

HIGHWAY INFRASTRUCTURE ASSET MANAGEMENT PLAN

1. SUMMARY

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The Council's Highway Infrastructure Asset Management Plan (HIAMP) presents an overview of Hull's highway assets and the approach for managing, maintaining and improving the highway infrastructure assets.

The highway assets are diverse, and include over 745 km (463 miles) of roads, 780 km of footways, 35,000 street lights, 2,500 illuminated signs, more than 39 km (24 miles) of Public Rights of Way, and nearly 400 highway and non-highway structures. It is critical that these assets are safe and usable for movement, and transport of goods and services within and through the city.

The most recent data available from 2014/15 using the Whole Government Account method values the highway infrastructure assets at £1,429m (£4,841m including land); the Gross Replacement Cost to enable the build of the asset at today's prices. The Depreciated Replacement Cost, to replace the asset to a modern equivalent condition is £1,249 (£4,662m including land). The most valuable elements are carriageways at around 67% and bridges and structures at 20% of the total.

Many of the highway assets have a long history, are specially engineered to address low level ground and soft soil conditions found in Hull and were built to accommodate far lower levels of vehicles, especially lorries than today. Nowadays, these serve a population of 257,710 in a compact area of 71.45 sq km (27.59 sq miles) and suffer from stresses of traffic and weather when compared to newer assets designed and built for such purposes.

The City is continuing to face growth in travel demand along with an expectation for high standards of maintenance. The condition of the highway infrastructure continues to be a key issue for users and a reputational one for the Council. Poor and declining conditions on roads and paths are occurring as the materials decay and become damaged over time and let in water to the lower layers, eventually resulting in defects and failures seen as cracking, potholes or splitting of concrete sections.

The Council advocates an asset management approach to help deliver the best long term outcomes for the City and manages the highway assets through a Highway Asset Management group in Streetscene Services. This group comprises 80 technical, professional and operational staff engaged in overseeing the carriageway and footways, bridges and structures and street lighting, development and design of highway and traffic schemes, and operations for minor highway repairs and moving bridges.

The Council has a finite budget to spend on repairs and renewal of assets. It is particularly an issue for the roads in the city used by buses and those roads and footways serving residential areas. Based on the 2020 condition surveys less than half the sum of £6.70m needed annually is available to prevent the entire road network declining. The comparable figure for the total highway infrastructure assets is in the region of £16.2m. The resultant shortfall means there is a backlog value of £62m (£180m for the total highway infrastructure assets) which is increasing year on year and making it impossible to eliminate all defects and results in prioritised treatment programmes based on inspection, usage and other considerations to meet the strategic objectives of:

- Delivering and maintaining an accessible and safe transport network sustainably
- Keeping Hull moving
- Supporting Hull's City Plan and future prosperity whilst reducing energy costs and the emissions of greenhouse gases making Hull a more desirable place to live, work and play
- Meeting customer expectation.

The Council uses three maintenance approaches:

- Planned to replace or enhance
- Preventive to arrest deterioration and prolong the life cycle.
- Reactive to maintain public safety.

The Council targets resources to deliver the “right treatment, at the right time, in the right place” for a given budget allocation and is increasingly focusing on intervening at the most appropriate point in the lifecycle of the highway assets with using different treatments and techniques to increase the life of an asset subject to cost.

For the carriageway and footway assets, user preference supported by the condition profiles give a clear direction and identifies that a greater proportion of the total available budget is directed towards carriageway and footways. Both these assets are in the greatest need of attention with the desired outcome to improve the overall condition and arrest the progressive decline.

This direction has led to investment in planned maintenance on the ‘A’ road network followed by the remaining classified road network, so that the classified ‘A’ road network requiring maintenance stays below the national average road condition index (RCI) target standing at 3% in 2019 and the classified ‘B’ and ‘C’ road network national average of 6%. After which the unclassified distributor roads are considered followed by the residential roads, with an allocation of about 20% of the budget.

