal orders including the Line Orders for the Trunk Road and Compulsory Purchase Orders for outstanding land required were advertised on 2 March 2018. Objections were received to the advertised orders and a statement of case was therefore served to the DfT on the 12 June 2018 in response to the objections. LCC are actively engaging with the objectors to remove these and thus ideally remove the need for an inquiry. Land negotiations to acquire any outstanding plots of land by agreement are continuing to progress during this period.

The design for Phase 3, the Southern Quadrant Link Road, is almost complete and negotiations are ongoing with Network Rail in relation to their Shared Value policy. Significant service diversions have already been carried out with Anglian Water and Western Power Distribution.

LCC have now qualified for the next stage of a bid to Homes England for a forward funding Housing Infrastructure Fund (HIF).

Spalding Western Relief Road

Section 1 (Southern Connection) – LCC and the developer have reached a financial agreement for funding Section 1 of the SWRR. Following the Examination In Public for the Local Plan adoption LCC will submit a planning application for the road only with an aspiration for works commencement in autumn 2021.

Section 2 – This section of the SWRR is having options developed as part of the SWRR delivery strategy. Section 2 will be developed in tandem with Section 1 to allow a full connection between the B1172 and the A151 Bourne Road. It is important to stress that the two sections will be developed independently with an aspiration to have both schemes constructed sequentially.

Sections 3 and 4 – These sections of the SWRR are having options developed as part of the SWRR delivery strategy.

Section 5 (Northern Connection) – SHDC in collaboration with LCC submitted a successful bid to HCA through the Housing Infrastructure Fund Marginal Viability Fund for £12m. A meeting with Homes England on 6th April 2018 highlighted the positive partnership working on the development of the scheme. Further costs and programme details have been provided via an additional paper and supplementary evidence to Homes England on 30th April 2018. Homes England have confirmed that the project will now progress to the due diligence stage.

Significant work has been undertaken on the development of a delivery programme and work has now commenced on the preparation of the relevant planning applications for Sections 1 and 5 for March 2019. It is also proposed that consultation on the proposed route of Sections 2-4 is undertaken at the same time.

Traffic modelling work has been commissioned to WSP and surveys have been completed with the analysis of the data currently taking place. A report is due by the end of October 2018 to support planning applications for Sections 1 and 5.

LCC is also working on the detailed design and liaising closely with SHDC, Homes England, Network Rail, Environment Agency and the Welland and Deepings Internal Drainage Board as the scheme continues to be progressed.

North Hykeham Relief Road

An Outline Business Case is currently being prepared, funded by the Advance Design Block to continue the progress of this major scheme. The aim is to submit a bid to the DfT Local Majors Fund in late 2018, which is when the DfT has suggested an opportunity may arise. A number of community engagement events were held in

June 2018 for updating key stakeholders on progress and ensuring compliance with the DfT funding bid process. This road will be a key link in the Lincolnshire Coastal Highway from the A1 through to Skegness.

Lincolnshire Coastal Highway

Lincolnshire County Council is investigating potential improvements to the A158 across the county from the A1 to the North Sea coast around the Skegness locality, known as the 'Lincolnshire Coastal Highway'. This will look at the options for intervention along the route. In identifying improvements to the Highway, consideration will need to be given to being future-ready, building in capacity to support growth, investigating options across a range of modes and building in resilience and lower longer term costs for management of infrastructure.

The Council has developed a number of potential projects and initiatives along the route and has also held four engagement events at Skegness, Horncastle, Wragby and Lincoln to gather perceptions, existing challenges and potential solutions from key stakeholders.

The sifting of the longlist of projects against assessment has been completed and a shortlist of options has been developed. A paper was presented to LCC Informal Executive on 19th June 2018 outlining the proposed shortlisted projects including existing projects like the North Hykeham Relief Road, A46/A15 Nettleham Road Roundabout and A46/A158 Riseholme Road Roundabout. The Executive proposed an additional three projects to also be taken forward, these being: Horncastle Bypass, Skegness Relief Road and Wragby Pedestrian Crossing as well as various safety improvements. This work is being progressed to the next stage which entails a scoping report of costs, benefits and deliverability. Once complete a further paper will be produced and presented to the Informal Executive at a later date.

National Productivity Investment Fund

LCC secured a grant of £5.4m from DfT for NPIF Tranche 1 based upon a number of named schemes; the only remaining scheme to be completed is the Wolsey Way/Wragby Road Improvement in Lincoln. This project is to improve flows through two traffic signalised junctions and is planned to be complete in August 2018.

LCC's bid was successful against the NPIF tranche 2 bid for A46 Dunholme/Welton roundabout improvement which has an estimated cost £4.6m. The DfT awarded LCC a £2m grant for expenditure in financial year 2018/19 and 2019/20. Planning approval was granted in February 2018 and work is progressing on detailed design and land acquisition in parallel with the legal orders process.

Single Local Growth Fund 3

The A46/A15 Nettleham and A46/A158 Riseholme Road Roundabout projects on Lincoln's Western Bypass attracted SLGF to a value of £2.5m. The project entails enlarging the size of both roundabouts and increasing the number of lanes both entering and exiting each leg of both roundabouts. This will alleviate congestion at these pinch points and improve journey time reliability. The Outline design is complete which has confirmed that planning permission and Side Road Orders are not required, although land acquisition is for Nettleham Road Roundabout. The

project has now progressed on to detailed design with a focus on acquiring the required land through agreement. It's expected that work may commence in 2019.

Network Rail Footbridges, Lincoln

This is a Network Rail owned and managed project which consists of constructing a new iconic footbridge over the rail line on Brayford Wharf East. Following an appeal process planning permission was granted to Network Rail in January 2018. Morgan Sindall has been awarded the tender to design and build the footbridge which is expected to commence in September/October 2018 for a period of six months. LCC are working closely with Network Rail to drive a coordinated approach between all parties.

In March 2018 Network Rail commenced another project in the same locality, which includes developing building 179 and establishing a footway between Brayford Wharf East and High Street. The current programme suggests that impact on the highway network will cease in August 2018.

Boston Quadrant

This is a developer led scheme for a new football ground and mixed use commercial and residential use. This includes a link road between A16 and London Road with a new roundabout on the A16 and signalised junction on London Road. The Boston Quadrant forms what will become the first section of a proposed Boston Distributor Road.

Quadrant 1 is well underway, with the installation of a new roundabout south of Boston on the A16 complete. The section of road which links the A16 roundabout to the adjacent London Road is also on site being constructed. The London Road signalised junction is at the detailed design stage which sits with the developer and their consultants. A further Outline Planning Application for 1200 homes has recently been received by Boston Borough Council.

DfT Challenge Fund

LCC are preparing for a bid through the Challenge Fund to the DfT for a £10m Langrick Bridge replacement scheme as identified in the County Council Asset Management Strategy. A series of options are under consideration prior to a consultation on the favoured options subject to the outcome of a successful bid. The DfT have not confirmed a date for this bidding opportunity yet.

**Lincolnshire Highways Alliance
Performance Report
Year 9 Qtr 1 April to June 2018**

August 2018

Introduction

This report is prepared for the Highways Network Alliance Group (HNAG) by the Performance Working Group. It offers a summary of the results from each of the agreed KPIs and PIs.

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Highways Works Term Contract Performance Summary

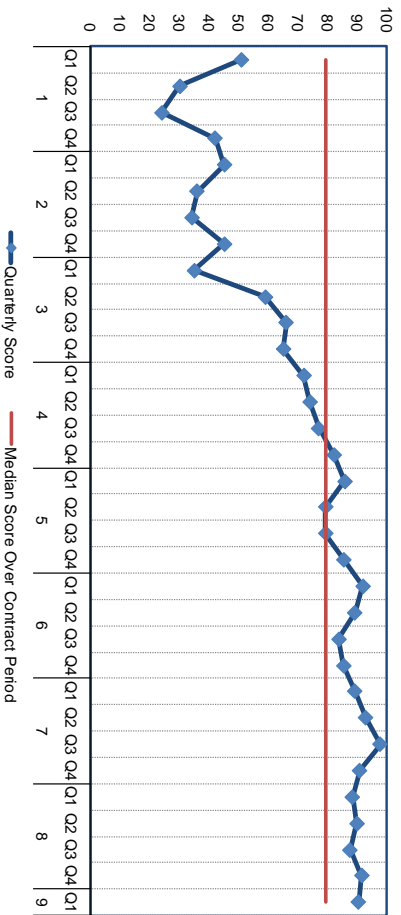
Performance Summary	Target	Current Quarter	Quarter Score	Last Quarter	Rolling		Comments for Quarter
					Year Average	2 Year Trend	
HWTC P11 Street lighting Standard	98.9%	92.49%	9.4	7.9	8.9		There has increased on the previous quarter due to bad weather no longer having an impact on routine maintenance.
HWTC P12 Response times for emergency works	99.5%	97.91%	6	10	7.5		Out of the 1196 emergency jobs over the quarter, 1171 achieved the required response rate.
HWTC P13 Tasks completed within timescale	97%	97.47%	10	10	10.0		116 out of 119 jobs were completed on time
HWTC P15 Acceptable site safety assessments	95%	97.05%	10	10	10.0		33 assessments over the pass year have passed out of 34 assessments. All assessments this quarter passed.
HWTC P17 Defect corrections requiring TMI	98%	99.16%	10	10	10.0		There were 3840 jobs this quarter, of which 32 was a defect requiring traffic management.
HWTC P18 % waste reused/recycled	90%	95.3%	10	10	10.0		95.3% of waste was reused/recycled.
HWTC P19 Compliance with tendered Quality Statements	100%	79.16%	8	8	8.0		12 Quality statements have been selected to score this measure. After assessment it has been deemed that 9.5 are currently being achieved
HWTC P110 Quality assessment of workmanship	100%	95.23%	8	6	7.0		This quarter there was 21 tests of which 20 passed.
HWTC P111 Reduction in Carbon Emissions	100%	100%	10	10	10.0		This indicator continues to improve, showing that the Alliance fleet is continuing to reduce unnecessary mileage and journeys
HWTC P112 % task orders in compliance with TMA	95%	98.26%	10	10	9.5		Out of the 115 orders 113 had been assigned the correct notice.
HWTC P14 Reportable accidents under RIDDOR	0	0	0	0	0.0		There were no RIDDOR incidents reported this quarter so the points score is zero.
HWTC P16 Service strikes	0	2	-1.0	-0.5	-1.1		There were 2 service strikes this quarter. Each service strike equates to -½ point being removed from the total.

Total	90.4	↓	91.4	89.8
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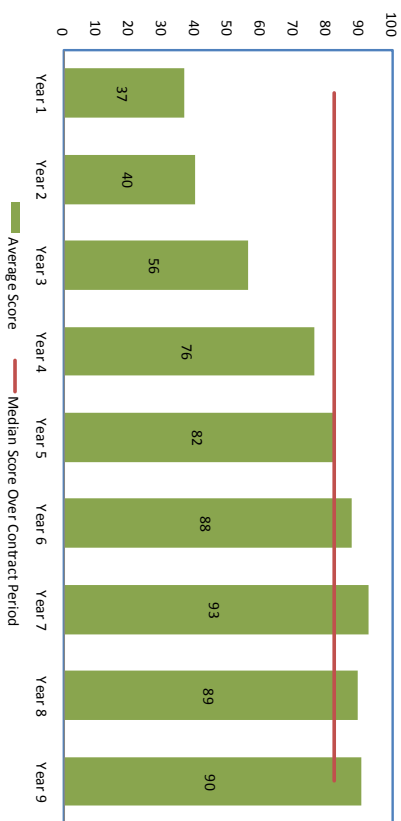
The figure for performance has decreased this quarter. This is due to a decrease in response time to emergency works hitting their target and an increase in Service Strikes.

