

Highways and Transport Service Transformation Plan

To: Highways and Transport Committee

Meeting Date: 04 July 2023

From: Executive Director of Place and Sustainability

Electoral division(s): All

Key decision: No

Forward Plan ref: N/A

Outcome: This report provides an update to members on progress being made and the future actions to deliver improvements to the Highway Service. It provides a draft transformation plan which identifies the key actions that will be taken forward. The report also provides a response to the Motion of Full Council in May 2023 in relation to Highways Maintenance.

Recommendation:

- a) To note, review and endorse the approach outlined in this report to transform and improve the Highways Service and the Highways Improvement Action Plan at Appendix 1.
- b) To note the responses to the Motion to Full Council regarding Highway Maintenance as outlined as paragraph 1.12 in this report.

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Member contacts:
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1. Background

- 1.1 Highways Management and Maintenance is one of the key services provided by the County Council and impacts on every resident, business, and visitor in the County. The highway enables access to employment, education, leisure and to essential services such as health. The use of the highway for walking, cycling, wheeling and horse-riding can promote physical and mental wellbeing and contribute to the environment and carbon reduction agenda. It therefore has a significant contribution to make to the Council's strategic framework and ambitions.
- 1.2 Ensuring that the highway is effectively managed and maintained is a key priority for the Council and it is essential that we deliver a service which is customer focused and responsive to the needs of communities and residents, as well as protecting and developing the highway asset to provide functionality and safety for all users.
- 1.3 The principal highway asset is made up of a series of 'ways':
 - 4,500km Carriageways (Roads),
 - 2,950km Footways,
 - 548km Cycleways and routes,
 - 4,000km Public Rights of Way
- 1.4 The use of these 'ways' is supported by other assets including road markings, signs and barriers; streetlighting and signals, structures including bridges, retaining walls and embankments, and drainage assets. Ancillary assets such as benches and fences also form part of the highway asset. Green highway infrastructure including verges, grassed areas and trees provide space for wellbeing and habitat for nature (green corridors).
- 1.5 This broad range of assets is managed and maintained through maintenance activities funded by revenue and capital. Highways maintenance and management is delivered through a service provider, Milestone, who have a contract that runs up until July 2027.
- 1.6 Streetlighting services are delivered through a Private Finance Initiative (PFI) contract with Balfour Beatty Living Places, which has an end date June 2036. In addition, project work and consultancy advice is supported through a Joint Professional Services Framework which has been awarded to WSP and Atkins which has an end date of April 2024 (with two potential extensions of a year) and through the Eastern Highways Alliance Framework.
- 1.7 There have been several challenges in recent years which have impacted on the quality of the Cambridgeshire highways network including:
 - Impacts of the extreme weather conditions which have increased in frequency and severity and have led to a deterioration of highway surfaces and drainage systems.
 - On-going financial pressures at a local and national level for investment in reactive, and preventative maintenance.
 - Inflation in 22/23 reduced the extent of maintenance works the service was able to carry out within the agreed budget for that year. For example, price increases for the preventative surfacing works programmes increased by 30%.
 - Increasing traffic volumes, and vehicle weights across the network which contributes to the deterioration of road surfaces.

- Standing surface water and a reduced grips/ drainage works programme over several years has contributed to the deterioration of rural roads
- Increasing proportion of roads with surfaces seeing a natural deterioration of the materials used
- Approximately 36% of Cambridgeshire Roads are constructed on peat-based soils which are highly vulnerable to fluctuations in moisture content and temperature.