Hull is doing well. On classified roads, the 2019/20 RCI score for ‘A’ roads was 3% compared to 3% nationally but in 2020/21 Hull figure shot down to 1%. For the ‘B’ and ‘C’ classified road network the score is under 2% against almost 6% nationally which puts the Council in the top 4% of the country.

For the unclassified roads, 7% are in need of repair compared to the national average of almost 16%, placing Hull in the top 12% of the country. There is a national trend for unclassified road networks to deteriorate. After the unclassified road were split into two categories the local distributor roads and bus routes (U1) and the residential unclassified roads (U2) the LA was able to target new polymer modified materials at the U1 road network and the micro surfacing programme at the U2 network.

As a result even though the overall budget still represents only about 60% of the figure condition data states is required the annual and accumulative depreciation figures remains constant at 6 million per year and 60 million total respectively. For footways, less than 1% are in very poor condition even though larger proportions require maintenance at 41% of well used and 50% of the less well used footways.

Under the current strategy and funding arrangements the Council's footways are likely to deteriorate such that 37% will be in very poor condition by 2034. It is hoped by introducing greater use of both recycling and plane and resurfacing programmes allowing funding to be spread further the decline suggested will be prevented.

The Council uses safety and targeted approach to bridges and structures. Most are considered to be in a good and fair condition as measured by the average and critical percentage Bridge Condition Indices at 82% and 65% respectively. The total annual revenue funding available to cover reactive maintenance of highway structures, waterways, statues and monuments and dangerous structures is £1,484,149 (dangerous structures funding in connection with public protection is potentially unlimited). The capital allocation for bridge assessment and strengthening is £1,420,000 plus other specific funding following awards; an approach that is expected to continue. However, there are several unique structures which may require extra attention, comprising 11 moving bridges, 26 nationally listed bridges and 90 nationally and locally listed statues and monuments.

For street lighting and other illuminated assets, the existing capital funding for renewing street lighting stock has remained at £0.9M since 2015/16 however, last year saw an additional £100K put towards renewing lighting assets and this financial year it will be supplemented by a £1M increase aimed primarily at replacing lighting assets of a very poor condition. The conversion of over 97% of The Councils street lighting to LED technology during 2018 to 2020 has seen a marked reduction in reactive maintenance faults thus enabling a further £200K to be targeted per annum at renewing assets. Although the uplift in funds directed towards eliminating assets of a very poor condition during the last year and this is welcomed it should be noted that the annual capital budget of £0.9m is not sustainable and equates to 110 year replacement cycle leading to a deterioration of asset. Under the current strategy and funding arrangements, between now and 2034, the percentage of street lights in very poor condition will increase from 20% to 65%. To eradicate the backlog of columns in a very poor condition a 10 year programme with an annual injection of funds amounting to £2.5m per annum is required. The stock could then be maintained in a steady overall state by investing £1.8m per annum.

Funding for maintaining road marking assets has remained at £108k since 2016/17. Combined with renewal through carriageway surfacing schemes and an average lifecycle of 5 years this is sufficient to maintain the condition of the asset to a good standard.

The Council is to use proactive communications to ensure that our residents are increasingly better informed about the services the Council provides on their behalf. The Council's Highways Service Communication Strategy describes the Service's communication objectives; lists the Council's stakeholders and key audience groups along with our key messages and communication channels. There is significant room for improvement in the Council's performance with respect to the 45 public satisfaction indicators.

Out of the 16 overall NHT Key Benchmarking Indicators for the Highway Services: 7 indicators are only meeting minimum standards 10 are reported as fair 1 is reported as good and none are reported as excellent. Of the remaining 29 public satisfaction indicators the Council is meeting the minimum standard in 10, Fair in 15, good in 3 and excellent in 1.

Hull's satisfaction scores in the 2020 NHT survey range from a high of 76% for ease of access onto public transport to 30% for speed of repairs to roads, with the majority of results over 50%. 23 of the indicators either improved or matched last year's results and 43 reduced.

The largest single improvement was for the professionalism of staff dealing with enquires which was up 10% while the largest reduction in satisfaction was relating to traffic congestion at -9%. Comparing Hull's results with other authorities 72 indicators were above or level while 64 were below average.