Trafford Council

Highway Infrastructure Asset Management Plan

2022- 2027

May 2023

ONE TRAFFORD Excellence Investment Efficiency

TRAFFORD COUNCIL working with amey

Approvals Sheet

We the undersigned approve of the attached HIAMP and our responsibilities within:

Title	Signature	Date
Leader of the Council, Trafford Council		2023
Executive Member for Highways, Environmental and Traded Services, Trafford Council		2023
Chief Finance Officer, Trafford Council		2023
Corporate Director, Place, Trafford Council		2023
Highway, Transportation and Greenspaces Head of Services, One Trafford Partnership, Trafford Council		2023
Highways Manager, One Trafford Partnership, Trafford Council		2023
Principal Engineering Manager, One Trafford Partnership, Amey		2023

Contents

Foreword

I am pleased to endorse this latest version of the Highways Infrastructure Management Plan (HIAMP) for Trafford Council. Our highway network is an integral part of the way in which we go about our daily lives. It contributes to Council objectives by enabling safe and reliable journeys throughout the borough. The highway network helps enable social wellbeing, economic prosperity and provides vital conduits for emergency services, connecting communities for leisure and to access services. It can also add to the green landscape in the urban environment.

The infrastructure assets that form the fabric of our highway network, such as the bridges, street lighting, signage, highway drainage and the roads themselves, are the Council's most valuable asset, valued at over £1.86BN. They need to be well managed and well maintained to keep them in continuous, serviceable condition.

Since the introduction of the first HIAMP in 2017, we have witnessed increasingly challenging circumstances including growth in traffic volumes, extreme weather events, uncertainty around future funding to meet the deterioration of the assets and exceptional impacts from coronavirus.

Using a local asset management approach, based on national guidance, enables us to meet these challenges and we have made good progress during the first period of the HIAMP. A major investment in our street lighting, to convert lanterns to LED and to introduce a programme of column replacement, has ensured a much lower carbon footprint, a reduction in energy usage and guarantees a high-quality lighting provision for future years. Similar long-term, planned investments in our roads and bridges has helped us to keep pace with the rate of deterioration of the strategic highway network.

Changes in the work way we work, following the introduction of the HIAMP, has enabled us to provide a better understanding of our highway assets, their current condition, and likely rate of deterioration. In this respect, the Council recognises the need to continue to collect and maintain meaningful asset and condition data that will inform objective decision making in support of policy and investment, to ensure that best value is being achieved.

This latest version of the HIAMP confirms that we recognise there is still work to do. We must continue the good work to improve our knowledge of all the different asset groups, to refine our existing plans for the major asset groups and develop similar plans for some of the lower value assets. We must look to the latest maintenance technologies to obtain the best value solutions over the long-term, and to meet the challenge to reduce our carbon footprint as a result of our maintenance activities.

Councillor Stephen Adshead,

Executive Member for Highways, Environmental and Traded Services

Executive Summary

Trafford Council has a firm commitment to the principles of an asset management driven approach to the way we maintain our highway network. This approach is set out for service users and those involved in delivering the services in this Highways Infrastructure Asset Management Plan (HIAMP).

The first Trafford HIAMP was intended to be a 10-year plan covering the period 2017 to 2027. This latest HIAMP is provided as an update to this plan covering a 5-year period from 2022 to 2027. This update builds on the work borne out of the first plan, provides information on progress of the plan for the various asset groups, but also takes account of the increasingly changing environment since the initial plan was published.

Since the introduction of the initial HIAMP we have continued to review the approach to the highway asset management framework with reference to the Code of Practice '*Well-managed Highway Infrastructure*' (October 2016) and the UK Roads Liaison Group (UKRLG) Highways Maintenance Efficiency Programme's (HMEP) '*Highway Infrastructure Asset Management*' guidance.

The HIAMP details the comprehensive framework for the way in which we deliver our highway maintenance services to meet the relevant strategic outcomes of the Council. The HIAMP sets out the way in which we aim to optimise the available resources to meet the required service levels for each asset group. It seeks to manage our highway assets over the long term and highlights the importance of consistency of funding and approach over that longer period, to enable us to deliver a more efficient service with better asset condition outcomes.

The document is formed of three constituent parts, policy, strategy, and plan. This allows a clear line of sight from local and national policies that shape the future direction of the Council, via the strategies we will employ to meet these polices and the outcomes for specific assets through their corresponding performance data.

Policy – The HIAMP sets out Trafford's Highways Asset Management Policy and the link to the Council Plan, other regional and national policies, and the legislative framework.

Strategy – The main body of the HIAMP establishes how we will undertake management of the highway assets in line with the policies. It describes how we manage our assets and make decisions based on risk, the importance of lifecycle planning to maximise the long-term value for money, how we will respond to a changing climate, how we engage with stakeholders and how we establish levels of service and report on progress.

Plan – The final part of the HIAMP contains individual asset management plans that set out the function of each asset group, the current condition, historical investment, future investment scenarios and the likely effect of these on the condition of the assets.

Introduction

Trafford Council is the local authority of the Metropolitan Borough of Trafford, one of ten Councils forming the Greater Manchester Combined Authority (GMCA). The Council is represented by 63 Councillors in 21 Wards across the Borough. Ward and ward boundary changes were made during 2022, although there were no changes to the number of wards or Councillors.

