

## ENVIRONMENT AND ECONOMY OVERVIEW AND SCRUTINY COMMITTEE

<b>Date of Meeting</b>	Tuesday, 10 <sup>th</sup> October 2023
<b>Report Subject</b>	Highways Structures (Audit Report)
<b>Cabinet Member</b>	Deputy Leader of the Council and Cabinet Member for Streetscene and Regional Transport Strategy
<b>Report Author</b>	Chief Officer (Streetscene & Transportation)
<b>Type of Report</b>	Operational

### EXECUTIVE SUMMARY

The Streetscene and Transportation portfolio is committed to ensuring the safety of highway network structures, which are currently recorded as assets that are related to highways such as bridges, including footbridges, underpasses, culverts, and retaining walls.

As part of the agreed Internal Audit Plan for 2021/2022, an internal audit review of the 'Inspection and Maintenance of Highway Structures and Bridges Part Two' was conducted and the report was issued in March 2023.

The purpose of the audit was to assess whether adequate controls were in place, and whether all actions from the Service Action Plan and those agreed in the interim audit report have been implemented and embedded. The overall findings from the audit were that the controls in operation at the time provided some assurance, but key controls to mitigate the strategic risks were found to be not effective or applied consistently and several areas for further improvement were recommended.

This report provides Cabinet members with an overview of the Highway Network service, with particular focus on the management of highways structures, along with assurances regarding the recommended action taken and controls put in place following the audit.

### RECOMMENDATIONS

1.	That Scrutiny notes and supports the work of the Streetscene and Transportation Highway Network team and acknowledges the required support from the wider technical team to deliver the action plan.
2.	That Scrutiny notes and supports the action taken and controls put in place in response to the internal audit recommendations.

## REPORT DETAILS

1.00	<b>BACKGROUND TO THE REPORT</b>
1.01	The Well Managed Highway Infrastructure Code of Practice 2016 states that: <i>“It is not in the public interest to allow highway structures to deteriorate in a way that compromises the functionality of the highway network, be it through restrictions or closures caused by unsafe structures or the disruption of traffic through poor planning of maintenance work.”</i> Failure of a structure is its inability to meet this function.
1.02	Highway related structures normally includes bridges (including footbridges), tunnels, underpasses, retaining walls, environmental barriers (including noise barriers and fencing), and all drains, piped and box culverts, sewers and drainage structures that have a diameter or clear span of more than 900mm.
1.03	<p>A highway related structure is either any structure built in, under, or over, the highway; or any retaining wall or structure which supports the highway and where the structure, or any retaining wall is built within 3.65m of the highway boundary where the retained height above the adjacent highway is 1.4m, or more, as set out in S167 Highways Act 1980.</p> <p>Note: The definition of ‘highway’ used above includes the carriageway, footways, and all verges.</p>
1.04	The Council has a statutory duty to maintain ‘passage’ along adopted highways. Section 41 of the Highways Act 1980 imposes the familiar, absolute duty on the highway authority to maintain the highway, a breach of which may give rise to a private law claim for damages; maintenance is to be interpreted as including repair, by virtue of section 329(1) of the Act.
1.05	Highways structures in Flintshire are managed by the Operational Manager - South and Structures, within the highway network team. The operational manager has responsibility for three area coordinators and their respective geographical areas, whose role is to deliver on the Streetscene principles, along with overall responsibility for winter maintenance service plans and operations, public open space management and maintenance, verge mowing and weed-spraying contracts, football pitch bookings, and local toilets.
1.06	<p>The operational manager relies on the support of the technical team to implement and manage the inspection of structures to ensure that they are functioning correctly and that repairs are carried out promptly and meet corporate targets and standards, whilst also ensuring accurate daily recording of data for performance indicators. This technical support is also required to review, plan, and prepare works programmes and method statements for the implementation of works to ensure that all activities comply with guidelines, policy, and legislation. The general inspection of assets is carried out by the eight area coordinators, who are responsible for the assets in their respective areas, and these returns are analysed by the technical support.</p> <p>This relatively small team are required to manage and control the Council’s structures assets and ensure that the asset information is current and updated, whilst developing and maintaining the asset database to provide a timely and accurate point of reference and ensure that bridge and retaining wall records are well maintained.</p>