Overall Summary

Highways Works Performance Scores Over The Contract Period (Median score = 79)



Yearly Average Alliance Performance Scores

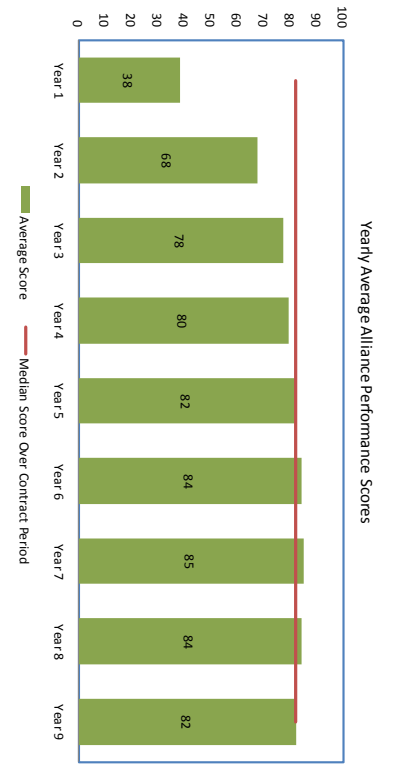
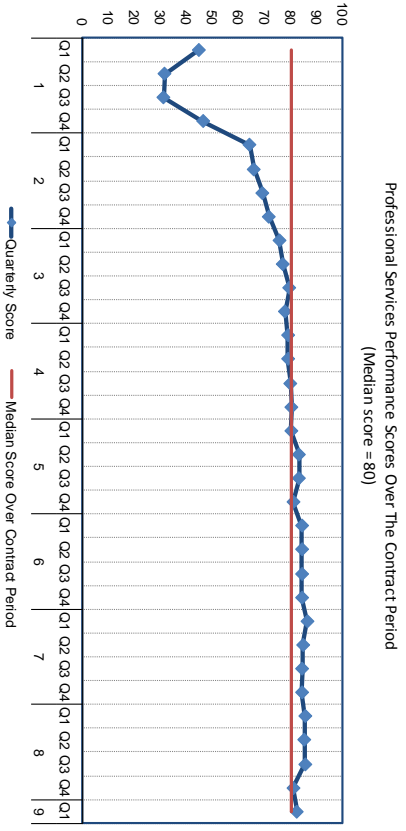


Professional Services Contract Performance Summary

PSP	Metric	Target	Current Quarter	Quarter Score	Last Quarter	Year Average	Rolling 2 Year Trend	Comments for Quarter
PSP P11	Client Satisfaction of Product	8.5	9.13	12.8	14.8	14.4		<p>PSP 1 and 2: Satisfaction remains at a good level, with actual results averaging over 9 out of 10 for both service and product. Effort has gone into improving the return rate and the results are more meaningful than they have been previously.</p> <p>PSP 3: Quality statements. These 'promises' have been revised with a selection of new 'year 9' commitments from WSP, as agreed with the Group Manager (Design Services). In addition to various service wide commitments, this year's incorporate a number in support of implementing key aspects of the TSP Improvement Plan. The result this quarter is at 97% reflecting ongoing commitment relating to the improvement plan.</p> <p>PSP 4 & 6: Design delivery to cost and time. Scores for delivery to cost are up and delivery to time are slightly down – with the performance of certain individuals being reviewed. There continues to be a clear focus of the TSP improvement plan in this area.</p> <p>PSP 7: Works delivery to time. As with design, delivery to time is good, up on 2017/18 Q4 and at a yearlong high.</p> <p>PSP8: Compensation Events: This is a new measure. For this quarter there were 6 Compensation Events of which 2 were actioned within 2 weeks.</p> <p>PSP9: Provision of Kier Programme: This is a time bound measure, triggered between 30/11/2018 and 31/03/2019 – on target to deliver so score currently at '5'.</p>
PSP P12	Client Satisfaction of Service	8.3	9.22	14.6	14.2	13.3		
PSP P13	Compliance with tendered Quality Statements	95%	97.0%	9.7	8.9	9.2		
PSP P14	Predictability of Design Costs	Design Costs to be within 10% accuracy	16.67%	11.3	10.9	11.4		
PSP P15	Predictability of Works Costs	Works Costs to be within 10% accuracy	Removed	n/a	12	3.0		
PSP P16	Predictability of Time for Design	Time for Design to be within 10% accuracy	5.58%	12.8	11.5	12.8		
PSP P17	Predictability of Time for Construction	Time for Works to be within 10% accuracy	0.0%	13.2	8.6	11.9		
PSP P18	% Compensation Events acknowledge within 2 weeks	90%	33.3%	3.0		3.0		
PSP P19	Date Forward Programme Issued	Nov-18	Pending	5.0		5.0		

Total	82.4	↑	81.0	76.0
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Overall Summary
 Performance remains at a good level, with the Q1 figure being slightly higher than the last quarter, although lower than the all-time high of 85.5 achieved in Y8 Q3. The underlying trend therefore is balanced.



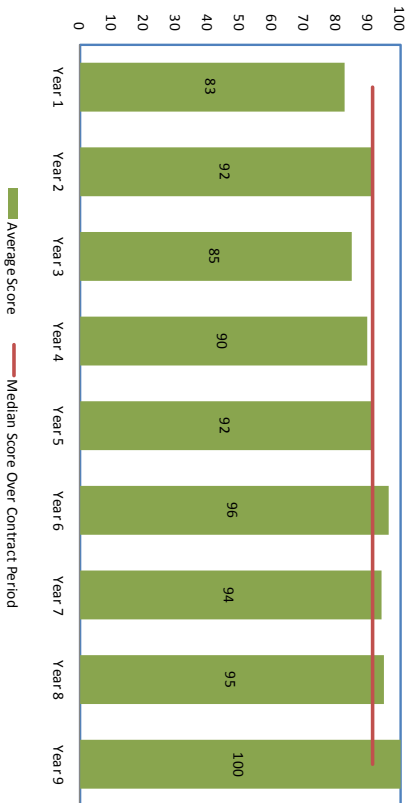
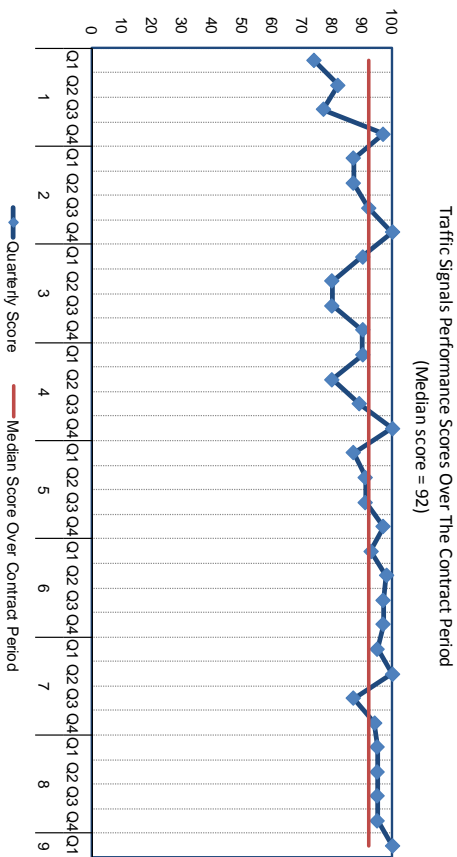
Traffic Signals Term Contract Performance Summary

Performance Promise	Target	Current Quarter	Quarter Score	Last Quarter	Rolling Year Average	2 Year Trend	Comments for Quarter
TS/TC P11 10 Critical Contractors Quality Promises	100%	100%	5	↔	5	5.0	All 10 quality promises are being met scoring 5 points for 100%.
TS/TC P13 Acceptable Site Safety Assessments per annum	95%	100%	10	↔	10	10.0	Only 1 joint inspections took place this quarter, so the measure has been deemed to be 100% compliant
TS/TC P14 Weekly works planning & asset data supplied within timescales	99%	100%	10	↔	10	9.3	Weekly works planning and asset data supplied within agreed timescales. 3/3 Inventory's received and 13/13 Whereabouts submitted. 13/13 Dashboard compliance checks carried out in Q4.
TS/TC P15 Number of Faults Cleared within Contract Timescales	99%	100%	10	↔	10	10.0	645 faults out of 645 faults received during Q1 have been cleared within the contract timescales.
TS/TC P16 % Task Orders completed on time	99%	100%	10	↔	10	9.3	148 / 148 task orders that have been received during Q1 have been completed within the contract timescales.
TS/TC P17 % Task Orders completed free of remedial works	99%	100%	10	↔	10	10.0	0 remedial have been reported for the task orders this quarter
TS/TC P18 % faults resolved at the first visit.	99%	99.53%	10	↑	6	8.8	642 out of 645 Standard faults & Emergency faults were resolved first time.
TS/TC P19 % Task Orders carried out in compliance with TMA.	99%	100%	10	↔	10	10.0	All task orders have been completed complying with TMA.
TS/TC P110 % annual inspections completed per annum.	100%	100%	10	↔	10	10.0	97 out of 71 inspections due have been carried out by the end of Quarter 1. This measure is currently ahead of programme.
TS/TC P111 Reduction in Carbon Emissions	<117 Tonnes CO2	27.54 Tonnes	10	↔	10	10.0	Target is to reduce Carbon Emission by 5% from 123.77 Tonnes of CO2. This has been achieved significantly.
TS/TC P112 % waste reused/recycled	100%	100%	5	↑	4	4.0	91.59% Recycled materials & 7.41% recovered materials
TS/TC P12 Reportable accidents under RIDDOR	0	0	0	↔	0	0.0	Zero reportable incidents

Total	100.0	↑	95.0	96.3
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The overall score has increased to a maximum 100 points. Performance in this area is always very high.

Overall Summary



Client Performance Summary

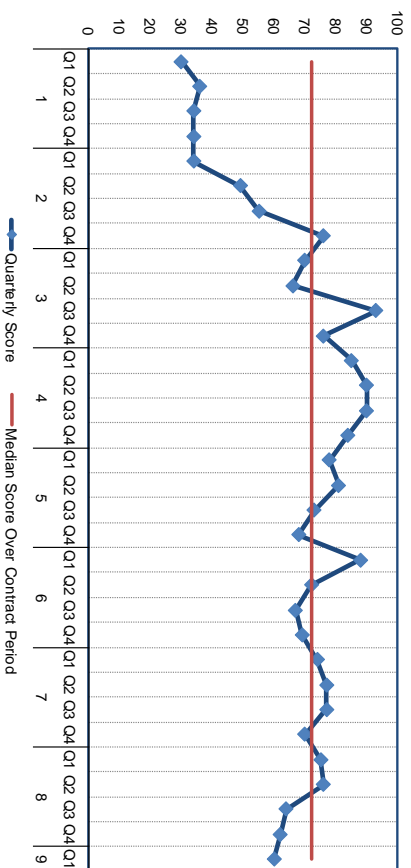
Client	Metric	Target	Current Quarter	Quarter Score	Last Year	Rolling Year Average	2 Year Trend	Comments for Quarter
Client P11	Profit/Gain Results by Area	In Gain	Removed	n/a	7	5.3		This measure has been replaced by Client P17
Client P12	Date Forward Programme Issued	On Time	Dec-17	0	↔	2.5		The Forward programmes have all been submitted late. They were due end of October - as such this measure scores no points.
Client P13	% variation from current programme spend profile	On time	On time	20	↔	20.0		All budget and forecast data has been submitted on time.
Client P14	% of JVs giving all info 8 weeks prior to start	100%	99.71%	19	↑	18.5		Performance has improved with a increase in 'right first time' client task orders this quarter, with the number of rejected orders decreasing from 1.09% last Quarter to 0.29% this Quarter. In real terms this means that 12 jobs were rejected out of 4284 total jobs. This has though had no impact on the score.
Client P15	Valuation of compensation events versus targets	<2% variation	0.06%	20	↑	19.0		So far £5,432,495 has been raised on Confirm with £3,483 compensation events against that target.
Client P16	% of CEs committed within timescale	98%	79.69%	1	↑	0.3		Out of 197 Compensation Events recorded only 157 were responded to in the two week time frame. Whilst this has improved this will still need to be monitored and data will be issued on Dashboards to inform all parties of this performance.
Client P17	Client Response Times	100%	69.83%	0	n/a	0.0		Out of 16948 incoming enquiries only 11836 were actioned within appropriate time scales. This will be monitored to see if an improvement plan needs to be initiated.