Trafford has a population of over 235,000 and covers an area of 106km2. The Borough contains a major industrial area at Trafford Park which provides employment for approximately 40,000 people, the Trafford Centre retail and leisure attraction and two major international sporting venues at Old Trafford and the Northwest biggest National Trust attraction in Dunham Massey. Trafford borders with four other local authorities; Salford to the North, Warrington to the West, Cheshire East to the South and Manchester to the East.

Trafford Council is the Highway Authority responsible for the maintenance of 829.9 km of roads and associated infrastructure within the borough. We work closely with National Highways who are responsible for the motorway and trunk road network and Transport for Greater Manchester (TfGM) who support Trafford and the Greater Manchester region, in its duties and the network management duty to manage all activities on the highway network for the safe and efficient movement of traffic. TfGM also maintain and operate the traffic signals and associated control systems on our behalf.

Trafford's highways form a vital asset for the borough. They allow for safe and reliable journeys, connecting communities for work and leisure. They contribute to the economic prosperity and overall social wellbeing of the borough and are vital conduits for business and essential services.

The highway infrastructure assets comprise not only carriageways and footways, but also include cycleways, structures, street lighting, barriers, fences, street furniture, road signs & markings, grass verges and highway drainage.

We have calculated the total asset value in accordance with the requirements of the whole Government accounts to be a gross replacement cost of £1.86 billion* making the highway network the largest value asset that the Council is responsible for.

Like most infrastructure, highway assets suffer continual deterioration through the actions of traffic, extremes of weather and degradation of materials. Regular maintenance is essential to keep these assets in a safe and serviceable condition. Increases in construction costs have placed even greater pressure on the limited financial resources that are available for this maintenance work.

Adoption of current highway asset management principles allows the maximum use of the available financial investment, to deliver the greatest return on the condition of the assets to meet the needs of current and future road users.

Asset management has been widely accepted by central and local government as a way of using knowledge and forward planning to manage the highway assets. It has been 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.'

This updated Highway Infrastructure Asset Management Plan (HIAMP) enables delivery of the most efficient approach to management of the highway infrastructure assets through longer term planning.

Using detailed knowledge of the condition of the assets and their likely deterioration, enables better-informed decisions around service levels, priorities, risks, and our future approach, so that the available

investment is allocated appropriately. It also supports the case for future investment and better communication with stakeholders.

We must continue to be flexible in our planning, to be able to adapt to new and emerging challenges, in particular the effects of climate change. Trafford Council declared a climate emergency in 2018 and developed a carbon neutral action plan. This latest version of the HIAMP seeks to respond to this challenge to reduce the carbon footprint of our maintenance activities, mitigate the impact of climate change on our highway assets and protect and enhance the biodiversity of the highway infrastructure asset.

* value under review as new data is presently being assessed from 2022 data returns

Summary of Highway Assets

Asset	Quantity	Estimated Value (The cost of a like for like replacement)
Roads	A Roads – 77.5km B Roads – 53.4km C Roads – 42.9km Unclassified Roads – 656.1km TOTAL – 829.9km	£1,042,240,000
Footways & **Cycle Tracks**	1243.1 km Footway 12.95 km Cycle-track	£268,099,182
Structures	Bridges – 62 Footbridges - 39 Culverts – 51 Subways -10 Other structures – 16	£379,986,972
Street Lighting	Lighting Columns – 25,130 Illuminated bollards – 680 Illuminated signs – 2,323 Feeder Pillar - 80	£70,532,500
Fences and Barriers	Vehicle Restraint Barriers – 50,000m Safety fence – 16,402m Pedestrian barriers – 13,947m	£20,470,000 £2,050,250 £3,486,750
Drainage	Road gullies – 57,503 units (*Limited separate data currently available for drainage pipe and surface linear network currently available)	£ 69,003,600 *.
Soft Landscape	Verges – 21.20km Trees – 20,191	Not currently included in WGA Valuation estimate
Signs and Road Markings	Non-illuminated signs – 11,910	£ 4,168,50 (conservative est.)
	Total	**£1,860,037,454**

Purpose of the HIAMP

This HIAMP is based on the asset management principles set out in the Highway Infrastructure Asset Management Guidance (HIAMG) published by the UK Roads Liaison Group* in 2013. This guidance and the Highways Maintenance Efficiency Programme (HMEP) were both commissioned by the Department for Transport (DfT) to provide a framework for local authorities to adopt an asset management approach for the effective maintenance of their highway network assets.

The framework provided by this HIAMP takes into consideration the following factors:

- A strategic approach over the long term
- A systematic, holistic approach to all highway assets
- Meeting stakeholders' needs
- Optimal allocation of resources
- Managing expenditure over the asset lifecycle
- Meeting service levels in the most efficient way
- Managing risk
- Best value operational delivery

The UK Road Liaison Group (UKRLG) guidance provides 14 recommendations, as a minimum requirement, for authorities to adopt in order to achieve the appropriate benefits from an asset management approach for their highway network:

1. **Asset Management Framework**- An Asset Management Framework should be developed and endorsed by senior decision makers. All activities outlined in the Framework should be documented.
2. **Communications** - Relevant information associated with asset management should be actively communicated through engagement with relevant stakeholders in setting requirements, making decisions and reporting performance.
3. **Asset Management Policy and Strategy** - An asset management policy and a strategy should be developed and published. These should align with the corporate vision and demonstrate the contribution asset management makes towards achieving this vision.
4. **Performance Management Framework** - A performance management framework should be developed that is clear and accessible to stakeholders as appropriate and supports the asset management strategy.
5. **Asset Data Management** - The quality, currency, appropriateness, and completeness of all data supporting asset management should be regularly reviewed. An asset register should be maintained that stores, manages, and reports all relevant asset data.
6. **Lifecycle Plans** - Lifecycle planning principles should be used to review the level of funding, support investment decisions and substantiate the need for appropriate and sustainable long-term investment.
7. **Works Programme** - A prioritised forward works programme for a rolling period of three to five years should be developed and updated regularly.
8. **Leadership and Commitment** - Senior decision makers should demonstrate leadership and commitment to enable the implementation of asset management.
9. **Making the Case for Asset Management** - The case for implementing the Asset Management Framework should be made by clearly explaining the funding required and the wider benefits to be achieved.
10. **Competencies and Training** - The appropriate competency required for asset management should be identified, and training should be provided where necessary.

11. **Risk management** - The management of current and future risks associated with assets should be embedded within the approach to asset management. Strategic, tactical, and operational risks should be included as should appropriate mitigation measures.
12. **Asset Management Systems** - Asset management systems should be sustainable and able to support the information required to enable asset management. Systems should be accessible to relevant staff and, where appropriate, support the provision of information for stakeholders.
13. **Performance Monitoring** - The performance of the Asset Management Framework should be monitored and reported. It should be reviewed regularly by senior decision makers and when appropriate, improvement actions should be taken.
14. **Benchmarking** - Local and national benchmarking should be used to compare performance of the Asset Management Framework and to share information that supports continuous improvement.

This latest version of the HIAMP maintains the links to these recommendations, to set out the way we work to continuously improve our performance in managing the highway assets to meet our corporate objectives and stakeholder needs.

*UKRLG is now known as the UK Roads Leadership Group

Scope of the HIAMP

Background

Trafford Council is the Highway Authority responsible for the highway network in Trafford, including the Key Route Network (KRN). Following devolution, Transport for Greater Manchester (TfGM) have the strategic management responsibilities for the KRN[1]. TfGM also manages the design and maintenance functions, for traffic signals and the associated urban traffic control systems on the network, together with the urban traffic control centre, on behalf of all of the Greater Manchester authorities.

Trafford Council has been applying the principles of asset management for some time; since 2001/02, which is evidenced within the 2007 Transport Asset Management Plan (TAMP). The TAMP was the forerunner to the HIAMP. It followed national guidance and good practice available at that time.

The asset management approach documented at that time in the 2007 TAMP, previously highlighted the known size and value of the key Trafford highway related assets to elected members, other Council officers and residents. It determined the cost per year to stop / stagnate further deterioration of the asset known as the **'steady state'** cost, and the cost to improve the network over and above the steady state cost. It contained an improvement action plan to support continuous improvement in the management of Trafford's highways asset.

In 2017 Trafford reviewed the latest national guidance and identified a required change in approach to asset management where expenditure should be targeted based on available budget, asset management principles, sound data and engineering analysis; resulting in the first version of the Highway Infrastructure Asset Management Plan (HIAMP). Without an increase in annual funding on the highway network to the 'steady state' cost, currently in excess of £10.6m per year (under review presently as new data is available from 2022 surveys), the overall network condition will continue to deteriorate. The continued development of the HIAMP will however better target the limited resources available to maximum effect, build in resilience for the future network condition and help future investment decisions.

The HIAMP follows the principle of an asset management **Policy, Strategy** & **Plan**, whereby there is a clear line of sight from the local and national policies that shape the future direction of Trafford Council,

[1] Transport policies that affect the ten districts of Greater Manchester are set by the new Greater Manchester Combined Authority and its Transport for Greater Manchester Committee. TfGM is the delivery arm for the elected body, responsible for investing in improving transport services and facilities.

via the strategies we will employ to meet these polices and what this means for specific assets and their corresponding performance data.

Policy – The integration of Trafford's corporate objectives with other local policies such as Greater Manchester 2040 Transport Strategy, plus national legislation and policies such as The Highways Act 1980, The Traffic Management Act 2004, and Code of Practice documents such as Well-Managed Highway Infrastructure.

Strategy – Sections within the HIAMP demonstrate the steps being taken to meet the 14 recommendations in the Highway Infrastructure Asset Management Guidance Document.

Plan – Asset Management Plans for specific assets namely:

- Carriageways,
- Footways and Cycleways,
- Structures,
- Highway Lighting,
- Drainage,
- Road Signs and Markings,
- Fences & Barriers
- Soft Landscape.

These sections show in greater detail how we are managing these assets within the asset management framework to make best use of the resources available to provide a safe and efficient working highway network for those who travel within or through Trafford.

Legal Context

The delivery of highway maintenance is largely based on statutory powers and duties contained in legislation and precedents of case law. We have a general duty of care to keep public highways safe and available for the passage of the travelling public.