- 1.8 This combination of factors has led to an increase in highway defects and a deterioration in road surfaces. However, reactive pothole and defect repair resources have been doubled since December 2022 to address the significant rise in pothole defects across the network. The number of defect repair teams has been increased from 4 to 8. A proactive programme of defect repairs has been instigated and this will be supported further through a programme of patching later in the summer to address the increase in defects. This will provide a more permanent fix in areas where the road surface has deteriorated to a point where individual defect repairs do not provide an effective intervention. The highways service is using the latest survey and inspection techniques to target interventions to the worst sections of roads.
- 1.9 Furthermore, the development and delivery of the Safe and Dry programme will improve flood resilience through a targeted programme of drainage maintenance schemes, the majority of which have been delivered. In addition, an enhanced grip cutting programme is clearing and reinstating drainage channels through roadside verges to deliver the effective drainage of standing water from roads. This has so far seen the delivery of over 10,000 grips countywide. The highways service has worked with Milestone and the supply market to use an innovative water blasting technique for grip cutting which reduces damage to utilities, increases productivity and reduces the inconvenience to road users.
- 1.10 Another key issue is the fact that many of the County's roads are constructed on peat-based soils. This is further exaggerated in Cambridgeshire because of the significant agricultural economy. Many of our roads carry substantial volumes and weights of HGVs servicing this industry. This includes many rural routes on some of our most vulnerable peat-based roads. This places a need for rural roads to be maintained to higher standards than similar rural roads in other parts of the country. Roads constructed on peat-based soils are a significant issue in the county, as the seasonal movement of these soils, caused by repeated cycles of saturation followed by drying-out, causes increased and accelerated deterioration of the affected road surfaces.
- 1.11 A Peat Affected Roads Management plan is being developed to support safety of road users as these roads deteriorate. Initial assessment work has been undertaken and further investigation is on-going to establish the scale of the risk and the financial implications these roads present to communities, the economy, and the county council. The evidence that has been collected through this process is being used in discussions with the Department of Transport, identifying the need for additional resources at a regional level. Cambridgeshire County Council is leading a consortium of authorities in the pursuit of additional support and funding to address the issues affecting these roads.
- 1.12 A council motion was presented to Full Council in May 2023 recognised the pressures on the highway network, the agreed Council Motion stated:

- **Highways and Transport is informed that the full amount of the government’s pothole fund will be allocated to it for use as part of the highways’ maintenance budget**

Response:

The £3.617m additional allocation to be received from the Department for Transport (DfT) through the Cambridgeshire and Peterborough Combined Authority has been allocated to Highways and Transport and is being invested in increased reactive pothole maintenance, a proactive regime of find, record and fix to prevent defects forming and the implementation of a planned patching programme.

- **Chief Executive allocate sufficient resources and take a specific interest in the quality and quantum of highways maintenance.**

Response:

The Chief Executive, through the Executive Director of Place and Sustainability will ensure that sufficient resources will be allocated to address the quality and quantum of highway maintenance. This will include the establishment of a service transformation programme and Highways Transformation Programme Board as outlined within this report. Progress with this programme will be reviewed regularly by the Corporate Leadership Team.

- **Executive Director of Place and Sustainability delivers a draft action plan to members for improvements in dealing with highways maintenance for consideration by the Highways and Transport Committee in July**

Response:

This paper from outlines the draft action plan and proposed approach to improve and transform the highways service.

- 1.13 Whilst action has been taken to address the issues affecting the condition of highways in Cambridgeshire it is evident that further improvement is required. This paper provides an overview of the approach that being taken to deliver this improvement.

2. Main Issues

- 2.1 A service transformation programme is being initiated by the Executive Director of Place and Sustainability to oversee the required improvements to highways maintenance and management. This builds on improvements made to date through the Highway Improvement Plan but increases the focus on achieving the following four key aims.
- *Improving Customer Experience*- ensuring there are effective customer focused systems in place to provide timely and accurate information to members of the public. This will not only include effective mechanisms to deal with customer enquiries and complaints in a responsive way but also developing systems to proactively provide information and self-serve arrangements to reduce demand and increase customer confidence in the service. Furthermore, the programme will examine ways in which the Council can work differently with communities to increase the level of engagement and ownership of highways management in local areas.

- *Achieving Service Excellence* ensuring the service has an effective asset management strategy which provides an accurate and benchmarked assessment of the current condition of the highways, enables effective decision-making regarding maintenance and investment programmes and that works are delivered to an appropriate quality and standard.
- *Achieving Value for Money* - ensuring that resources are directed and used effectively. This will include the ensuring that current contract management and delivery arrangements are fit for purpose and that the council is securing the maximum value for the resources and funding allocated to the service
- *Developing the Culture and Workforce*– ensuring that the structure is fit for purpose, that our people are well led, engaged, motivated and skilled to be able to deliver the best job they can and that there is an effective outcome focused culture within our supply chain and delivery partners.

2.2 This report provides a high-level summary of the actions being undertaken to develop highway services to ensure the continued improvement focussed on these four key themes. A draft action plan is provided at Appendix 1.