Total	60	62	65.5
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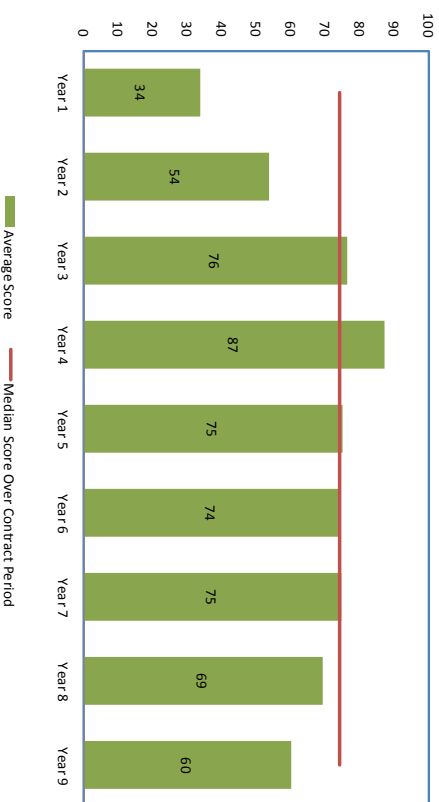
The Client score has decreased this quarter. This is due to the introduction of P17 Client Response Times scoring less than anticipated. It is though worth noting that performance has improved in three of the indicators.

Overall Summary

Client Performance Scores Over The Contract Period
(Median score = 72)



Yearly Average Client Performance Scores

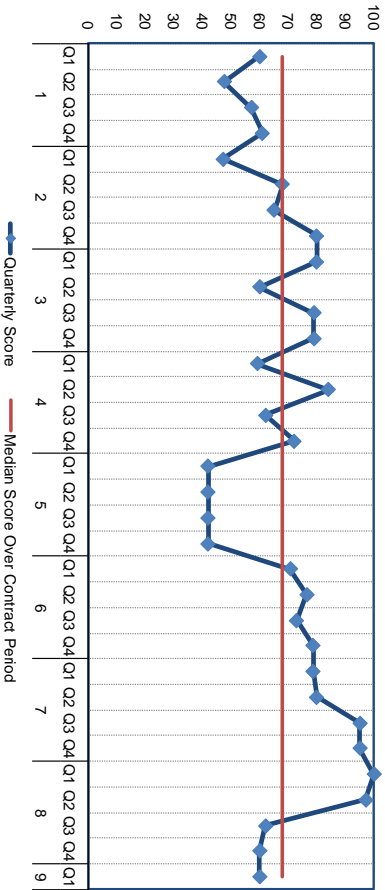


Alliance Performance Summary	Target	Rolling		2 Year Trend	Comments for Quarter	
		Current Quarter	Last Quarter			Year Average
Alliance KPI1	Net/positive Press Coverage	95%	98.4%	25	25.0	This Quarter there was 360 positive and neutral stories out of 366.
Alliance KPI2	Public Satisfaction Survey	>0% improvement	-3.00%	5	10.0	This is annual data, and the figure for 2017 was an decrease of 3% in satisfaction. This result changes once per year in October.
Alliance KPI3	Tasks delivered against the agreed Client programme	95%	74.23%	10	11.0	There has been increase in the amount of jobs hitting their programmed targets. However this has had no impact on the indicator score and remains at 10.
Alliance KPI4	Relationship scoring	>6.5 points	7.48	20	20.0	This Quarter the relationship score was 7.48 which means the indicator has increased by 0.85 of a point. This did not impact on the overall score.
Alliance KPI6	Creation of an agreed programme	by 31st Oct	Late	0	3.8	The programme was not agreed until March 2018.

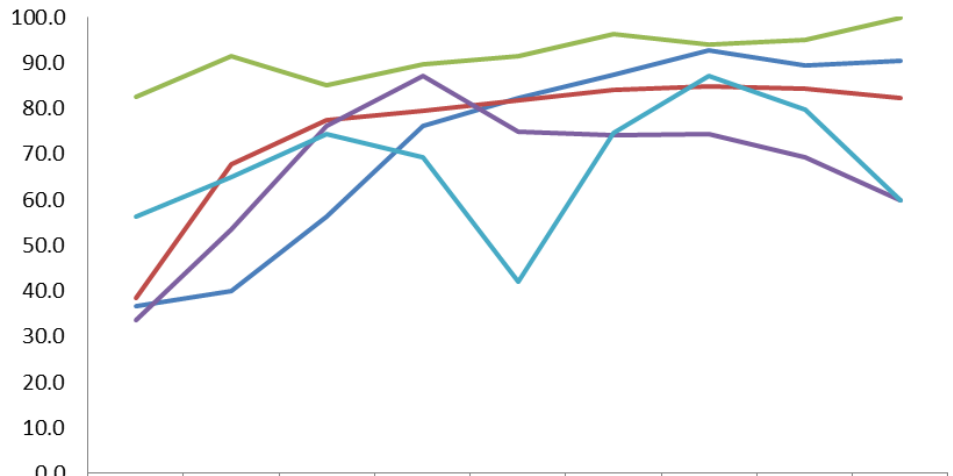
Total	60	↔	60	69.8
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Overall Summary
The Alliance score has maintain at the same level this quarter. There has been no significant changes to report

Alliance Performance Scores Over The Contract Period
(Median score = 68)



Comparative Yearly Average Performance Over Contract Life



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Highways Works Term Contract	36.8	40.0	56.3	76.3	82.4	87.5	92.7	89.3	90.4
Professional Services	38.4	67.7	77.5	79.5	81.9	84.2	85.0	84.4	82.4
Traffic Signals	82.5	91.5	85.0	89.8	91.5	96.2	94.0	95.0	100.0
Client	33.5	53.5	76.3	87.3	75.0	74.1	74.5	69.3	60.0
Alliance	56.4	65.0	74.5	69.3	42.0	74.7	87.2	79.8	60.0

Conclusion

The Highway Works Term Contract score has decreased slightly from 91.4 to 90.4. This is a good score and the 6th highest since the start of the contract.

The Professional Service Contract score has increased slightly to 82.4 from 81.0. This is a good score and maintains at a high level.

The Traffic Signals Contract scored 100 this quarter – this is the 4th time that maximum points have been scored. This area is consistently at a high level.

The Client score has decrease to 60 points this quarter from 62. Compensation Events being committed within timescales, having an agreed forward programme and enquiry response times are areas that requires improvement if the Client score is to improve significantly.

The Alliance Indicator score has stayed the same this quarter at 60 points. Not having an agreed programme in place for next year was a factor, but also public satisfaction on the NHT survey has dropped from last year. Improvement in these areas will be required to improve on the score.

James Malpass
August 2018

Improvement Actions

Indicator No	Description	Action	Owner	Target Date
Client PI 6	CE's committed within Timescale	Assess all CE's committed by Officer to see if there is a pattern. Report information on Divisional Dashboard and to the monthly NDM's meeting. Monitor results for future Quarters as Confirm/Agresso shut down will effect CE commitment.	Network and Development Managers, TSP management and Divisional management.	September 2018 Q2 Year 9
Client PI 2	Date forward programme issued	The processes involved to issue a programe has change this year but has resulted in the programme taking longer to produce. This will need to be monitored and see if lessons can be learn to improve for subsequent years.	Network and Development Managers, TSP management and Divisional management.	December 2018 Q3 Year 9
Client PI 7	Client Response Times	This is a new measure that will need to be monitored to ensure improvement in future	Network and Development Managers, TSP management and Divisional management.	September 2018 Q2 Year 9
Alliance KPI 2	Public Satisfaction Survey	Liaise with the Comms Team to see if a PR Campaign can improve public perception of the Alliance.	Target Cost and Performance Manager, Alliance Works Contract Manager	December 2018 Q3 Year 9
Alliance KPI 6	Creation of an agreed programme	The processes involved to issue a programe has change this year but has resulted in the programme taking longer to produce. This will need to be monitored and see if lessons can be learn to improve for subsequent years.	Network and Development Managers, TSP management and Divisional management.	December 2018 Q3 Year 9

Highway Works Terms Contract (HWTC)– Performance Indicators

HWTC PI1 - Street Lighting service standard.

This indicator is designed to measure the percentage of streetlights working within Lincolnshire and is identified through night scouting regime and customer reported faults.

The method of assessment has been amended to suit the transformation project. Since 2016 due to ongoing funding cuts, there has been a project of conversion of the current infrastructure. This has include converting street lighting to LED lights, 'part-night' lighting and switching off of lights permanently as a way of reducing spending.

Further information can be found at : www.lincolnshire.gov.uk/transport-and-roads/major-projects/street-lighting-transformation-project

As such this indicator is measured by looking at the following elements

- a) Amount of conversions completed in line with project plan
- b) Delivery of daily whereabouts each working day
- c) % of Non-transformation and non-emergency jobs not requiring return visit
- d) % of Non-transformation and non-emergency jobs completed

HWTC PI2 - Compliance of response times in respect of emergency works

This indicator is designed to measure the percentage of emergencies responded to within given timescales.

This is identified by comparing the total number of emergencies attended within time, to the total number of emergencies reported and logged.

Points Scale	99.5 to 100% = 10
	98.5 to 99.5% = 8
	97.5 to 98.5% = 6
	96 to 97.5% = 4
	95 to 96% = 2
	<95% = 0

HWTC PI3 - Tasks completed with given timescale

This indicator is designed to measure the percentage work orders completed within agreed timescales.

This is identified through comparing the total amount of work orders completed within agreed timescales, to the total amount of work orders.

HWTC PI5 - Acceptable site safety assessment

This indicator is designed to measure the safety of site work. This is identified through Mouchel Inspections and Client H&S Inspections. Ratings are 1-5 where 1 and 2 is classed as not acceptable.

This indicator was revised in Year 6. Instead of looking at the Quarter average the indicator now looks at a Yearly average. This is because not enough assessments were being undertaken over the Quarter to give meaningful data.

The target is for 95% of assessments to be considered acceptable.

HWTC PI7 - Defect correction requiring traffic management.

This indicator is designed to measure the amount of remedial work carried out over a quarter, where defects have been found and need to be rectified.

This is identified by comparing the number of defect job types raised in quarter as a percentage of total number of orders.

HWTC PI 8 - % waste reused/recycled

This indicator is designed to measure the amount of waste that is reused/recycled compare to going to landfill.

The target for the indicator is that 90% of waste does not go to landfill, so that the environmental impact of the service is reduced.

HWTC PI 9 – Compliance with tendered Quality Statements

This indicator is designed to review delivery against a series of quality statements made during the tender for the contracts which are chosen each year by the performance group.

The statement currently used to monitor performance are : -

- Audits undertaken by competent, trained and qualified assessors will focus on compliance with legislation, policy, meeting contractual requirements and effectiveness and efficiency of key processes. Value from audits will be shared across the Alliance.
- Engage schools, colleges as part of Local Communities Investment Plan. Provide presentations to local schools about “stay safe – stay off site”, road safety and careers within construction industry
- Improve customer satisfaction and lower overall costs and improvements by measuring community response.
- To develop a Vehicle and Plant Asset Review
- Each area to have a Performance Improvement Plan
- “Drive Alive” training scheme to be initiated to drive down carbon emissions and teach methods of safe and economical driving which must be adhered to.
- Implement and improve the Alliance H&S Plan
- To develop a programme of inspections and audit.
- All Schemes to be financially closed out within 3 months.
- Involve subcontractors with improvement scheme.
- Produce an agreed programme of works .
- Alliance training to be delivered to all staff

HWTC PI10 - Quality assessment of workmanship

This indicator is designed to measure the compliance to agreed material standards as detailed within contract specification.

A number of sites are tested by Lincs Lab and reported compliance is used to equate the indicator score. Sites can be requested by Division for investigation, but the majority of sites tested, are randomly selected.

This is identified by comparing the total number of passed quality assessments, to the total number of assessments carried out to get a pass percentage.

Ideally the pass percentage should be 100%, so total points reduce for being below this; 1 point for every 3% below.

HWTC PI11 - Measure/reduce carbon over the whole fleet

This indicator is designed to monitor the amount of mileage each quarter to try to ensure that there is a reduction in our carbon emissions.

HWTC PI12 - % task orders in compliance with Traffic Management Act

This indicator is designed to measure the compliance with the Traffic Management Act regulations with regards to correct notice of works being produced.