The fundamental duties and powers are:

- The explicit duty to maintain the highway and its assets
- Powers to improve, ease movement and protect highway users
- Duty to co-ordinate activities undertaken on the highway

Our statutory duties are outlined in several pieces of legislation including:

- Highways Act 1980
- Traffic Management Act 2004
- New Roads & Street Works Act 1991
- Road Traffic Reduction Act 1997
- Transport Act 2000
- Road Traffic Regulation Act 1984
- Environmental Protection Act 1990
- Weeds Act 1959
- Health and Safety at Work Act 1974
- Local Government Act 2003
- Construction (Design & Management) Regulations 2015
- Equality Act 2010

- Traffic Signs Regulations & General Directions 2016
- Railways and Transport Safety Act 2003
- Local Authorities (Transport Charges) Regulations1998
- Countryside and Rights of Way Act 2000
- The Clean Neighbourhoods and Environment Act 2005
- Flood and Water Management Act 2010
- Management of Health and Safety at Work Regulations 1999
- Town and Country Planning Act 1990

The most strategically significant legislation is summarised:

The Highways Act 1980 places duties upon and bestows powers to Trafford as the local Highway Authority. Chief among these is our duty to maintain the highway in a safe and serviceable condition.

The Traffic Management Act 2004 places a network management duty to manage all activities on the highway network for the safe and efficient movement of traffic.

The New Roads and Street Works Act 1991 imposes duties upon to monitor, inspect and co-ordinate all works and events within the highway.

Policy Context

National Transport Policy sets targets for local authority achievement. The Council will continue to keep itself informed of, and respond to, updates via direct communication with the Department for Transport.

We are also driven by policies in **The Greater Manchester 2040 Transport Strategy**, the key transport policy document for the conurbation prepared jointly by all 10 Greater Manchester Authorities and Transport for Greater Manchester. The strategy sets out the collective long-term commitment to invest to save in the maintenance of highway network with an objective to reduce the total lifespan cost of the highway assets.

The Vision for Trafford is:

Trafford – where all our residents, business and communities prosper.

The **Corporate Strategy** for all services can be found within Trafford's Corporate Strategy on the website - http://www.trafford.gov.uk/

Trafford Council recognises that transport systems play a large part in facilitating a high quality of life by meeting the needs of the individual whilst remaining responsive to the changing needs of business.

Codes of Practice

Well-managed Highway Infrastructure (WMHI) published in October 2016. This document is the first edition and replaces the previous codes; Well-maintained Highways, Management of Highway Structures and Well-lit Highways. The new Code moves away from suggesting specific service levels, to promote the adoption of an integrated asset management approach to highway infrastructure based on the establishment of local levels of service through risk-based assessment.

By adopting the recommendations in the Code (together with the UKRLG Guidance) we have established a framework that can be used as an effective tool when managing the highway network.
Adoption of the framework in this HIAMP should enable the delivery of a more efficient and planned highway service, resulting in assets that are in better condition than otherwise would have been the case.

Finance and Investment

Funding for the maintenance of highway assets comes from a combination of revenue and capital sources. Capital funding may be used to add to the highway asset or increase its remaining life through activities such as resurfacing of carriageways. Revenue funding is used for the day-to-day maintenance activities such as gully emptying or pothole repairs.

Capital funding comes from three main sources:

- Local Transport Plan (LTP) Capital Grant
- DfT Grants such as the Pothole Fund
- Trafford Capital Investment

Local Transport Plan Capital Grant

Annual funding is made available for local authorities for maintenance of highway infrastructure through a formula allocation topped up with an incentive fund element. The formula allocation is based on the relevant authority's road length and condition data. This funding is allocated to Greater Manchester Combined Authority (GMCA) and allocated to Trafford as part of the City Region Sustainable Transport Settlement (CRSTS) allocation of funding that they receive as a City Region.

The Incentive Fund element was introduced, by the Department for Transport, to promote the adoption of good asset management practice across all local authorities to ensure value for money.
A local highway authority is categorised based upon where they are on the "efficiency curve":

Band 1: Early-stage authority - Has a basic understanding of key areas and is in the process of taking it forward.

Band 2: Mid stage authority - Can demonstrate that outputs have been produced that support the implementation of key areas that will lead towards improvement.

Band 3: Final stage authority - Can demonstrate that outcomes have been achieved in key areas as part of a continuous improvement process.

A local authority's category is based on the annual responses to a self-assessment exercise on efficiency. The self-assessment questionnaire has 22 questions in total, divided into five categories:

- Asset Management
- Resilience
- Customer
- Benchmarking & Efficiency
- Operational Delivery

Further questions have also been added as a data gathering exercise for DfT to assess local authorities' response to the challenges of climate change and biodiversity, over the past two years.

A local authority's Band will be based on its score in this self-assessment questionnaire:

- **Band 1**: Does not reach Level 2 or Level 3 in at least 15 of the 22 questions.
- **Band 2**: Must reach Level 2 or Level 3 in at least 15 of the 22 questions.

- **Band 3**: Must reach Level 3 in at least 18 of the 22 questions.

Only authorities who achieve Band 3 will be awarded 100% of the available funding. Band 3 authorities must be able to demonstrate the steps they are taking and the strategies they employ in their commitment to the adoption of asset management principles in all highway maintenance activities.

Trafford is rated as a Band 3 authority; however, we recognise that in order to maintain this status, we need to be able to demonstrate that the use of good practice is being continually monitored and developed. This revised HIAMP is the central document that is used to achieve this and forms an important part of the Incentive Fund evidence.