2.3. *Improving Customer Experience*

The key projects that are being implemented to support this theme are:

- The procurement and implementation of an effective asset management system which will replace the current system that is no longer fit for purpose (previously reported to Highways and Transport Committee 13th September 2022, and Strategy and Resources 30th September 2022). This system will also provide clearer information to customers and enable them to access timely and accurate information regarding the condition of the highway, to report defects on the highways and raise service requests. The system will also provide accurate information to the customer on the action being taken in relation to reported defects, service requests and timescales for delivery. The preferred bidder will be selected in July 2023 and the procurement process will be complete by August 2023, with implementation start planned for September 2023. The system will have a phased introduction over the following 14 months, with an overall completion date of December 2024.
- Undertaking a review of complaints handling procedures and processes to ensure that complaints are well handled and that opportunities for improvement and lessons learnt are embedded in the service.
- Increasing the level of councillor engagement, briefing, and tracking of their enquiries. An internal tracker system has been implemented to gather evidence of demand and response times. This has been introduced incrementally since April 2023 and will inform the development of an effective Councillor support package, including the development of the Local Highway Officer function through the Highway restructure. In addition, regular service updates are provided to Councillors on a bi-monthly basis and a programme of all member briefings will be initiated.

- Developing a proactive communication and engagement plan. This will include enhanced engagement with partners e.g., parish councils, businesses, district councils.
- Developing of a shared project programme across Cambridgeshire County Council (CCC), Greater Cambridgeshire Partnership (GCP) and Cambridgeshire and Peterborough Combined Authority (CPCA), to ensure there is effective co-ordination of works to manage the impacts on the network thereby reducing traffic delays, diversions and impacts on public transport.

2.4. *Achieving Service Excellence*

The key projects that are being implemented to support this theme are:

- The replacement of the Asset Management System (as highlighted above) will also enable more efficient and effective management of maintenance programmes, works ordering, mobile working and improved customer information and reporting. The preferred bidder will be selected in July 2023 and the procurement process will be complete by August 2023, with implementation start planned for September 2023. The system will have a phased introduction over the following 14 months, with an overall completion date of December 2024.
- The procurement and implementation of new contract management system to support the delivery of services and commercial management of contracts (included within Highway Asset Management System Replacement reported to Highways and Transport Committee 13th September 2022, and Strategy and Resources 30th September 2022). The new system is in procurement (alongside Asset Management System) and will be implemented on the same timeframes.
- The revision and updating of the Highways Operational Standards to ensure highways are maintained and managed in line with modern use whilst delivering within available funding. The revision of the pothole intervention standards is planned to be trialled this year with a revised policy being presented for adoption in 2024.
- Implementation of innovative technology in data and information collection and analysis. In 2022/23 the Gaist high-definition video and analysis was adopted to replace older type survey methods. This system uses 360-degree camera technology, mounted on survey vehicles to collect high definition photographic and video data from the network. This offers significant opportunities to use the information collected for a wider range of purposes, in addition to condition surveys. These are being investigated and developed further.
- The development and adoption of maintenance hierarchy for active travel to guide and inform maintenance decisions, ensuring active travel is supported and enhanced through our maintenance activities. The work on this commenced in May 2023 with a planned adoption of hierarchy policy planned for April 2024.

- Development of a service decarbonisation strategy and associated action plan. Work on baselining the carbon footprint of the service is being carried out currently and will be followed by the development of a Decarbonisation Plan. Technical capacity to develop this plan is being commissioned through the Net Zero programme. The contract is due to be awarded in June with a planned completion due in November 2023.
- Investigation has been undertaken into Peat Affected Roads to qualify and quantify the scale of the risk presented for the Council. This includes the assessment and implementation of safety management plans to ensure safe use of the worst affected roads. This is planned to be completed by July 2023.

2.5. *Achieving Value for Money*

The key projects under this theme include:

- Developing a robust and resilient client team to manage the commercial arrangements of the services through development and recruitment of suitability skilled and experience people. This will enable enhanced contract management and provide commercial assurance regarding the delivery of projects and in the day-to-day management of maintenance works.
- Using good asset management information and practise to direct available funding to the most beneficial treatment programmes focusing on early life preventative maintenance. Asset management capacity and responsibilities have been developed through the Highway Maintenance re-structure which will now enable asset management planning to create a three year forward look which will be implemented for 2023/24 onwards.
- An improved regime of operational service performance and quality monitoring, initially focusing on the quality of pothole and defect works orders and the associated repair works.
- Assessing the value for money achieved through the current contract arrangements and reviewing all options to improve them. Ensuring there is active contract management and quality monitoring of works. Implementing tender processes to encourage competitive bids for capital projects and consultancy support.