All jobs with value that need a TMA notice are recorded over the Quarter and checked accordingly.

HWTC PI4 - Reportable accidents under RIDDOR

RIDDOR is the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995.

This indicator is designed to measure the number of RIDDOR reportable accidents. The objective of this indicator is to reduce the number of accidents.

This indicator does not provide points as ideally there will be no accidents/incidents. Instead points are lost from the total if any occur.

HWTC PI6 - Services Strikes

This indicator is designed to measure the number of statutory undertaker equipment strikes occurring during works on the Lincolnshire highway network. The objective of this indicator is to minimise the number of service strikes.

This indicator does not provide points as ideally there will be no strikes. Instead points are lost from the total if any occur.

Professional Services (PSP) – Performance Indicators

PSP PI1 – Client Satisfaction of Product

This indicator is designed to measure Client Satisfaction with finished Works.

The method of measuring this indicator is by recording client satisfaction on completion of design and completion of works based on responses to questionnaires that offers clients the opportunity to grade works based on their opinion on the end product..

Score		
Excellent	Totally satisfied. Excellent Service	10
Good	Demonstrates above average proficiency. Exceeds expectations.	8
Satisfied	Competent service. Meets expectations. Neither satisfied nor dissatisfied.	5
Less than Satisfied	Does not fail but service is basic.	3
Poor	Total failure. Totally dissatisfied	1

The total score is then averaged for all completed works for a quarter.

$$PI = \frac{\text{total score of questions answered.}}{\text{Number of questions answered.}}$$

PSP PI2 – Client Satisfaction of Service

This indicator is designed to measure Client Satisfaction with the provided service.

The method of measuring this indicator is by recording client satisfaction on completion of design and completion of works based on responses to questionnaires that offers clients the opportunity to grade works based on their opinion on the service provided.

Score		
Excellent	Totally satisfied. Excellent Service	10
Good	Demonstrates above average proficiency. Exceeds expectations.	8
Satisfied	Competent service. Meets expectations. Neither satisfied nor dissatisfied.	5
Less than Satisfied	Does not fail but service is basic.	3
Poor	Total failure. Totally dissatisfied	1

The total score is then averaged for all completed works for a quarter.

$$\text{PI} = \frac{\text{total score of questions answered.}}{\text{Number of questions answered.}}$$

PI3 – Compliance with tendered Quality Statements

This indicator is designed to review delivery against a series of quality statements made during the tender for the contracts which are chosen each year by the performance group.

PSP PI 4 - Predictability of Design Costs

This indicator is designed to measure Professional Services Design Costs compared to agreed fees. An agreed fee for design prior to commencement of work is compared to the Actual out-turn fee (this will include any additional fees).

Ideally the Actual out-turn fee will equal the agree fee or come under.

This indicator measures the percentage of construction works where the design costs ended up being above the agreed fee.

PSP PI 5 - Predictability of Works Costs – This measure will be removed

This indicator is designed to measure the estimated works costs against the Actual works cost. A figure is produced each quarter to show how accurate estimates were for a given quarter.

Ideally the costs of works will be less than or equal to the estimated amounts.

PSP PI 6 - Predictability of Time for Design

This indicator is designed to measure the time taken for Design work compared to agreed timescales for this process.

Each set of works has an agreed length of time for design. This is the length of time expended in providing the required deliverable(s) prior to commencement of construction.

The Agreed time to undertake the work and target delivery date is compared to the actual date the design work was completed.

This accuracy is used to give an interpretation of how much Design work has been completed on time, or going over schedule.

PSP PI 7 - Predictability of Time for Construction

This indicator is designed to compare the actual time taken to undertake Works compared to the estimated time for construction.

This measure gives an indication as to how accurate the design works were with regards to estimate timeframes.

PSP PI 8 - % of Compensation events committed within timescale

This indicator is designed to ensure compensation events are committed in a timely manner as they can delay works close down.

The method of measuring this indicator will be to take information from a scheduled Confirm report. The report will show the compensation events raised and committed within two weeks and over two weeks for each highways area and this will be shown as a percentage.

10% variation is allowable (90% accuracy) – there after points are lost.

>90%=10;

80-89%=8

70-79%=7;

60-69%=6

50-59%=5;

40-49%=4

30-39%=3;

20-29%=2

10-19%=1;

<10%=0

PSP PI 9 - Programme issued to Contractor

The Indicator is designed to allow sufficient time ahead of scheme commencement to ensure Early Contractor Involvement can be fully implemented and also encourage effective planning throughout the Alliance. It is also gives the contractor the opportunity to plan and control his resources

PSP are required to issue the Forward Programme to the Contractor by the end of November (annually).

Points are lost for being beyond this date.

Traffic Signals Term Contract (TSTC) – Performance Indicators

TSTC PI 1 - 10 Critical Contractors Quality Promises

This indicator is designed to measure to what extent the quality promises from the contract tender are being met

Analysis of actions by the term contractor in relation to the quality promises with 1 mark being given for each action achieved. Actions are:

1. Full attendance and participation at Alliance Meetings
2. Fully operational Lincolnshire depot and testing facility
3. Fully engaged in ECI in design process
4. Fully engaged in managing the programme
5. Full collaboration in Alliance projects
6. Full implementation of Alliance branding
7. Competency of staff
8. Full operation of target cost financial system
9. Full operation of an open book financial system
10. Fully compliant Fault Management System

A maximum score of 5 points is obtained by meeting all 10 promises.

TSTC PI 2 - Reportable accidents under RIDDOR

RIDDOR is the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995.

This indicator is designed to measure the number of RIDDOR reportable accidents. The objective of this indicator is to reduce the number of accidents.

This indicator does not provide points as ideally there will be no accidents/incidents. Instead points are lost from the total if any occur.

TSTC PI 3 - Acceptable Site Safety Assessments per annum

This indicator is designed to measure the safety of site work.

This indicator is designed to measure the safety of site work. This is identified through Mouchel Inspections and Client H&S Inspections.

Ratings are 1-5 where 1 and 2 is classed as not acceptable.

The target is for 95% of assessments to be considered acceptable.

TSTC PI 4 – Weekly works planning and asset data supplied within timescales

This indicator is designed to ensure that work is planned in advance.

TSTC PI 5 - Number of Faults Cleared within Contract Timescales

This indicator is designed to measure the ability to clear faults within the specified timescales and to minimise number of faults on the network.

When a fault is reported a timescale is allocated as to when the fault will be resolved.

The target is for 99% of faults to be cleared in agreed timescales and points are lost for being under this benchmark.

99 - 100% = 10

95 - 98% = 9

85 - 94% = 7

75 - 84% = 2

Less than 75% = 0

TSTC PI 6 % Task Orders completed on time

This indicator is designed to measure the amount of task orders completed on time that Lincolnshire County Council have specified a completion date for.

The target is for 99% of orders to be completed in agreed timescales and points are lost for being under this benchmark.

99 - 100% = 10

95 - 98% = 9

85 - 94% = 7

75 - 84% = 2

Less than 75% = 0

TSTC PI 7 - % Task Orders completed free of remedial works

This indicator is designed to measure the amount of tasks completed without the need to return for remedial works.

Ideally by monitoring this aspect, there will be an improvement in the percentage of task orders completed without the need to return for remedial works, ensuring efficiency of resources and network.

The target is for 99% of orders to not require remedial works. Points are lost for being under this benchmark.

99 - 100% = 10

95 - 98% = 9

85 - 94% = 7

75 - 84% = 2

Less than 75% = 0

TSTC PI 8 - % faults resolved at the first visit.

This indicator is designed to measure the amount of tasks that are resolved with the need for only one visit.

Ideally by measuring this aspect there will be an improvement in the percentage of faults resolved after just one visit, and in turn ensuring efficiency of resources and network.

The target is for 99% of tasks to be resolved in one visit. Points are lost for being under this benchmark.

99 - 100% = 10

95 - 98% = 9

85 - 94% = 7

75 - 84% = 2

Less than 75% = 0

TSTC PI 9 - % Task Orders carried out in compliance with TMA.

This indicator is designed to measure the compliance with the Traffic Management Act regulations with regards to correct notice of works being produced.

All jobs with value that need a TMA notice are recorded over the Quarter and checked accordingly.

The target is for 99% of tasks to be be compliant with the Traffic . Points are lost for being under this benchmark.

99 - 100% = 10

95 - 98% = 9

85 - 94% = 7

75 - 84% = 2

Less than 75% = 0

TSTC PI 10 - % annual inspections completed per annum.

This indicator is designed to measure the percentage of site inspections carried out each year.

There are 317 Sites in Lincolnshire per annum that require the annual inspections to be carried out.

Quarterly target inspection have been set at Q1-71, Q2-82, Q3-82 & Q4-82.

At the end of each quarter the target is compared to the actual amount of inspections that have taken place.

The target is for 95% of inspections to have taken place each quarter. Points are lost for being under this benchmark.

Points Scale	>95% = 10
	85% to 94% = 7
	75% to 84% = 2
	<75% = 0

TSTC PI 11- Reduction in Carbon Emissions

This indicator is designed to monitor the amount of Carbon Emissions produced each quarter to try to ensure that there is a reduction .

Benchmarking results have been established and emission have been targeted to be reduced by 5%

TSTC PI 12- % waste reused/recycled

This indicator is designed to measure the amount of waste that is reused/recycled compare to going to landfill.

The target for the indicator is that 90% of waste does not go to landfill, so that the environmental impact of the service is reduced.

Client - Performance Indicators

Client PI1- Pain/Gain Results by Area – This is to be removed

The Indicator is designed to show the changes in pain/gain in each year.

The method of measuring this indicator will be to take information from financial closed out schemes and will be reported as a percentage of pain/gain

After a recent review of financial information it has been assessed that Year 6 is around 2.5% in pain. This figure has been used to represent Year 7 as there are too few financially closed out jobs to make a reliable assessment.

Sliding scale = For every percentage point of pain 1 point is lost. For example if pain is predicted to be 4.65% then 4 points will be lost. The aim for this indicator is to reach parity or to be in gain.

Client PI 2 - Date Forward Programme issued

The Indicator is designed to allow sufficient time ahead of scheme commencement to ensure Early Contractor Involvement can be fully implemented and also encourage effective planning throughout the Alliance. It also gives the contractor the opportunity to plan and control his resources

Area Highways Managers are required to issue the Forward Programme to the Contractor by the end of October (annually). 1 point is awarded for every area programme that is issued on time (maximum score is 10 points)

Client PI 3 - % variation from current programme spend profile

The Indicator is designed to encourage keeping the programme up to date and encourage endeavouring to stick with programme, giving all parties greater budget certainty.

5 points are awarded per Division (max score 20 points) for providing Budget forecast and outcome data to Contractor at Commercial Meeting. All Forecasts need to be submitted for Quarter 3.

This measure is set by Alliance agreement.

Client PI 4 - % of Jobs with Value giving all info 8 weeks prior to start

This indicator is designed to ensure that orders give the correct and required information. Correct information ensures the processes work as planned, avoids cost plus and builds confidence in LCC professionalism.

The method of measuring this indicator will be to take the scheduled report from Confirm which details all jobs rejected and displays the reasons for rejection. Each reason is checked and a count made of the number of jobs rejected for incomplete information.

The aim is to be 100% correct. 1 point is lost per percentage point.

Client PI 5 - Valuation of compensation events versus targets

This indicator is designed to ensure improving predictability of costs. Compensation events also disrupt programme delivery and get in the way of efficient planning.

The method of measuring this indicator will be to calculate the percentage value of compensations events against the total spend.

2% variation is allowable – after that 1 point is lost per percentage point of variation. For example if the variation was 4.25% then 2 points would be lost.

The target is set by Alliance agreement.

Client PI 6 - % of Compensation events committed within timescale

This indicator is designed to monitor the time taken by the Client to initially respond to incoming enquiries/fault received from members of the public.

Enquiries should not exceed prescribed amount of working days to move from initial status to the creation of a job, or a response to the public.

All members of the Client team will be expected to help works towards this target, and actively deal with enquires as they are received.

All enquires/faults are classed as either emergency or non-emergency when they are received. Emergency requests require a response within 24 hrs. Non-emergency requests require a response within 10 days.

A percentage is calculated based on what has achieved the appropriate level of response.