Implementing Asset Management

Good asset management is essential in enabling us to effectively deliver highway maintenance activities to achieve our corporate objectives. Asset management principles enable informed decisions to be made about investment and maintenance funding. Resources can then be targeted at where they are most effective and enable the identification and management of risk associated with our statutory duty to manage and maintain our highways.

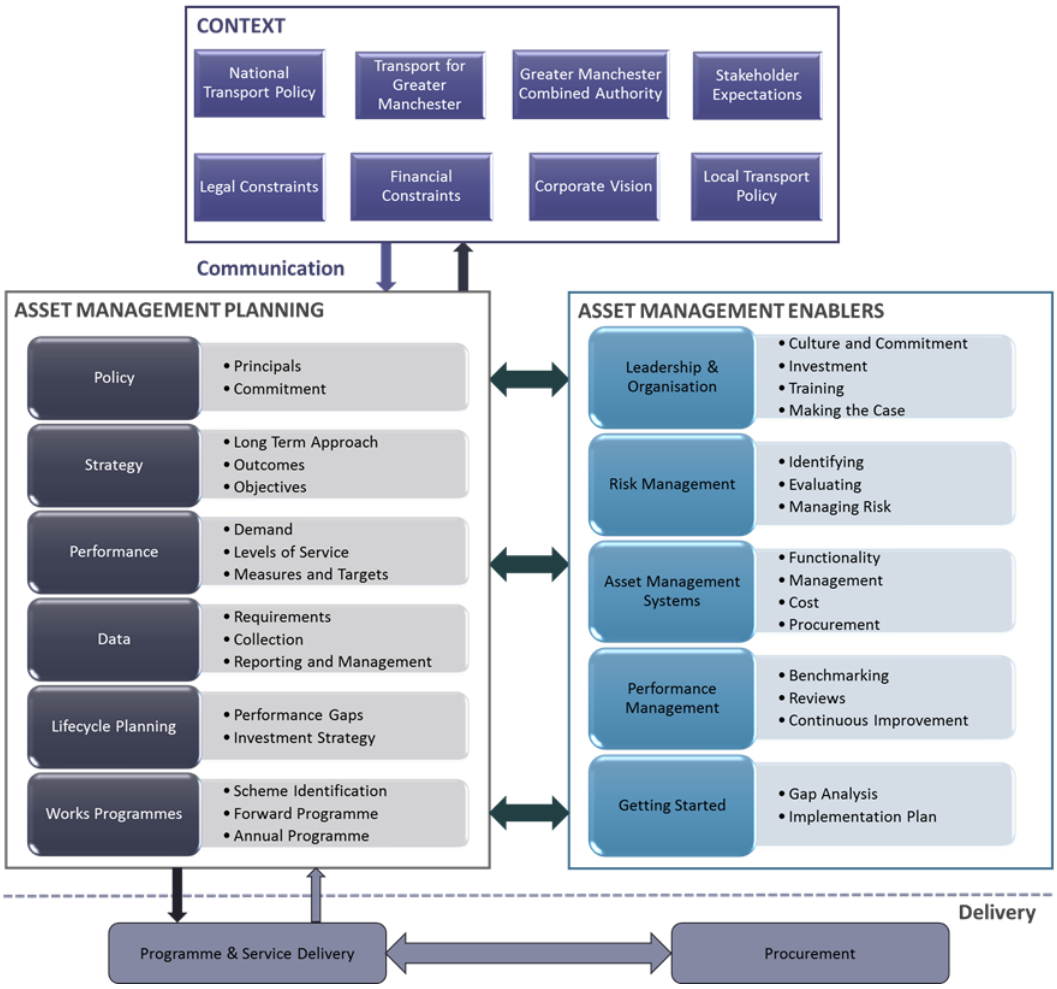
Delivering highway infrastructure asset management is not a stand-alone activity. It is linked with the Trafford Council policies and service delivery. It supports the interface with all stakeholders, including elected members, road users, the public and local communities.

Asset Management Framework

An Asset Management Framework comprises the activities and processes that are necessary to develop, document, implement and continually improve asset management. These activities and the approach to their delivery should be clearly documented and accessible to relevant stakeholders.

Trafford Asset Management Framework

The table below shows the communication links required to support Asset Management between the policy makers, planners, enablers, and deliverers of Asset Management within Trafford Council set in the local and national context.



Asset Management Framework links of Communication

The Framework is presented in three parts:

Context – Describes the context for highway infrastructure asset management, the organisation, and the environment within which the local highway service is delivered.

Asset Management Planning – Describes the key activities and processes for asset management planning and shows how these are be applied to Trafford Council highway infrastructure assets.

Asset Management Enablers – Describes the enablers that support the implementation of the Asset Management Framework.

Asset Management Policy and Strategy

This HIAMP is set around the clear principles of Policy, Strategy & Plan, whereby the HIAMP follows a clear line of sight from the existing local and national policies that shape the future direction of Trafford, via the strategies we employ to meet these polices and what this means for specific assets and their corresponding performance data.

Policy

Trafford Council Asset Management Policy is a high-level document which establishes the Council's commitment to Highway Infrastructure Asset Management and demonstrates how this approach aligns with the Council Plan. The Policy is a stand-alone document and is published alongside this strategy on the Council's website but is also included within this HIAMP on the following page.

Strategy

This document contains the Highway Infrastructure Asset Management Strategy for Trafford. In line with the authority's Asset Management Policy and closely tied to the UKRLG Guidance document (2013) it shows the steps we will take to effectively manage our highway assets in the coming years.

