

Scrutiny Committee

3 November 2016

Highways Infrastructure Asset Management

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Introduction

1. This evidence set has been provided by County Council officers responsible for the management of highway infrastructure asset management through Suffolk Highways.
2. The purpose of this report is to provide the Committee with an update on the progress that Suffolk Highways is making towards strengthening the Council's approach to highways infrastructure asset management.
3. The work being undertaken is directed and shaped by the Highways Transformation Programme, ensuring that changes in the approach to asset management align with the future ambitions of the County Council in respect of the highway maintenance and improvement work delivered by Suffolk Highways.

Responses to question in the Scrutiny Focus

How has consultation on the Highways Asset Management Plan and Highways Maintenance Operational Plan been undertaken?

4. Approval was given by Cabinet on 12 July 2016 to undertake stakeholder consultation for both the draft Highway Infrastructure Asset Management Plan (HIAMP) and the Highway Maintenance Operational Plan (HMOP).
5. Summary documents for both the HIAMP and HMOP were prepared to provide stakeholders with a precis of the full documents. It was envisaged that, by providing these accompanying documents, stakeholders could choose to read the overview to gain an understanding of the new approach with the option to delve into the more detailed and technical documents if they wished to.

6. The HIAMP consultation exercise was launched on 26 July 2016 and finished on 15 September 2016. The summary and full documents were made available to stakeholders on the consultation pages of the Council's website.
7. The Cabinet Member for Highways and Transport officially launched the consultation exercise in the July version of 'Highway Matters' which is distributed to all county, district and borough councillors, and the Suffolk Association of Local Councils (SALC) for further distribution to its parish and town council members. This was accompanied by a press release in the East Anglian Daily Times on 29 July 2016.
8. Stakeholders were able to comment on the HIAMP online.
9. The HMOP consultation exercise commenced on 17 October and will conclude on 14 November 2016 and stakeholders are able to comment online.

What were the results of the consultation and how is this being taken into account?

10. Suffolk Highways' responses to the HIAMP consultation comments have been published on the Council's website and can be found in Appendix 1.
11. Cabinet delegated authority to the Director of Resource Management, in conjunction with the Cabinet Member for Highways and Transport, to consider the responses received from the stakeholder consultation exercise and make appropriate changes to the HIAMP.
12. The final version of the HIAMP will be published on the highways area of the Council's website in November 2016.

How is information about highways infrastructure being gathered and analysed and what further work is required?

13. To enable effective asset management, it is essential that suitable and complete data is stored in an asset management system.
14. The Asset Management workstream of the Highways Transformation Programme completed a review of the data held for each major highway infrastructure asset, focusing on inventory and condition data. This included a review of what data was currently collected, for what purpose and where it was stored.
15. Gaps were identified in the data held for some assets and these were subsequently prioritised for collection. The Council's audit team were engaged to undertake a review of the processes for the ongoing management of this asset data and provided assurance that the systems in place were fit for purpose. The audit confirmed that some asset data could benefit from migrating data from existing storage into the Symology *Insight* asset management system. The migration of this data is under way.
16. Inventory and condition data collection varies depending on the asset. For example, inventory data for street lighting is updated when works are undertaken using handheld devices at the roadside. This information is fed back to the *Mayrise* asset database. Condition data for carriageways, on the other hand, is a blend of machine surveys and condition inspections undertaken in the field by appropriately qualified technicians. This information is stored in the UK Pavement Management System (UKPMS) module in *Insight*.