1.07	<p>An internal audit review of the 'Inspection and Maintenance of Highway Structures and Bridges Part Two' was included in the approved Internal Audit Annual Plan for 2021/22. The report was issued in March 2023.</p> <p>The purpose of the audit was to assess whether adequate controls were in place, and whether all actions from the Service Action Plan and those agreed in the interim audit report have been implemented and embedded.</p> <p>The overall findings from the audit were that the controls in operation at the time provided some assurance, but key controls to mitigate the strategic risks were found to be not effective or applied consistently and several areas for further improvement were recommended.</p>
1.08	<p>An update was provided to the Governance and Audit Committee in July 2023, which provided details of the challenges and issues that the teams were facing, along with an update of progress to date.</p> <p>The agreed action plan is detailed in <b>Appendix 1</b>.</p>
1.09	<p>Since the update provided in July 2023, progress has been constrained by annual leave and the conflicting priorities faced by the portfolio to deliver on other major projects (such as 20mph). However, the audit system has been updated with progress to date and evidence has been provided to confirm the closure of actions, with work continuing to improve the record keeping on the dedicated software system AMX. The timescales for the audit action plan had been amended accordingly to reflect the available resources where necessary. Additionally, the highway network team has been experiencing resilience and capacity issues for the technical support for highway structures, due to the secondment of the technical officer who was supporting the operational manager to another temporary role within the portfolio. That technical officer has now returned to the service (with effect from 18<sup>th</sup> May 2023) and has continued to address the actions agreed in the audit since returning to the substantive post, whilst transitioning back into the role.</p>
1.10	<p>Work has continued with the software supplier to integrate a mobile solution that will allow inspection records to be inputted and updated on site, which will improve the timeliness and accuracy of records as well as reduce the admin burden back-office and avoid duplication and manual interventions. Flintshire IT Services have committed to resolving this by the end of September 2023. The reporting function within the software has been enhanced to create dashboards that identify risk and performance standards, which will begin to be reported to the senior management team on a regular basis after September 2023.</p>
1.11	<p>A review of historical documents, plans, and photographs has been undertaken to create electronic records that will improve asset data held and make the process of retrieving information much more efficient. The work to link this information to the asset register will follow and the timescales for completion will be subject to available resources.</p>

1.12	A process has been drafted and presented to the operational manager for reconciling both adopted and disposed assets to ensure that the asset register is kept up to date. The existing assets across the county have received principal inspections where appropriate and the general inspections have been allocated across all eight area coordinators. These inspections are being recorded in the asset register for consistent record keeping.										
1.13	Flintshire Bridge (our largest and most expensive structure) was inspected during the Spring, and the general inspection and strand testing has been completed, for which we are awaiting the results. Initial indications are that the structure is in good condition.										
1.14	<p>The overall condition of all our structures is recorded below:</p> <p>487 assets with an average Bridge Condition Index (BCI) from General Inspection of 91.89, with the highest being 100 and the lowest being 63</p> <p><u>Breakdown:</u></p> <p>336 - structures fall within the <b>Very Good</b> category</p> <p>120 - structures fall within the <b>Good</b> category</p> <p>30 - structures fall within the <b>Fair</b> category</p> <p>1 - structures fall within the <b>Poor</b> category</p> <p>0 - structures fall within the <b>Very Poor</b> category</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;"><b>Structure Condition Index Key</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #006400; color: white; padding: 2px;"><b>Very Good</b></td> <td style="padding: 2px;">&gt;=90 &amp; &lt;=100</td> </tr> <tr> <td style="background-color: #90EE90; padding: 2px;"><b>Good</b></td> <td style="padding: 2px;">&gt;=80 &amp; &lt;90</td> </tr> <tr> <td style="background-color: #FFFF00; padding: 2px;"><b>Fair</b></td> <td style="padding: 2px;">&gt;=65 &amp; &lt;80</td> </tr> <tr> <td style="background-color: #FFA500; padding: 2px;"><b>Poor</b></td> <td style="padding: 2px;">&gt;=40 &amp; &lt;65</td> </tr> <tr> <td style="background-color: #FF0000; color: white; padding: 2px;"><b>Very Poor</b></td> <td style="padding: 2px;">&gt;=0 &amp; &lt;40</td> </tr> </table> </div> <p>An annual work programme of capital investment is in place to address those structures with the lowest BCI and the critical elements that require attention.</p>	<b>Very Good</b>	>=90 & <=100	<b>Good</b>	>=80 & <90	<b>Fair</b>	>=65 & <80	<b>Poor</b>	>=40 & <65	<b>Very Poor</b>	>=0 & <40
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1.15	<p>It is planned that as part of the Highway Asset Management Plan (HAMP) review work that is included in the Forward Work Plan for Q4 2023/24 that Annual Status Reports (ASRs) will be presented for our major highway asset groups, including highways structures.</p> <p>The ASR will present a summary of the council's highway structures assets, which will complement the HAMP. It will provide information regarding the status of the structure in terms of condition, the outputs delivered, the standards achieved and an indication of customer satisfaction.</p>										