2.6 *Creating the right workplace culture*

- The organisational structure of the service has been reviewed. The revised structure has been implemented to add capacity and build capability as an effective client and to create more capacity to better engage with communities and customers.
- There will be an ongoing programme of engagement with all staff to develop and embed values, behaviours and positive workplace culture across the service.
- Training and development programmes are underway to expand and improve our staff skills knowledge and understanding. These plans have been developed with the

support of the Learning and Development team. This includes the implementation of an Apprenticeship programme from September 2023, bringing in 8 Level 4 Civil Engineering Apprentices. The service is also supporting 4 Level 6 Civil Engineering Apprentices and is actively encouraging existing members of the teams to undertake apprenticeships.

- Implementation of Progression Schemes, working with Human Resources, three schemes have been implemented to date covering Project Management, Commercial and Design functions. This is delivering positive outcomes in both retention and recruitment in a highly competitive market, with positive feedback from existing and new staff on the significance of this approach in their career decisions.
- Wellbeing and Health and Safety is one of the Councils and the Highways and Transport service imperatives and is embedded throughout the service. Ensuring that the safety and wellbeing of our people, our customers and our service providers is our highest priority throughout all our services. The service has therefore already initiated a number of actions to focus on health and safety including the introduction of well-being, health and safety moments at all team meetings, assessing and ensuring the correct PPE is used, undertaking site inspections and ensuring contracts are being effectively managed from a health and safety perspective.

2.7 Governance of the Programme

- The programme will be governed by a Highways Transformation Board which will lead and oversee the transformation and improvement programme of the highways service. This will focus on demonstrating that the County Council delivers a high quality, customer centric highways service whilst achieving value for money for Cambridgeshire residents.
- The Executive Director of Place and Sustainability is the Sponsor and Chair of the Board, and the Service Director: Highways and Transport is the Senior Responsible Officer and Deputy Chair. The membership includes the Assistant Director: Transport Strategy and Network Management, Assistant Director: Highway Maintenance, Assistant Director: Project Delivery, the Operations Director Milestone Infrastructure, and wider corporate services including Customer Services, IT, Communications, Human Resources, Finance, Property and Procurement, together with staff representatives.
- The board will ensure that the highways service supports the delivery of the Council's Vision and Ambitions particularly in relation to active travel, net zero, health inequalities and supporting local communities to prosper and aligns with the emerging Local Transport and Connectivity Plan.
- It will also act to provide corporate assurance and confidence regarding the transformation of the highways service within the corporate portfolio of change and transformation projects. It will also ensure that the transformation of the service incorporates the key features of corporate change activity i.e., those relating to the introduction of the corporate landlord approach, achieving net zero, increased digitisation, automation including taking a corporate approach to initial customer

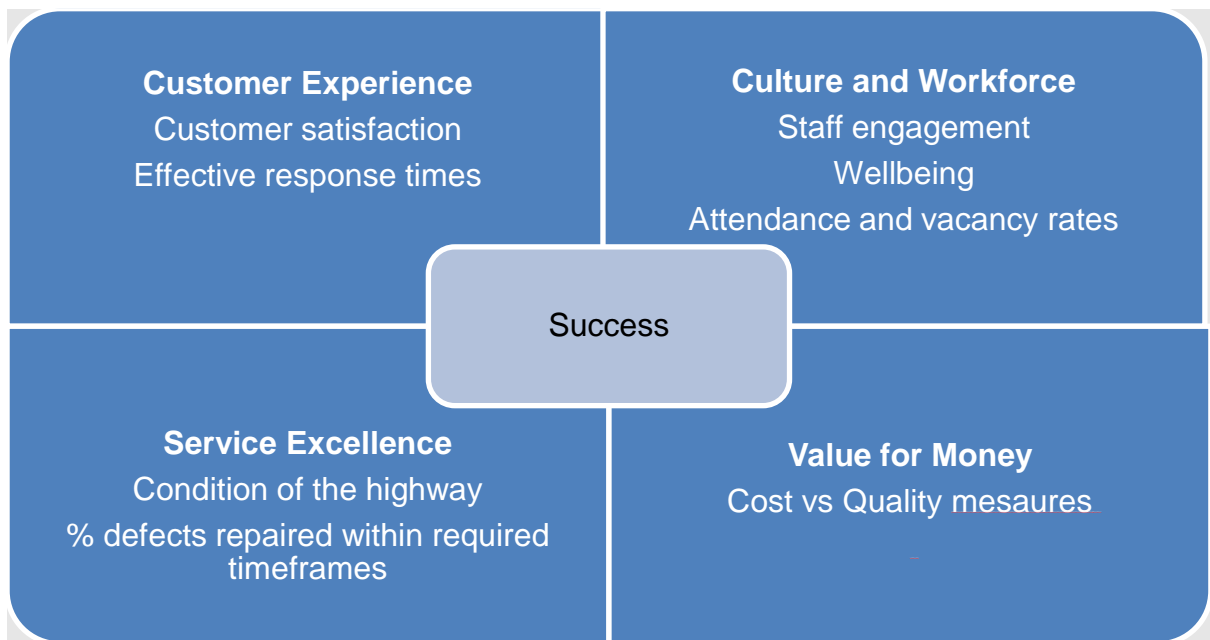
contact via digital channels. Furthermore, the board will support the business planning process in relation to highways.