Plan

This document also includes Trafford's Highway Infrastructure Asset Management Plans for specific Highway Asset categories. This is where we set out the function of the assets, their condition, our performance targets, and the methods we will employ to achieve them

Asset Management Policy

Trafford Council

Policy for Highways Asset Management

Trafford Council is committed to adopting an asset management approach for the highway network in order to support the Council's vision for:

Trafford is a place where our residents achieve their aspirations, and our communities are thriving.

Together with **Positive Environmental Impact (Priority Outcome PE4) Better maintained highways**, Trafford Council recognises that transport systems play a huge part in facilitating a high quality of life by meeting the needs of the individual whilst remaining responsive to the changing needs of business.

In order for all Trafford's people and communities to enjoy the highest quality of life in a safe, clean, attractive, healthy, and sustainable environment Trafford Council's Asset Management Policy will seek to:

Maintain roads in a safe and serviceable condition. To provide a safe, well managed, maintained and more resilient highway network for all who use it. In order to deliver this, we will continue to understand our community's needs, promote levels of service and maintenance priorities for our highways.

Deliver a road and transport infrastructure that seeks to meet the needs of Trafford's residents, visitors, and businesses. To provide long term maintenance planning to help with co-ordination of expenditure, resources and third-party network access whilst being flexible enough to respond to dynamic changes in the needs of businesses and the local economy.

To provide our road users with a reasonable level of confidence that their journeys on the highway will be predictable and timely. To efficiently manage the maintenance of highway infrastructure to reduce disruption to the network where possible.

To ensure that the highway network is available and accessible, as far as possible. To efficiently maintain the highway infrastructure asset to meet the needs of the travelling public where possible.

To progressively reduce the environmental impact of the highway asset for the benefit of all our road users. To review materials and maintenance techniques used in managing the highway infrastructure asset reducing its environmental impact for improved sustainability.

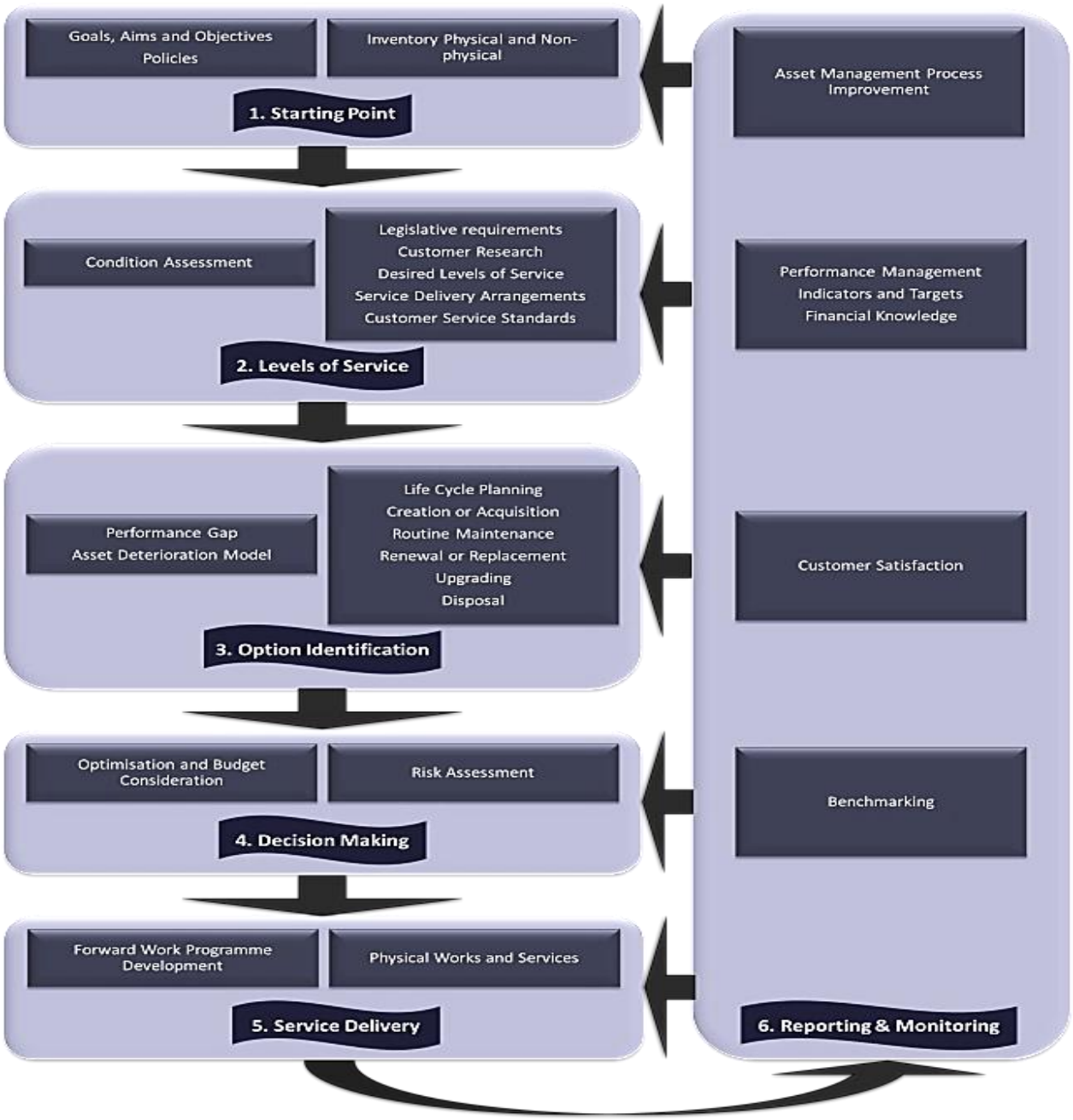
Our adoption of an asset management approach will take a long-term view in making informed maintenance and investment decisions.