100% = 10
>98% = 9
>96% = 8
>94% = 7
>92% = 6
>90% = 5
>88% = 4
>86% = 3
>84% = 2
>82% = 1
<80% = 0

Alliance - Performance Indicators

Alliance PI 1 – Net/Positive Press Coverage

This indicator is designed to gauge the client / Public satisfaction with the service provided by the Alliance.

By capturing the positive press coverage of those areas impacted by the Highway Alliance, it is possible to target the areas which have significant impact on the perception of the Highway Service for all parties in the Alliance and gauge the positive impact the Highway Alliance is having for the people of Lincolnshire.

This measure is obtained by analysis of press coverage data provided by LCC Comms team. An agreed bespoke analysis tool has been developed to distinguish what LCC considered to be Positive, Neutral or Negative press coverage of the service provided.

The Target is for at least 95% positive or Neutral press coverage each quarter.

Points Scale	>95% = 25
	90% to 95% = 15
	85% to 90% = 10
	75% to 85% = 7
	65% to 75% = 4
	<65% = 0

Alliance PI 2 - Public Satisfaction Survey

This indicator is designed to measure public satisfaction in the condition of the highway.

Data is provided annually by National Highways & Transport Public Satisfaction Survey and is used to directly measure if there has been improvement in the perception of the people of Lincolnshire in their highway network.

This measure is designed to capture all elements of the work of the Alliance by using the Overall Satisfaction indicator.

Points are lost if there is a loss in public satisfaction from the previous year.

Points Scale	>0% improvement = 25
	-1% to -0.01% = 20
	-1.5% to -1.01% = 10
	-3% to -1.51% = 5
	<-3% = 0

Alliance PI 3 - Tasks delivered against agreed Client Programme

An Alliance works programme has been agreed by the Programme working group and the performance of the Alliance is measured by number of works completed against this agreed programme. Until this full programme is in place a combination of the individual programmes will be used each month.

To this end the programme must be agreed and a degree of ownership for each member of the Alliance and be kept up to date as the programme must be able to flex to the demands of the parties whilst still delivering planned works by the Alliance.

The performance measure is calculated by taking the number of jobs that have been planned for completion, and comparing this figure to the amount that have been notified as substantially complete / technically complete.

The monthly target has been set as 95% and points are lost for being below this percentage.

Points Scale

>95%	= 15
80% to 95%	= 12
65% to 80%	= 10
50% to 65%	= 5
<50%	= 0

Alliance PI 4 - Relationships Scoring

This indicator is designed to gauge the relationships between the partners of the Alliance

Staffs are emailed on a quarterly basis and are asked to score the following out of 10 (10 = best, 1 = worst):

- Delivery: Consistency and Effective
- Systems and processes
- Continuous improvement
- Consistent communications and direction
- Challenge
- Reputation
- Alliance Behaviours

Returned scores are entered into excel spreadsheet to give average client score (Kier, TSP, Dynniq) an average partner score and an average Alliance score

Baseline scores are currently set as 6.5.

Points towards the monthly performance are lost for being below this baseline.

Points scale

>6.5	= 20
6.25 to 6.49	= 15
6 to 6.24	= 10
5.75 to 5.99	= 5
<5.75	= 0

Alliance PI 5 - Defunct

This KPI is no longer measured.

Alliance PI 6 - Creation of an agreed programme

An agreed programme should be complete by 31st October each year for a co-ordinated programme of works across the Alliance and efficient scheduling of works.

Points are awarded for when this agreed programme has been finalised.

Points scale	31 st October = 15
	30 th November = 12
	31 st December = 10
	31 st January 5
	Later than January = 0

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Document	Lincs CC Highways Service 2018 VFM Review & Improvement Opportunities
Client	Lincolnshire County Council
Date	22 June 2018
Author	Andy Perrin, Proving
Restrictions	Commercial Confidential
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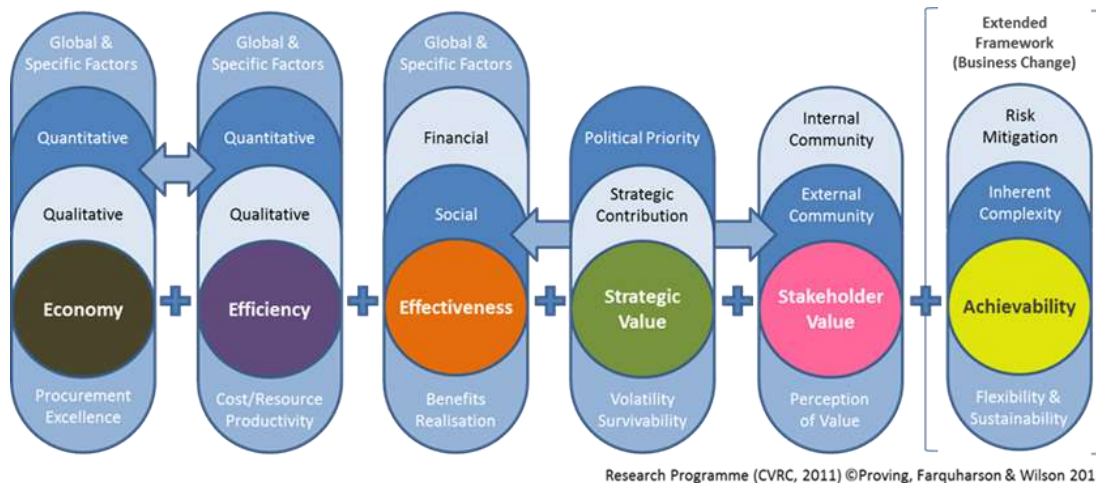
Lincolnshire County Council
Highways Service

2018 Value for Money Review

Introduction

This document provides a summary and analysis of the Value for Money (VfM) Assessment completed in May 2018 for the Lincolnshire County Council Highways Service (LCCHS). The review was undertaken using the Proving VfM framework as shown in Figure 1.

Figure 1: Proving Value for Money Framework



The assessment was completed through a half-day workshop¹ involving the management team (Appendix B). The participants were asked to consider a series of weighted VfM factors and agree the current factor performance and the opportunity for improvement. The comments and explanations associated with each score were captured and recorded as comments in the **Value Analyser** (Excel) Workbook. As this review was undertaken using a ‘deep dive’ approach, supporting evidence was obtained and reviewed for all highly weighted factors. The exception was for Stakeholder Value; no survey was undertaken to directly ascertain the views of stakeholders although this is an exercise LCCHS may wish to consider in future. A list of the sources of evidence reviewed is at Appendix C.

A confidence score was applied to each performance score. Factor performance was based on the views and explanations of workshop participants and validated by reference to the supporting evidence. The factor set used for the VfM scoring has been developed through the Future Highways Research Club (FHRC) and represents the agreed and weighted criteria for evaluating a typical local authority highways service.

The complete 2018 VfM Assessment is provided in Appendix A.

Summary Findings

Lincolnshire County Council Highways Service (LCCHS) provides sector leading value for money (VfM). Since 2014, LCCHS has introduced a new operating model with clear separation between commissioner and provider functions. It has underpinned this with a robust programme of continuous VfM improvement with each function subject to periodic, independent VfM review and

¹ Refer LCC Highways Workshop Scoring Protocols (pdf).

with ownership and accountability for its own improvement plan. Consequently, LCCHS is now providing a highly economic and efficient service whilst delivering very good outcomes. The position of LCCHS as a sector leader is evident in Figures 2 and 3 which show the plotted VfM position of LCCHS against other FHRC authorities, assessed by Proving within the last 15 months:

Figure 2: LCHHS VfM Position benchmarked against other FHRC members

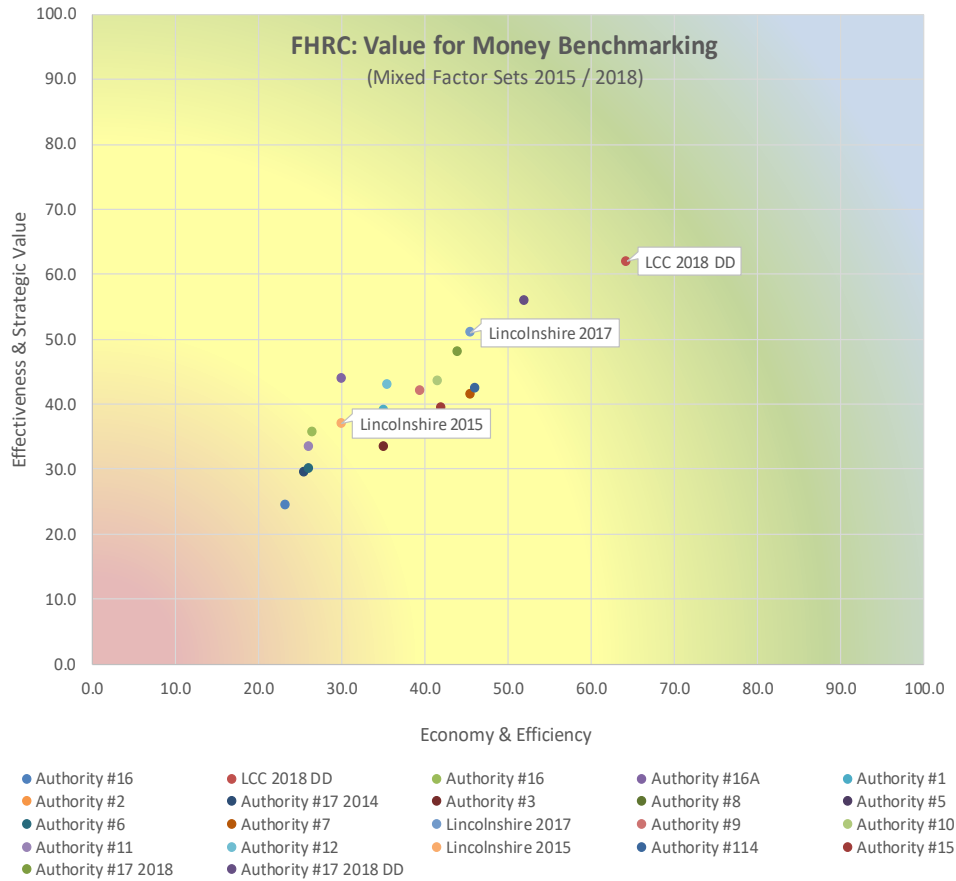
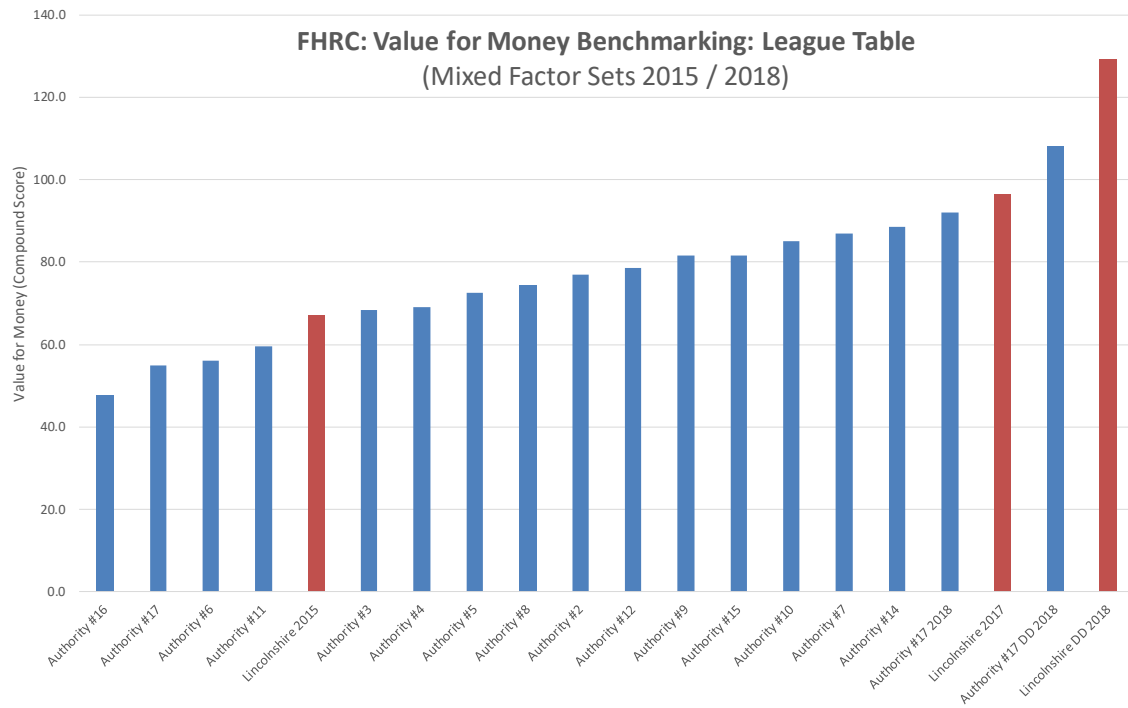


Figure 3: FHCR Value for Money Benchmarking: League Table



Economy

LCCHS manages its costs very well. Regular benchmarking is undertaken through the MSIG framework using a basket of costs covering staff, materials and other operating costs and LCCHS is consistently one of the lowest cost services. Costs incurred with the main contractor are transparent and the relationship between cost and price has remained static throughout the life of the contract with annual uplifts consistent with BCIS published rates. Sub-contractors are often employed through mini-tender and regular audits are undertaken of all suppliers and of both successful and unsuccessful tenders. Annual retainers have been stripped out other than those that have been proven to deliver better value than alternative procurement.