17. The other essential ingredient for asset management, used alongside inventory and condition data, is understanding the current and future performance of infrastructure assets. Using a combination of historical and industry recognised performance data, lifecycle plans have been produced for all key assets.
18. These lifecycle plans enable asset teams to project forward, over a number of years, how assets will perform using different maintenance techniques and treatments to determine the lowest whole life cost for maintaining each asset.
19. The preferred lifecycle plan for each asset can then be utilised to determine investment levels for a given level of service (e.g. improving, maintaining or managing the decline of each asset's overall condition). In turn, this provides the asset manager with a number of scenarios to consider and enables informed decisions to be made when apportioning annual and multi-annual budgets.
20. Once indicative annual budgets are set, each asset team will use actual condition data to identify individual assets, which are in their optimal window for a given maintenance treatment, and develop forward works programmes. This process will ensure that the levels of investment afforded to each asset are targeted at the right asset at the right time ensuring that the maximum benefit for each pound spent is achieved.
21. Whilst much work has been undertaken over the last 12 months, asset management does not stand still. Condition data is gathered for all key assets at least annually. This refresh of data allows the performance of assets and their respective lifecycles to be constantly reviewed and refined. Additionally, this new data enables each asset team to refine and reprioritise schemes for delivery in subsequent years, ensuring that investment continues to be directed in the most appropriate manner.
22. Highway infrastructure asset management constantly evolves with the sharing and learning from other local highway authorities, other highway contracts within the Kier group, published best practice and advancements in materials and maintenance techniques. Suffolk Highways is sharing its practice with other local highway authorities and the Department for Transport. It is receptive to the practices of others and, where appropriate, incorporate these into its approach, ensuring that the service continues to meet and, where possible, exceed stakeholder's expectations.

When will any changes be implemented as a result of the new approach?

23. Changes to Suffolk Highways approach to asset management are constantly being introduced.
24. The development of carriageway lifecycle plans has supported the business case for investing in preventative treatments. Including these treatments in a roads lifecycle provides the lowest whole life cost of all the lifecycle plans. As such, a condition-led scheme identification exercise was undertaken to develop a works programme for the first tranche of the additional £10m allocation to highway maintenance for 2016/17 and 2017/18. This was an informed tactical switch away from tackling 'worst first' which detracts from these more cost effective preventative interventions.
25. Using the condition data, the asset team was able to identify sites for treatment in their optimal window whereas, historically, locations were being identified too late, meaning they required substantial preparatory patching and structural

repairs. By selecting sections of road at the correct time for surface dressing the cost of the preparatory works reduced from £31,553 average per site to £4,254 average per condition data identified site, a significant reduction of 87%. Put in context, this is a saving in preparatory costs of approaching £4.2m for every 1million m² of surface dressing completed.

26. The proven success of condition-led scheme identification will enable substantially more carriageway assets to be treated for the same budget and increase coverage. It will also provide the road network with resilience to pothole formation and other related structural failures, whilst supporting the existing infrastructure to last longer than if left untreated.
27. Other changes include introduction of the new risk-based HMOP (trials since May 2016). Over the last decade or so, highway maintenance has moved further and further towards reactive maintenance, meaning that only large and high risk defects were repaired.
28. The new risk-based HMOP provides Suffolk Highways with a mechanism to identify and record smaller defects which previous versions of the HMOP would have left unattended. Tackling defects at an early stage whilst they are low risk and preventing them from getting worse allows Suffolk Highways to group repairs in the same location together. On the rare occasion where this is not possible, due to the serious nature of a particular defect, the remaining defects will be programmed for patching at a single return visit.
29. Over time, the identification and repair of smaller defects will reduce the number of occasions where large defects occur, reducing the risk and improving the safety of your roads. This approach is consistent with the direction that central government wishes all local highway authorities to take, as exemplified by the principles set out in the Department for Transport's 'Well-Managed Highway Infrastructure'.
30. As significant changes are introduced, these will continue to be shared with county, borough, district, parish and town councillors through Highways Matters newsletters.

What will be the impact on Suffolk's residents?