Asset Management Strategy

Trafford Council is committed to the continued implementation of Asset Management principles, in support of maintenance of Trafford's highway network, aiming to deliver the greatest amount of community and business benefit with the funds available. These principles are directly linked to the 14 recommendations in the Asset Management guidance document published through the Highway Maintenance Efficiency Programme (HMEP) and promoted by the DfT in its Capital Maintenance Funding Programme.

Asset Management Strategy Process

Our Asset Management processes are illustrated in the diagram below. This approach will also be utilised by Trafford when undertaking the completion of lifecycle plans for individual assets.



Asset Management Plan

Understanding the Asset

The Trafford highway network includes a diverse range of assets including, carriageways, footways, lighting, structures, drainage, street furniture, green infrastructure and road signs and markings. Each of these perform a separate function and each have different characteristics that need to be managed accordingly.

Key Route Network

The Greater Manchester Combined Authority (GMCA) has established a 'Key Route Network' (KRN), consisting of the most strategic and economically important roads in Greater Manchester, carrying the highest concentrations of commuter and logistics traffic.

Trafford's KRN comprises of approximately 65 kilometres of highway, approximately 7% of the total network length. The defined KRN benefits Greater Manchester through improved traffic management across local authority borders and supports GMCA in prioritising investment to meet the current and future needs of Greater Manchester, in order to boost economic growth, better coordinate roadworks and improve travel information for road users.

Though the day-to-day maintenance of the KRN is still vested with local authorities, TfGM are included in the process of developing Asset Management Plan elements for the KRN, in collaboration with the other GM Councils to review and develop investment priorities. There are close working arrangements with National Highways and the Northern Transport Strategy, which provides a more holistic approach to improving and managing the region's motorways.

Trafford Council will continue to work and coordinate with TfGM to deliver the KRN Strategy.

Highway Asset Management Systems (HAMS)

Asset inventory is the foundation on which asset management must be built.

Asset data describes what highway infrastructure assets an authority has, where they are and how they perform. It is used to support the requirements of the asset management strategy and in determination of the approach to deliver the strategy, including performance management, lifecycle planning, forward programming, and risk management

One Trafford uses the Confirm system in conjunction with Amey Asset Manager – Horizons as its main Highway Asset Management Systems, providing a robust tool for holding and reporting on Asset Data.

Confirm is a modular piece of software which allows us to develop the system to our requirements. Amey Asset Manager – Horizons provides a visualised pavement management system for visual display of carriageway condition and provides carriageway lifecycle scenarios with deterioration modelling to help determine future investment priorities.

Structures asset data is managed on the PONTIS system under a Greater Manchester wide agreement between the participating authorities.

The table below shows the management systems used for each asset group.

Asset Group	Information System
Carriageways, Footways and Cycle Tracks	Confirm – inventory, inspections Horizons – lifecycle planning Symology Insight – street works co-ordination
Drainage	Confirm Map-info
Street Lighting	Confirm
Structures	PONTIS
Road Signs and Markings	Confirm / Key Signs
Fences and Barriers	Confirm
Soft Landscape	Confirm