Since the introduction of the Future Operating Model, internal management and staff teams have been streamlined and are now lean, with each function operating within a defined headcount and budget. The Service has now implemented its cost reduction and savings plan although emergent opportunities to reduce costs are still exploited; for example, the current initiatives to procure salt differently and to move from a leasing to ownership model for gritters. The cost of risk is well managed, with all parties to major projects spending significant time early in the planning process to ensure all risks are identified and mitigated.

LCCHS also has a successful record of income generation, for example in Civil Parking Enforcement and Permitting. The Service is also leading the exploration of more innovative commercial opportunities including Smart Cities and Biomass collection and re-sale. Through its role as lead pioneer for the FHRC, LCCHS will identify what further opportunities there may be to broaden its commercial portfolio. LCCHS also has a very good record in securing grant monies and is considered and selective in what it bids for.

As evidenced in Figure 3, there are no high priority improvement opportunities emerging under the Economy dimension and perhaps the biggest challenge to LCCHS will be managing the inevitable rise in costs that will come with the new contract.

Figure 3: Top 10 Improvement Priorities for Economy

Economy	Income / Services Trading	75	75	50	75		8.8
Economy	Cost of Compensation (Including CEs / Functional FTP Events)	80	75	75	75		6.6
Economy	Contract Cost Management	60	75	75	75		4.9
Economy	Grant / Investment Winning	80	75	75	50		4.4
Economy	Delivery of Service Within Budget	100	75	75	25		2.7
Economy	Depots / Offices	40	75	75	50		2.2
Economy	Cost of Risk (Emergent)	40	75	75	50		2.2
Economy	IT / IS Services, Equipment & Software	30	75	75	50		1.6
Economy	Management	100	100	75	25		1.6
Economy	Staff	100	100	75	25		1.6

Efficiency

Through application of the Future Operating Model, the service is now configured optimally and meet all targets within the Asset Management Plan. There is however some scope for further productivity, particularly in terms of the external contractor where the management team is arguably now too lean to adequately provide the service level required and, despite the introduction of new performance management software, there is a sense that gangs could still be more productive. LCCHS intends to address this in the new contract through the introduction of a suite of productivity KPIs specific to each lot as well as overarching KPIs across the alliance. More work is also required to ensure the desired culture is always exhibited in some professional services.

The productivity of internal management and staff is generally good although management consider the 'self-serve' nature of the Serco online portal does create an administrative burden that is something of a distraction from the core roles. There is also a view that staff utilisation, whilst very high, is now starting to overheat which creates a threat to service sustainability in the longer term. There is an aspiration, now being realised in some but not all parts of the Service, to reintroduce proper trainee schemes to aid succession planning.

The Service is agile, with each function empowered to reorganise as needed and with a very effective top up system for professional services. The IT Management system in use, Confirm, serves the Service very well and its full functionality is being exploited more successfully than at many other authorities. Stakeholders are managed well; there are annual briefings for members and town and parish councils and the CSE provides a good filter for what comes directly through to the Highways Service; this is viewed as one of the big successes of the new operating model.

The most significant opportunities for efficiency improvements are shown in figure 4 and of these, the highest priority relate to contractor productivity which LCCHS has clear plans to address in the new contract. The key risk the Service must continue to monitor is that of 'overheating' with the consequent impact on longer terms sustainability.

Figure 4: Top 10 Improvement Priorities for Efficiency

Efficiency	Productivity of Management (External)	100	50	75	75		11.7
Efficiency	Productivity of Staff	100	50	75	75		11.7
Efficiency	Other Resource (Productivity)	60	50	75	75		7.0
Efficiency	Service Sustainability	80	50	75	50		6.3
Efficiency	Productivity of Management (Internal)	100	75	75	50		5.5
Efficiency	Productivity of Staff	100	75	75	50		5.5
Efficiency	Service / Function Productivity & Throughput	100	75	75	50		5.5
Efficiency	Stakeholder Management (Internal & External)	100	75	75	50		5.5
Efficiency	IT / IS Management	100	75	75	50		5.5
Efficiency	Other Resource (Productivity)	60	75	75	50		3.3

Effectiveness

LCCHS provides the full range of county level highways services and at a scale that meets the needs of stakeholders. Where the level of service has been reduced, for example the introduction of part-night lighting, this has been driven by environmental rather than solely budgetary considerations. LCCHS has a suite of quality and outcome measures, linked to the AMP, and the asset value and condition are improving through doing the right things at the right time. The Service has an exceptional CQC rating of 98%.

The Service delivers very good outcomes with excellent transactional performance which means most jobs and projects are completed accurately, on-time and on-budget. Whilst stakeholders are managed well, there is a view that customer satisfaction could improve further if the achievements and constraints of the Service were better communicated to help manage expectations.

Resilience of the Service is a challenge; serious events such as an extended winter season do test a lean service and the recovery phase can be significant. LCCHS is seeking to address this in the new contract by moving more responsibility for reactive work to the successful contractor. There is also a desire for the new contractor to offer up more added value, in terms of service innovation and financial benefits, than is offered by the current main contractor. These opportunities are reflected as the priority areas for improvement in Figure 5.

Figure 5: Top 10 Improvement Priorities for Effectiveness

Effectiveness	Overall Customer Satisfaction	100	50	75	100		15.6
Effectiveness	Serious Events (Public Protection / Safety / Regulatory Compliance)	60	25	75	100		12.2
Effectiveness	Financial Benefits (Cashable Benefits)	80	50	75	75		9.4
Effectiveness	Services Development / Innovation	80	50	75	75		9.4
Effectiveness	Reputation Benefits / Dis-Benefits	60	50	75	75		7.0
Effectiveness	Environmental Benefits	60	50	75	75		7.0
Effectiveness	Scale of Services	100	75	75	50		5.5
Effectiveness	Resilience of Services	100	75	75	50		5.5
Effectiveness	Social Benefits	60	75	75	75		4.9
Effectiveness	Quality of Service	100	75	100	50		3.1

Strategic and Stakeholder Value

As a consequence of the very good value for money provided by the Service, LCCHS performs strongly against all strategic objectives and the Service Management Team consider the Service is well regarded by all significant internal and external stakeholders, with the exception of the general public as noted above.

Although the Service has received an NHT rating of 51%, there would be merit in conducting a more local, granular survey of key stakeholders, including politicians, other tiers of local government and both public and private sector partners. This would help inform the work considered necessary to better manage expectations.

Conclusions

LCCHS is very clearly providing sector leading value for money. There is much the sector could learn and benefit from through greater exposure to LCCHS's operating model and achievements and we must seek to provide this exposure through the FHRC and LCCHS's role as lead pioneer.

As regards improvement opportunities; these are set out in priority order across all dimensions in Table 1 below. LCCHS is aware of the areas of service that require further support and has plans to address these as part of the 2020 re-procurement exercise. Other relatively high priority areas, in particular around identifying any further income generation opportunities and better managing customer expectations will be addressed through LCCHS's lead role in developing the FHRC 2018 research themes:

- Commercialisation
- Continuous Value for Money Improvement
- Effective Communications
- Effective Community Engagement
- Mutuality (Effective Collaboration)

In summary, there are no critical areas to address anywhere in the current Service and LCCHS has robust plans in place to continue to improve an excellent service.

Improvement Opportunities

Table 1 shows the prioritised list of improvement opportunities identified during the 2018 Deep Dive Review.² The factors are ordered in terms of **Weighting** (High), **Performance Score** (Low) and **Opportunity** (High – Definitely).

Table 1: LCC Deep Dive Review - Prioritised Improvement Opportunities

Dimension	Factor Name	Weighting	Score (Text)	Score	Confidence (Text)	Confidence	Opportunity (Text)	Opportunity	Priority
Effectiveness	Overall Customer Satisfaction	100	Satisfactory [50]	50	Medium-High [75]	75	Definitely [100]	100	15.6
Stakeholder Value	General Public	100	Satisfactory [50]	50	Medium-High [75]	75	Definitely [100]	100	15.6
Effectiveness	Serious Events (Public Protection / Safety / Regulatory Compliance)	60	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	12.2
Efficiency	Productivity of Management (External)	100	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	11.7
Efficiency	Productivity of Staff (External)	100	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	11.7
Effectiveness	Financial Benefits (Cashable Benefits)	80	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	9.4
Effectiveness	Services Development / Innovation	80	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	9.4
Economy	Income / Services Trading	75	Good [75]	75	Medium [50]	50	Probably [75]	75	8.8
Efficiency	Other Resource (Productivity)	60	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	7.0
Effectiveness	Reputation Benefits / Dis-Benefits	60	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	7.0
Effectiveness	Environmental Benefits	60	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	7.0
Economy	Cost of Compensation (Including CEs / Functional FTP Events)	80	Good [75]	75	Medium-High [75]	75	Probably [75]	75	6.6
Efficiency	Service Sustainability	80	Satisfactory [50]	50	Medium-High [75]	75	Possibly [50]	50	6.3
Stakeholder Value	Parishes and Town Councils	80	Satisfactory [50]	50	Medium-High [75]	75	Possibly [50]	50	6.3
Efficiency	Productivity of Management (Internal)	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Efficiency	Productivity of Staff (Internal)	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Efficiency	Service / Function Productivity & Throughput	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Efficiency	Stakeholder Management (Internal & External)	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Efficiency	IT / IS Management	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Effectiveness	Scale of Services	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Effectiveness	Resilience of Services	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Strategic Value	Ensure Network Availability	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Strategic Value	Ensure Public Security & Safety	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
Stakeholder Value	CEO & Corporate Team Management	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5

² The Priority is calculated by multiplying [Weighting] x [Score] x [Opportunity]