<b>2.00</b>	<b>RESOURCE IMPLICATIONS</b>
2.01	<p>Local area coordinators within the Streetscene &amp; Transportation portfolio deliver General Inspections of assets within current allocations, with the structures budget funding the external procurement of Principal Inspections by qualified engineers. Funding of the repair and maintenance of structures is provided through the annual capital allocation to the Highway Asset Management Plan (HAMP). The current level of resource allocated to highway structures will require review as part of the ASR.</p> <p>The service operates on a fixed budget and the cost of maintaining the highways structures detailed as Council owned in this report will be delivered through existing available resources.</p>

<b>3.00</b>	<b>IMPACT ASSESSMENT AND RISK MANAGEMENT</b>
3.01	The internal audit review has highlighted that there are new procedures in place to guide officers to work in a uniform and consistent manner. However, it emphasised that the improvements are in their infancy and controls have not been fully embedded.
3.02	The action plan and work undertaken to date to introduce new systems, processes and controls will ensure that progress continues to be monitored and reported on a monthly basis to the Senior Management Team.

<b>4.00</b>	<b>CONSULTATIONS REQUIRED / CARRIED OUT</b>
4.01	None required

<b>5.00</b>	<b>APPENDICES</b>
5.01	Highways Structures Action Plan

<b>6.00</b>	<b>LIST OF ACCESSIBLE BACKGROUND DOCUMENTS</b>
6.01	Highways Act 1980

<b>7.00</b>	<b>CONTACT OFFICER DETAILS</b>
7.01	<p><b>Contact Officer:</b> Barry Wilkinson  <b>Telephone:</b> 01352 704656  <b>E-mail:</b> <a href="mailto:barry.wilkinson@flintshire.gov.uk">barry.wilkinson@flintshire.gov.uk</a></p>

<b>8.00</b>	<b>GLOSSARY OF TERMS</b>
8.01	<p><b>HAMP</b> - A Highway Asset Management Plan (HAMP) is a strategic document developed by a local authority or highway authority to systematically manage, maintain, and improve the condition and performance of a network of roads and associated assets within their jurisdiction. The purpose of a HAMP is to optimise the use of available resources while ensuring that the road network meets defined performance and safety standards.</p> <p><b>BCI</b> - A Bridge Condition Index (BCI) is a numerical rating system used to assess the overall condition of a bridge structure. It provides a quantitative measure of the state of a bridge based on various visual, structural, and functional evaluations. The BCI is a valuable tool for prioritising maintenance, repair, and rehabilitation efforts within a bridge management system.</p>