2.8 Reporting to Members

The progress and outcomes of the transformation programme will be reported together with an update on performance of the service to the Highways and Transport Committee alongside the risk register on a quarterly basis.

2.9 Benefits of the Programme

The success and performance of the programme will be measured through the achievement of the following outcomes based on the four key aims:



The programme will include the establishment of baseline data and the development of performance targets under each of these themes to provide a mechanism for the effective management of progress and improved performance.

As the Action Plan is developed each project within the programme will have its specific outputs identified to enable performance management of delivery as each project progresses.

The benefits in service performance will include:

- An improved customer experience through better engagement and communication, supported by a fit for purpose online reporting tool and supporting Asset Management

System. This will be measured by improved customer satisfaction and reduced repeat demands as well as quicker responses to customer enquiries.

- Members will have better, more timely information and awareness of maintenance activities in their area.
- Demonstrating Best Value, increased value for money and effective financial management.
- Demonstrate quality of the service and associated maintenance works through reliable service performance management and quality monitoring.
- Delivery of Net Zero and Nature Recovery within the service will be seen through the setting of the service carbon reduction strategy and its action plan. Followed by measurement of reducing carbon through triple bottom line accounting.
- Culture and Workforce change will be seen in improved engagement scores, staff satisfaction, reduced Health and Safety incidents involving our staff and our sites; Apprentices developing careers within the service; less reliance on interims in key roles; reduced avoidable sickness through active wellbeing support

3.0 Alignment with ambitions

- 3.1 Net zero carbon emissions for Cambridgeshire by 2045, and our communities and natural environment are supported to adapt and thrive as the climate changes

Highways Management and Maintenance is one of the key services provided by the County Council that impacts on every resident, business, and visitor in the County. The highway enables access to employment, education, leisure and to essential services such as health. The use of the highway for walking, cycling, wheeling and horse-riding can promote physical and mental wellbeing and contribute to the environment and carbon reduction agenda. It therefore has a significant contribution to make to the Council's strategic framework and ambitions.

Section 2.4 Achieving Service Excellence - item 6) within the report makes reference to the development of a service decarbonisation strategy and associated action plan. This will ensure the service actively contributes to the achievement of this service ambition. Alongside this, activities included within the action plan will also address the resilience of the highway network to climate changes and enhance the natural environment.

Action is underway to address the maintenance of active travel routes through the development of the active travel maintenance hierarchy to enable a strong modal shift away from motorised vehicles and encourage active travel as the first choice by improving the quality of the journey.

The ongoing review of Highway Operations Standards to ensure highways are maintained and managed in line with modern use and changing requirements, together with a review of policies such as the Highway Vegetation Policy.

Focus on improving the customer experience to provide support to customers and provide a responsive service which takes account of their needs

3.2 Travel across the county is safer and more environmentally sustainable

See wording under 3.1 above

3.3 Health inequalities are reduced

See wording under 3.1 above.

3.4 People enjoy healthy, safe, and independent lives through timely support that is most suited to their needs

See wording under 3.1 above.

3.5 Helping people out of poverty and income inequality

See wording under 3.1 above.

3.6 Places and communities prosper because they have a resilient and inclusive economy, access to good quality public services and social justice is prioritised

See wording under 3.1 above.

3.7 Children and young people have opportunities to thrive

See wording under 3.1 above.

4.0 Significant Implications

4.1 Resource Implications

There are no significant implications within this category.