Appendix A: Lincolnshire CC Highways 2018 Baseline Assessment

Assessment Title		WSCC VfM 2018 v4								
Assessment Type		Highways Value for Money								
Assessor Name		Simon Wilson								
Assessment Date		05 Mar 2018								
Assessment										
ID	Dimension	Factor Name	Weighting	Performance Analysis			Intervention Analysis		Priority	
				Score (Text)	Score	Confidence (Text)	Confidence	Opportunity (Text)		Opportunity
100	Economy	Commissioned / Outsourced Service Contract								
101	Economy	Management / Professional Staff	100	Satisfactory [50]	50	Medium [50]	50	Definitely [100]	100	18.8
102	Economy	Front Line Staff	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
103	Economy	Sub-Contractors	100	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	20.3
104	Economy	Professional Services including IT/IS	40	Requires Improvement [25]	25	Medium-High [75]	75	Probably Not [25]	25	2.0
105	Economy	Other Costs (Where Applicable)	20	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	0.5
106	Economy	Transactional / Internally-Contracted Costs (Where Applicable)								
107	Economy	Annual Retainers (Cost Justification & Cost Stability)								
108	Economy	Transactional Costs (Cost Analysis, Justification & Cost Stability)	80	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	16.3
109	Economy	Internal Costs								
110	Economy	Management	100	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	2.7
111	Economy	Staff	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
112	Economy	Contract Cost Management	60	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	1.6
113	Economy	Professional / Consultancy Services	60	Requires Improvement [25]	25	Medium-High [75]	75	Possibly [50]	50	6.1
114	Economy	IT / IS Services, Equipment & Software	40	Requires Improvement [25]	25	Medium-High [75]	75	Probably Not [25]	25	2.0
115	Economy	Materials & Consumables	10	Satisfactory [50]	50	Medium-High [75]	75	Probably Not [25]	25	0.4
116	Economy	Vehicles / Equipment	60	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	1.6
117	Economy	Depots / Offices	60	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	12.2
118	Economy	Other Operating Costs	10	Satisfactory [50]	50	Medium [50]	50	Possibly [50]	50	0.9
119	Economy	Cost of Risk (Where Applicable)								
120	Economy	Cost of Compensation (Including CEs / Functional FTP Events)	80	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	9.4
121	Economy	Cost of Risk (Anticipated)	40	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	8.1
122	Economy	Cost of Risk (Emergent)	80	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	16.3
123	Economy	Revenue Generation (Where Applicable)								
124	Economy	Income / Services Trading	100	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	20.3
125	Economy	Grant / Investment Winning	80	Requires Improvement [25]	25	Medium-High [75]	75	Probably [75]	75	12.2
126	Economy	Economy Improvement Plan (Savings Plan)	60	Good [75]	75	Medium-High [75]	75	Definitely [100]	100	6.6
127	Economy	Delivery of Service Within Budget	100	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	2.7

200	Efficiency	External Resource Efficiency (Commissioned / Outsourced Service Contract)								
201	Efficiency	Productivity of Management (External)	100	Satisfactory [50]	50	Medium [50]	50	Possibly [50]	50	9.4
202	Efficiency	Productivity of Staff (External)	100	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	20.3
203	Efficiency	Other Resource (Productivity) External	60	Requires Improvement [25]	25	Medium [50]	50	Possibly [50]	50	6.6
204	Efficiency	Internal Resource Efficiency								
205	Efficiency	Productivity of Management	100	Requires Improvement [25]	25	High [100]	100	Definitely [100]	100	18.8
206	Efficiency	Productivity of Staff	100	Requires Improvement [25]	25	Medium-High [75]	75	Probably [75]	75	15.2
207	Efficiency	Other Resource (Productivity)	80	Requires Improvement [25]	25	Medium-High [75]	75	Possibly [50]	50	8.1
208	Efficiency	Efficiency Performance Management								
209	Efficiency	Service / Function Productivity & Throughput	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
210	Efficiency	Service Utilisation	80	Good [75]	75	Medium-High [75]	75	Probably [75]	75	6.6
211	Efficiency	Service Optimisation	80	Requires Improvement [25]	25	Medium-High [75]	75	Probably [75]	75	12.2
212	Efficiency	Service Sustainability	80	Satisfactory [50]	50	Medium [50]	50	Probably [75]	75	11.3
213	Efficiency	Stakeholder Management (Internal & External)	100	Satisfactory [50]	50	Medium-High [75]	75	Probably [75]	75	11.7
214	Efficiency	Service Agility (Scope & Scale of Operations: Demand Matching)	80	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	4.4
215	Efficiency	IT / IS Management	100	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	20.3
216	Efficiency	Information Analysis & Reporting Management	80	Requires Improvement [25]	25	High [100]	100	Definitely [100]	100	15.0
217	Efficiency	Travel & Accommodation	40	Satisfactory [50]	50	Medium [50]	50	Possibly [50]	50	3.8
218	Efficiency	Efficiency Improvement Plan	60	Requires Improvement [25]	25	Medium-High [75]	75	Definitely [100]	100	12.2
300	Effectiveness	Effectiveness Management								
301	Effectiveness	Quality of Service	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
302	Effectiveness	Scope of Services	100	Satisfactory [50]	50	Medium [50]	50	Probably Not [25]	25	4.7
303	Effectiveness	Scale of Services	100	Good [75]	75	Medium [50]	50	Probably Not [25]	25	3.9
304	Effectiveness	Resilience of Services	100	Requires Improvement [25]	25	Medium-High [75]	75	Possibly [50]	50	10.2
305	Effectiveness	Serious Events (Public Protection / Safety / Regulatory Compliance)	60	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	3.3
306	Effectiveness	Transactional Performance (Where Applicable)								
307	Effectiveness	% of On-Budget Transactions	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
308	Effectiveness	% of Error-Free Transactions	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
309	Effectiveness	% of On-Time Transactions	100	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	2.7
310	Effectiveness	% of Reworked / Discarded Outputs	80	Satisfactory [50]	50	Medium-High [75]	75	Possibly [50]	50	6.3
311	Effectiveness	Overall Customer Satisfaction	100	Satisfactory [50]	50	Medium [50]	50	Definitely [100]	100	18.8
312	Effectiveness	Value Added Business Benefits								
313	Effectiveness	Financial Benefits (Cashable Benefits)	0							
314	Effectiveness	Social Benefits	0							
315	Effectiveness	Reputation Benefits / Dis-Benefits	0							
316	Effectiveness	Environmental Benefits	0							
317	Effectiveness	Services Development / Innovation	0							
318	Effectiveness	Effectiveness Improvement Plan	0							

400	Strategic Value	Ensure Network Availability	100	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	2.7
401	Strategic Value	Deliver Affordable & Sustainable Services	100	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	2.7
402	Strategic Value	Attract Inward Investment & Economic Stimulation	80	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	4.4
403	Strategic Value	Provide Comprehensive Value for Money Assurance	90	Good [75]	75	Medium-High [75]	75	Definitely [100]	100	9.8
404	Strategic Value	Implement Tangible Service Improvements	100	Good [75]	75	Medium-High [75]	75	Possibly [50]	50	5.5
405	Strategic Value	Services & Asset Plan Aligned With Customer Needs & Political Priorities	80	Good [75]	75	Medium-High [75]	75	Probably [75]	75	6.6
406	Strategic Value	Deliver Environment Protection Policies	70	Satisfactory [50]	50	Medium [50]	50	Probably [75]	75	9.8
407	Strategic Value	Ensure Public Security & Safety	100	Good [75]	75	Medium-High [75]	75	Probably Not [25]	25	2.7
500	Stakeholder Value	Politicians (Leader)	90	Good [75]	75					
501	Stakeholder Value	Portfolio Holder	100	Good [75]	75					
502	Stakeholder Value	Politicians (Cabinet & Scrutiny)	90	Good [75]	75					
503	Stakeholder Value	Politicians (Other)	80	Satisfactory [50]	50					
504	Stakeholder Value	Other Councils								
505	Stakeholder Value	Districts	60	Satisfactory [50]	50					
506	Stakeholder Value	Parishes and Town Councils	80	Satisfactory [50]	50					
507	Stakeholder Value	Neighbouring Authorities	40	Satisfactory [50]	50					
508	Stakeholder Value	Officers								
509	Stakeholder Value	CEO & Corporate Team Management	80	Good [75]	75					
510	Stakeholder Value	In-Function	100	Good [75]	75					
511	Stakeholder Value	In Other Dependent Functions	80	Good [75]	75					
512	Stakeholder Value	Partners (Delivery / Value Chain)	80	Good [75]	75					
513	Stakeholder Value	Utilities Organisations	30	Satisfactory [50]	50					
514	Stakeholder Value	Developers	80	Good [75]	75					
515	Stakeholder Value	DfT	70	Satisfactory [50]	50					
516	Stakeholder Value	Highways England	50	Good [75]	75					
517	Stakeholder Value	Other Transport-related Organisations / Agencies	60	Good [75]	75					
518	Stakeholder Value	LEP	80	Satisfactory [50]	50					
519	Stakeholder Value	General Public	100	Satisfactory [50]	50					
520	Stakeholder Value	Regulators	100	Good [75]	75					
521	Stakeholder Value	Special Interest Groups	70	Requires Improvement [25]	25					

Appendix B: Workshop Participants

1. Jonathan Evans
2. Mike Coates
3. Nicola Casburn
4. Paul Rusted
5. Shaun Butcher
6. Tom Gifford

Appendix C: Evidence Reviewed

1. Alliance Action Plan
2. Operational Asset Management Improvement Plan
3. Kier Application checks
4. Insight Report
5. CQC Reports
6. OAM Narrative
7. Operational Asset Management Dashboard April 18
8. Options Analyser – Operational Asset Management
9. Scrutiny Supplement Pack March 18
10. Surfacing & Patching audit March 18

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Customer Satisfaction Information
Highways and Transport Scrutiny Committee Q1
Date range for report 1st April 2018 – 30th June 2018

LCC Overview of compliments

Overall Compliments

The overall compliments received for Highways and Transport shows no change with 13 compliments being received again this Quarter.

Total number of compliments relating to <u>Highways and Transport Scrutiny Committee</u>	Current Q1	Q4	Q3	Q2	Q1
	13	13	18	22	21

Highways and Transport Compliments

Highways and Transport have received 13 compliments this Quarter. The compliments were in relation to contractor re-surfacing works and contractor staff attitude, thanks to specific Highways Officers and Assistants for the organisation and success of recent works including re-surfacing and damaged footpaths, clarification on grass cutting policy etc.

Highways also received thanks from the Police specifically to Darrell Redford and Jeanne Gibson for their overnight duty during the severe weather and compliments from Fulbeck Parish Council for timely replacement of damaged bollards.

1 compliment was received for the Blue Badge Team from a customer.

1 compliment was received for a Highways & Planning Business Support staff member for taking and circulating minutes for a recent 'Trainer' meeting.

LCC Overview of complaints

The total number of LCC complaints received this Quarter (Q1) shows a 4% decrease on the previous quarter (Q4). When comparing this Quarter with Q1 of 2017/18, there is a 17% increase, when 159 (excluding school complaints figures) complaints were received.

Total number of complaints received across all LCC service area.	Current Q1 18/19	Q4 17/18	Q3 17/18	Q2 16/17	Q1 16/17
	186	193	241	219	159
Total number of complaints relating to <u>Highways and Transport Scrutiny Committee</u>	63	52	62	78	46
Total Service Area Complaints broken down					
Highways	59	49	53	64	44

Transport	4	3	9	2	9
Number of complaint escalations relating to <u>Highways and Transport Scrutiny Committee</u>	19	9	8	8	5
How many LCC Corporate complaints have not been resolved within service standard	3	9	4	10	0
Number of complaints referred to ombudsman	15	16	10	11	9

This Quarter Highways and Transport has received 63 complaints which is an increase of 21% on last Quarter when they received 52 complaints. When comparing this Quarter with Q1 2016/17, there is a 37% increase when 46 complaints were received.

Highways Complaints

This Quarter Highways has received 59 complaints which is a 20% increase from last Quarter when they received 49 complaints. When comparing this Quarter with Q1 2016/17, there is a difference of 15 complaints when 44 were received.

The outcomes of the 59 Complaints were:

- 1 Complaint was substantiated
- 46 were partly substantiated
- 12 were unsubstantiated

The substantiated complaint related to a Waiver Permit in Grantham.

The partly substantiated complaints were generally in relation to the condition of the highway, road works / maintenance / resurfacing / closures. Others included parking issues, access concerns, highways assets and damage to property.

Transport Complaints

This Quarter Transport has received 4 complaints which is one more than last Quarter when they received 3 complaints. When comparing this Quarter with Q1 2016/17, there is a difference of 5 complaints when 9 were received.

The outcomes of the 4 complaints were:

All Partly Substantiated

1 was in relation to Call Connect

1 was in relation to 24/7 Lincs

2 about provision of school transport

Complaint escalations

In Quarter 1 of 2018/19 there were a total of 29 complaint escalations for LCC. 19 of these related to Highways and Transport.

Ombudsman Complaints

In Quarter 1 of 2018/19, 15 LCC complaints were registered with the Ombudsman, 2 of which related to Highways & Transport. 1 was in relation to a loose manhole cover causing complainants house to shake. No decision or conclusion was provided by the LGO.

The other complaint was in relation to a road in Leasingham. This was not investigated and the complainant was advised by the LGO to contact the magistrates court.