31. The asset management approach will deliver a risk-based, preventative whole life cost approach to highway infrastructure asset management.
32. This approach will determine where best to put resources to maintain the highway to a safe standard at the lowest cost. While there is no intention to focus on urban/rural areas specifically, people living in any area of Suffolk may notice a change in the way highway assets are maintained. For example, they may notice either more or less, depending on the need in their area. This summer's surface dressing programme was relatively evenly distributed across the county and across the different road classifications – but this may not be replicated in the summer of 2017.
33. When the public come across the work undertaken by Suffolk Highways, they should increasingly experience greater coordination. For example, where traffic management is required to undertake grass cutting, Suffolk Highways will look to simultaneously undertake gully cleansing or minor patching or road marking renewal or a combination of these activities at the same location, depending on

the suitability of weather conditions and the amount of equipment and other resource that is able to occupy the working space available.

34. Similarly, when Suffolk Highways attend a location to fix a pothole, the opportunity will be taken to treat adjacent potholes, even if they do not carry the same level of urgency for repair. Furthermore, whilst improving public perception by working in this way, such repairs will be completed as often as is practically possible under the temporary obstruction, 15 minute closures – thus reducing the need for costly and time-consuming road closures and associated diversions.
35. Effective coordination and consideration of how we plan to undertake works will reduce the amount of time Suffolk Highways will occupy the network, increasing accessibility to the critical infrastructure that supports public, businesses and critical services in undertaking their day to day activities.

How are changes being communicated?

36. The asset management approach supports better communication with stakeholders. Suffolk Highways will keep the public informed through the use of a number of channels:
37. Website - this is the primary source of information and provides access to:
 - i) Works programmes;
 - ii) Highway infrastructure asset management documentation;
 - iii) Map-based information on schemes and road closures;
 - iv) Mechanism for feedback on projects, policy, strategy and plans;
 - v) 'Report It', a tool that interacts with maps to help report issues.
38. Customer Contact Centre - customer service agents have access to all forms of highways service information and are briefed on numerous subject areas including asset management and relevant scheme details.
39. Twitter - used as a method of getting out information that is likely to be of interest to a large audience such as details about gritting during the winter.
40. Correspondence to individuals and organisations - letters and formal notices will be sent to affected residents and businesses in advance of works on the highway where passage to and from private property is likely to be restricted. Suffolk Highways will endeavour to respond to letters or emails that it receives within 20 working days (on the basis that many enquiries are of a detailed nature and invariably require some form of investigation or research before a response can be sent)
41. Media interaction - issues relating to changes in policy, strategy, plans and new projects/programmes of work will often be accompanied by press notices. If these are considered to be of public interest, these issues will be picked up by the media. Suffolk Highways officers and the Cabinet Member for Highways and Transport will be made available to provide details and undertake interviews or provide supplementary information as required.
42. Newsletters - these are sent directly to all councillors (county, district, borough, town and parish) and Suffolk Highways staff. The newsletters contain useful information on works planned in forthcoming months, along with other service developments such as notification of the availability of future works programmes

on Suffolk Highways webpages. By placing these newsletters on the website, they are available for wider access and consideration.

43. Public consultation - consultation exercises are undertaken to enable Suffolk's road users to shape how the Council targets and delivers its services. Suffolk Highways is keen that Suffolk residents have the opportunity to understand and comment on the future approach to asset management, why it is being implemented and the decisions that will be made such that available funding is used in the most cost effective and efficient manner

Is SCC on track to receive maximum "Incentive Fund" returns for the period to 2021?

44. The Highways Transformation Programme is supporting the bulk of the work required to enable the Council to return an overall band 3 classification (the highest band) to the Department for Transport. It is understood (but not yet officially confirmed) that the original target date for this year's self-assessment submission is to be put back from November to December. Irrespectively, this will secure all available funding for Suffolk Highways in the financial year 2017/18.
45. The Highways Transformation Programme is providing and will continue to provide the building blocks for the continual improvement required in the five key areas of the 'Incentive Fund': asset management; resilience; customer; benchmarking and efficiency; and operational service delivery, to ensure that band 3 status is maintained for the period to 2021 thus safeguarding all available funding for Suffolk Highways.

Supporting information

Appendix 1 – Responses to stakeholder consultation on the Highway Infrastructure Asset Management Plan