The report outlines service improvement actions that are underway and proposed which will have specific resource implications both in terms of finance and people. More details of these implications will be brought forward as the delivery of the action plan matures.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

See wording under 4.1, more details of procurement implications will be brought forward as necessary as the delivery of the action plan matures. The procurement process for the Highway Asset Management System replacement is nearing completion and is compliant with the County Council Contract Procedure rules. The procurement received approval through the Strategy and Resources Committee 30th September 2022 which resolved to:

- a) Approve going out to tender for the new Highways Asset Management system, the cost of which was going to exceed £500,000 over the lifetime of the contract.

b) Agree to delegate the decision to award these contract(s) to the Director of Highways and Transport and the Section 151 Officer in consultation with the Chair & Vice Chair of the Highways and Transport Committee.

- 4.3 Statutory, Legal and Risk Implications
See wording under 4.1 - more details of statutory, legal and risk implications will be brought forward as necessary as the delivery of the action plan matures
- 4.4 Equality and Diversity Implications
See wording under 4.1 - more details of equality and diversity implications will be brought forward as necessary as the delivery of the action plan matures
- 4.5 Engagement and Communications Implications
See wording under 4.1 - more details of Engagement and Communications implications will be brought forward as necessary as the delivery of the action plan matures
- 4.6 Localism and Local Member Involvement
See wording under 4.1 See wording under 4.1 - more details of Localism and opportunities and mechanisms for Local Member Involvement will be brought forward as necessary as the delivery of the action plan matures
- 4.7 Public Health Implications
See wording under 4.1 - more details of Public Health implications will be brought forward as necessary as the delivery of the action plan matures
- 4.8 Climate Change and Environment Implications on Priority Areas:
- 4.8.1 Implication 1: Energy efficient, low carbon buildings.
Neutral Status:
Explanation: currently neutral, but the development of the decarbonisation strategy and action plan may identify opportunities to achieve this outcome
- 4.8.2 Implication 2: Low carbon transport.
Positive Status:
Explanation: Enabling active travel through infrastructure development and maintenance hierarchy. Decarbonisation strategy and action plan will identify opportunities to achieve this outcome
- 4.8.3 Implication 3: Green spaces, peatland, afforestation, habitats and land management.
Positive Status:
Explanation: Development of green corridors and routine maintenance practice through the Highway Vegetation Management policies within the Highways Operational Standards will increase nature and biodiversity
- 4.8.4 Implication 4: Waste Management and Tackling Plastic Pollution.
Positive status:
Explanation: Highway waste recycling infrastructure developed within highways depot, in-situ recycling on the highway as standard practice and additional opportunities identified through the decarbonisation strategy process.

4.8.5 Implication 5: Water use, availability and management:

Positive Status:

Explanation: Highway drainage and flood risk management, development of practices such as grip cutting to increase productivity and reduce impact on the infrastructure.

4.8.6 Implication 6: Air Pollution.

neutral Status:

Explanation: Unknown at this point but will become more apparent as the action plan matures

4.8.7 Implication 7: Resilience of our services and infrastructure and supporting vulnerable people to cope with climate change.

Positive Status:

Explanation: Actions to manage and mitigate the climatic impact on roads such as peat affected roads included within the action plan will make the highway network more resilient. It is anticipated that additional opportunities will be identified through the Decarbonisation Strategy and action plan

Have the resource implications been cleared by Finance? Yes

Name of Financial Officer: David Parcell

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the Head of Procurement and Commercial? Yes or No

Name of Officer:

Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or Pathfinder Legal? Yes

Name of Legal Officer: Emma Duncan

Have the equality and diversity implications been cleared by your EqIA Super User?

Yes

Name of Officer: Jon Munslow

Have any engagement and communication implications been cleared by Communications?

Yes

Name of Officer: Christine Birchall

Have any localism and Local Member involvement issues been cleared by your Service Contact? Yes

Name of Officer: Jon Munslow

Have any Public Health implications been cleared by Public Health?

Yes or No

Name of Officer: Not applicable.

If a Key decision, have any Climate Change and Environment implications been cleared by the Climate Change Officer?

n/a

5. Source documents guidance

5.1 Source documents

Highways and Transport Committee 13th September 2022 (item 5) Highways Asset Management System Replacement. [Document.ashx \(cmis.uk.com\)](#)

Strategy and Resources Committee 30th September 2022 (item 5) Highways Asset Management System Replacement.

[Council and committee meetings - Cambridgeshire County Council > Meetings \(cmis.uk.com\)](#)

5.2 Location

Weblinks as above