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**Open Report on behalf of Richard Wills,
Director responsible for Democratic Services**

Report to:	Highways and Transport Scrutiny Committee
Date:	10 September 2018
Subject:	Highways and Transport Scrutiny Committee Work Programme

Summary:

This item enables the Committee to consider and comment on the content of its work programme for the coming year to ensure that scrutiny activity is focused where it can be of greatest benefit. The work programme will be reviewed at each meeting of the Committee to ensure that its contents are still relevant and will add value to the work of the Council and partners.

Members are encouraged to highlight items that could be included for consideration in the work programme.

Actions Required:

Members of the Committee are invited to:

- 1) Review, consider and comment on the work programme as set out in Appendix A to this report.
- 2) Highlight for discussion any additional scrutiny activity which could be included for consideration in the work programme.

1. Background

Overview and Scrutiny should be positive, constructive, independent, fair and open. The scrutiny process should be challenging, as its aim is to identify areas for improvement. Scrutiny activity should be targeted, focused and timely and include issues of corporate and local importance, where scrutiny activity can influence and add value.

Overview and scrutiny committees should not, as a general rule, involve themselves in relatively minor matters or individual cases, particularly where there are other processes, which can handle these issues more effectively.

All members of overview and scrutiny committees are encouraged to bring forward important items of community interest to the committee whilst recognising that not all items will be taken up depending on available resource.

Committee Scope

As part of its terms of reference, the Highways and Transport Scrutiny Committee will work to review and scrutinise the following services and their outcomes:

- Transport Commissioning, including Bus Network Support
- Highway Network Management and Highways maintenance
- New transport investments including highways improvements

There will inevitably be service specific subjects that the scrutiny committee will want to consider, either through policy development, project updates, or through pre-decision scrutiny.

Purpose of Scrutiny Activity

Set out below are the definitions used to describe the types of scrutiny, relating to the items on the Committee Work Programme:

Policy Development - The Committee is involved in the development of policy, usually at an early stage, where a range of options are being considered.

Pre-Decision Scrutiny - The Committee is scrutinising a proposal, prior to a decision on the proposal by the Executive, the Executive Councillor or a senior officer.

Policy Review - The Committee is reviewing the implementation of policy, to consider the success, impact, outcomes and performance.

Performance Scrutiny - The Committee is scrutinising periodic performance, issue specific performance or external inspection reports.

Consultation - The Committee is responding to (or making arrangements to) respond to a consultation, either formally or informally. This includes pre-consultation engagement.

Budget Scrutiny - The Committee is scrutinising the previous year's budget, or the current year's budget or proposals for the future year's budget.

Requests for specific items for information should be dealt with by other means, for instance briefing papers to members.

Identifying Topics

Selecting the right topics where scrutiny can add value is essential in order for scrutiny to be a positive influence on the work of the Council. Members may wish to consider the following questions when highlighting potential topics for discussion to the committee:-

- Will Scrutiny input add value?
Is there a clear objective for scrutinising the topic, what are the identifiable benefits and what is the likelihood of achieving a desired outcome?
- Is the topic a concern to local residents?
Does the topic have a potential impact for one or more section(s) of the local population?
- Is the topic a Council or partner priority area?
Does the topic relate to council corporate priority areas and is there a high level of budgetary commitment to the service/policy area?
- Are there relevant external factors relating to the issue?
Is the topic a central government priority area or is it a result of new government guidance or legislation?

Scrutiny Review Activity

Where a topic requires more in-depth consideration, the Committee may commission a Scrutiny Panel to undertake a Scrutiny Review, subject to the availability of resources and approval of the Overview and Scrutiny Management Board. The Committee may also establish a maximum of two working groups at any one time, comprising a group of members from the committee.

2. Conclusion

The Committee's work programme for the coming year is attached at Appendix A to this report. A list of all upcoming Forward Plan decisions relating to the Committee is also attached at Appendix B.

Members of the Committee are invited to review, consider and comment on the work programme as set out in Appendix A and highlight for discussion any additional scrutiny activity which could be included for consideration in the work programme. Consideration should be given to the items included in the work programme as well as any 'items to be programmed' listed.

3. Consultation

a) Have Risks and Impact Analysis been carried out?

Not Applicable

b) Risks and Impact Analysis

Not Applicable

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	Highways and Transport Scrutiny Committee – Work Programme
Appendix B	Forward Plan of Decisions relating to the Highways and Transport Scrutiny Committee

5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Daniel Steel, Scrutiny Officer, who can be contacted on 01522 552102 or by e-mail at daniel.steel@lincolnshire.gov.uk

Highways and Transport Scrutiny Committee

10 SEPTEMBER 2018 – 10:00am		
Item	Contributor	Purpose
North Hykeham Relief Road Business case	Mark Heaton, Programme Leader	PRE-DECISION SCRUTINY Consideration of the North Hykeham Relief Road Business case which is to be submitted to DfT IN late Autumn 2018
Highways Infrastructure Asset Management Plan (HIAMP)	Vincent VanDoninck, Policy and Strategic Asset Manager	PRE-DECISION SCRUTINY Executive Councillor Decision Between 12 September 2018 and 21 September 2018
Winter Service Plan 2018	Vincent VanDoninck, Policy and Strategic Asset Manager	PRE-DECISION SCRUTINY Executive Councillor Decision between 12 September 2018 and 21 September 2018
Civil Parking Enforcement Annual Report 2016/17	Matt Jones, Parking Services Manager	The annual report on CPE related activities and financial statement showing the cost of the operation, including any deficit or surplus.
CCTV Pilot Scheme for Parking enforcement outside schools	Matt Jones, Parking Services Manager	Review of progress on the CCTV Pilot Scheme.
Quarter 1 Performance Report (1 April to 30 June 2018)	Paul Rusted, Infrastructure Commissioner	Review of the Key Performance and Customer Satisfaction Information.

22 OCTOBER 2018 – 10:00am		
Item	Contributor	Purpose
Provisional Engagement with Network Rail	Network Rail	Annual engagement session with Network Rail which will include details of network performance and discussion of any key issues or concerns in Lincolnshire.
Highways 2020 Update	Paul Rusted, Infrastructure Commissioner	Update on progress towards replacement arrangements for Highways 2020.
New Highways Operating Model VfM Assessment	Paul Rusted, Infrastructure Commissioner	Consideration of the value for money assessment for the New Highways Operating Model.
Effective Highways Communication	Satish Shah, Network Manager	Review of the work being undertaken to enhance service users' experience with regards to the Highways and Transport services.

10 DECEMBER 2018 – 10:00am		
Item	Contributor	Purpose
Quarter 2 Performance Report (1 July to 30 September 2018)	Paul Rusted, Infrastructure Commissioner	Review of the Key Performance and Customer Satisfaction Information.
Boston Transport Strategy Progress Report	Sam Edwards, Major Schemes and Design Commissioner	Review of the progress for the Boston Transport Strategy.

21 JANUARY 2019 – 10:00am		
Item	Contributor	Purpose
Revenue and Capital Budget Proposals 2018/19	Andy Gutherson, County Commissioner Economy and Place, Paul Rusted, Infrastructure Commissioner	PRE-DECISION SCRUTINY Budget Proposals for 2018/19
Highways 2020 Update	Paul Rusted, Infrastructure Commissioner	Update on progress towards replacement arrangements for Highways 2020.
Lincolnshire Connected	Vanessa Strange, Accessibility and Growth Manager; Ian Kitchen, Transport Policy Manager	Update on the work being undertaken in relation to future infrastructure requirements.
Permit Scheme Annual Report 2017/18	Mick Phoenix, Network Management Commissioner; Mandi Robinson Network Regulation Compliance Manager	Annual review of the Highway Permit Scheme.

11 MARCH 2019 – 10:00am		
Item	Contributor	Purpose
Quarter 3 Performance Report (1 October to 31 December 2018)	Paul Rusted, Infrastructure Commissioner	Review of the Key Performance and Customer Satisfaction Information.

29 APRIL 2019 – 10:00am		
Item	Contributor	Purpose
Winter Maintenance – End of Year Report	Vincent VanDoninck, Policy and Strategic Asset Manager	Review of 2018/19 winter maintenance period.

10 JUNE 2019 – 10:00am		
Item	Contributor	Purpose
Quarter 4 Performance Report (1 January to 31 March 2019)	Paul Rusted, Infrastructure Commissioner	Review of the Key Performance and Customer Satisfaction Information and progress against the NHT Public Satisfaction Survey 2017 Action Plan

10 JUNE 2019 – 10:00am		
Item	Contributor	Purpose
Route and Place Based Transport Strategies Annual Report	Sam Edwards, Major Schemes and Design Commissioner	Annual review of Route and Place Based Transport Strategies development.

Items to be programmed

- **A46 Dunholme / Welton Roundabout scheme**
- **Midlands Connect Update**
- **Review of Cycling Strategy**
- **Local Transport Plan**
- **Coastal Highway** – Teresa James, Senior Project Leader – *Review of the first phase of work and initial report on possible options.*
- **Review of the Lincolnshire 'Bus Strategy'**
- **Passenger Transport Strategy**
- **Re-consideration of the Speed Management in Lincolnshire Scrutiny Review - (20mph Limits and Zones)** – *To be reviewed once additional information is received from Government.*
- **Midlands Connect Sub National Transport Body**

For more information about the work of the Highways and Transport Scrutiny Committee please contact Daniel Steel, Scrutiny Officer on 01522 552102 or by e-mail at daniel.steel@lincolnshire.gov.uk

Forward Plan of Decisions relating to the Highways and Transport Scrutiny Committee

DEC REF	MATTERS FOR DECISION	DATE OF DECISION	DECISION MAKER	PEOPLE/GROUPS CONSULTED PRIOR TO DECISION	DOCUMENTS TO BE SUBMITTED FOR DECISION	HOW AND WHEN TO COMMENT PRIOR TO THE DECISION BEING TAKEN	RESPONSIBLE PORTFOLIO HOLDER AND CHIEF OFFICER	KEY DECISION YES/NO	DIVISIONS AFFECTED
I016320	Contract for the change in winter service salt supplier	Between 24 August 2018 and 14 September 2018	Executive Councillor: Highways, Transport and IT	Senior Management Team; Executive Councillor; Highways and Transport Scrutiny Committee	Report	Network Resilience Manager Tel: 01522 553103 Email: darrell.redford@lincolnshire.gov.uk	Executive Councillor: Resources and Communications and Executive Director for Environment and Economy	Yes	All Divisions
I016087	B1191 Horncastle Road, Woodhall Spa	Between 28 August 2018 and 21 September 2018	Executive Councillor: Resources and Communications	Highways colleagues; all the local affected stakeholders / businesses / landowners; Anglian Water; the Environment Agency; and Western Power Distribution	Report	Senior Project Leader Tel: 01522 782070 Email: steve.brooks@lincolnshire.gov.uk	Executive Councillor: Highways, Transport and IT and Executive Director for Environment and Economy	Yes	Woodhall Spa and Wragby
I015772	Highways Infrastructure Asset Management Plan	Between 12 September 2018 and 21 September 2018	Executive Councillor: Highways, Transport and IT	Highways and Transport Scrutiny Committee	Report	Policy and Strategic Asset Manager Tel: 01522 782070 Email: vincent.vandoninck@lincolnshire.gov.uk	Executive Councillor: Highways, Transport and IT and Executive Director for Environment and Economy	Yes	
I016424 New!	Winter Service Plan 2018	Between 12 September 2018 and 21 September 2018	Executive Councillor: Highways, Transport and IT	Highways and Transport Scrutiny Committee	Report	Policy and Strategic Asset Manager Tel: 01522 782070 Email: vincent.vandoninck@lincolnshire.gov.uk	Executive Councillor: Highways, Transport and IT and Executive Director for Environment and Economy	Yes	All Divisions
I016499 New!	North Hykeham Relief Road Submission of Business case	2 October 2018	Executive	Highways and Transport Scrutiny Committee	Report	Major Schemes and Design Commissioner Tel: 01522 550328 Email: sam.edwards@lincolnshire.gov.uk	Executive Councillor: Highways, Transport and IT and Executive Director for Environment and Economy	Yes	Bassingham and Welbourn; Hykeham Forum; Potterhanworth and Coleby; Waddington and Hykeham East