Asset Condition

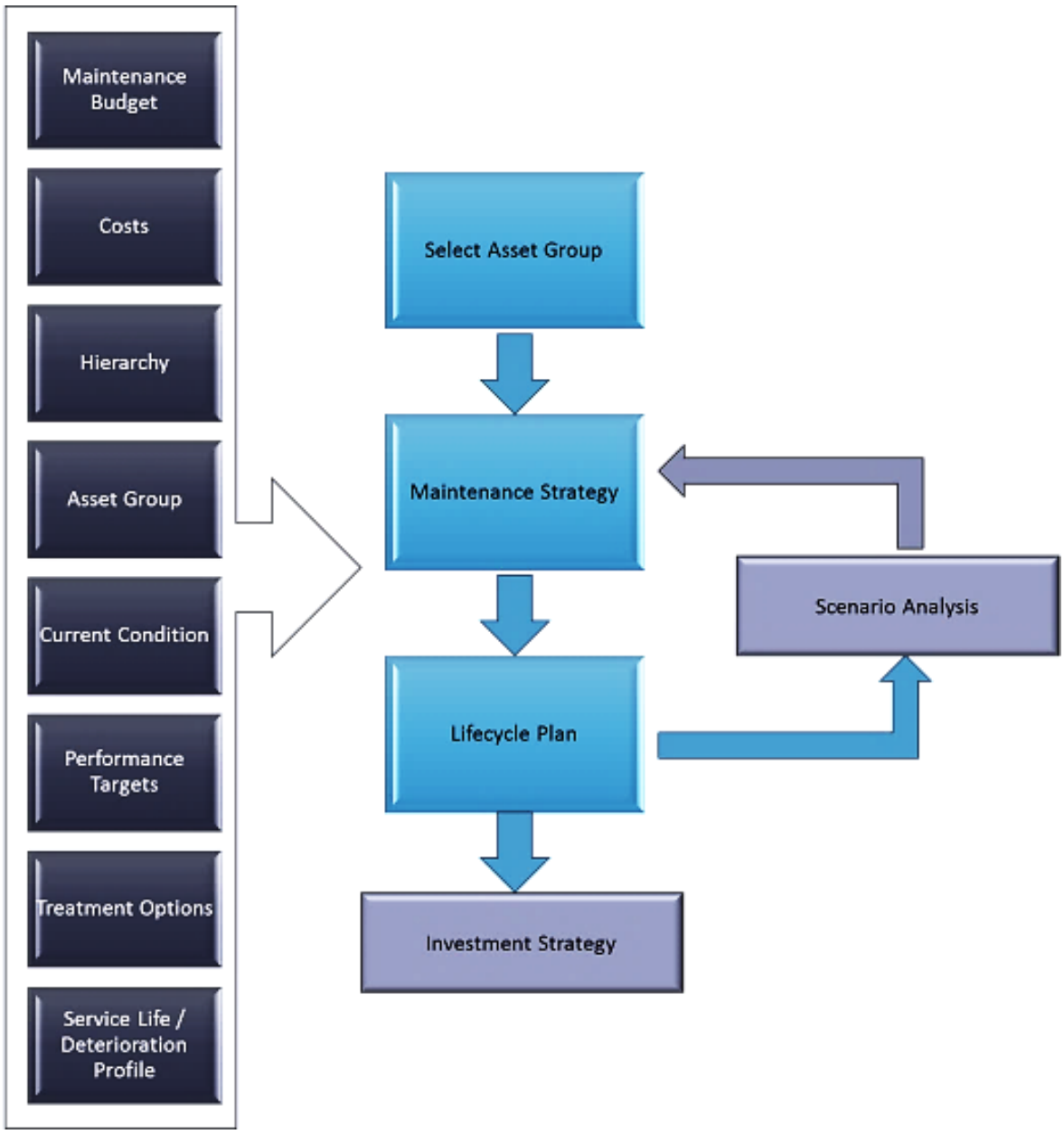
The highway network is surveyed routinely using a variety of different nationally accredited and industry led methods. Asset data is collected and verified through these methods and new details are identified as part of an on-going process. For new asset sets that have not previously been collated, a specific means of surveying is identified and implemented accordingly. This method allows the quality and integrity of the data to be regularly reviewed and any inaccuracies amended ensuring the overall data quality. This data is further reviewed by maintenance operations that identify assets' changes at a component level which are not necessarily easily seen.

Trafford's Technical Survey Strategy for carriageways and footways is detailed in the 'Works Programmes' section of this document. The highways asset condition data, collected through the technical surveys, is updated regularly (including any inventory updates), and loaded onto Horizons. Horizons has a facility to visualise highway condition along a road and can combine other data sets to help determine the most appropriate planned maintenance approach for Trafford. It can also plot future condition scenarios of the highway considering future budgets or the desired service levels.

Lifecycle Planning

All highway assets have a lifecycle from creation, maintenance, and eventually replacement. Lifecycle planning is the process of understanding what is involved at each of these stages, when it needs to happen and how much it will cost. Through the lifecycle planning of our assets, we can calculate the whole life cost, i.e., how much the asset will cost to create, maintain throughout its life span, and finally decommission. We can also model the impact of different maintenance and investment strategies to enable long term, best value outcomes. The lifecycle plan is the documented output from this process.

Development and use of lifecycle plans demonstrate how our funding and performance requirements are achieved through appropriate intervention and investment strategies, with the objective of minimising expenditure while providing the required performance and maintaining levels of service.



Lifecycle Planning Process

Renewal or Replacement

With effective forward works planning and deterioration profiling, we aim to carry out both proactive treatments (such as surface dressing or micro-asphalting) and major renewal or replacement (resurfacing) at the right time for the right cost, ensuring we get the maximum benefit for the cost outlay. This will be determined by design life and calculated deterioration.

Decommissioning

It is rare for highway assets to be decommissioned. This usually only occurs when roads are 'stopped up' because of major highway improvements or realignments. As a result of this, it is possible that sections of highway or other assets may become obsolete. Some drainage assets may be decommissioned if they are replaced by larger projects because of increased flooding. Other assets such as signs or street lighting columns may be deemed to be decommissioned when they have in fact been relocated during improvement works.

We will ensure that our asset inventory is kept up to date as much as possible, considering these changes ~~which~~ can be both frequent and varied.

Service Life / Performance Level

The type of asset in question will determine the method of measuring its level of performance and its service life. Highway gullies, for example, have three elements: the ironwork above, the structure below and its ability to drain water effectively (silting, blocked pipework etc). Each of these elements can be measured in varying ways and each element will have different expectations as to its service life and its whole life costing.

Regarding carriageways and footways, our performance levels will be determined by nationally agreed condition indices which are gathered using a mixture of SCANNER surveys, CVI (Coarse Visual Inspection), FNS (Footway Network Survey) and Safety Inspections. This data, coupled with deterioration profiling enables us to predict the condition of our roads and footways along a timeline, thus allowing us to target the right treatment for the right cost, at the right time.

Deterioration Modelling

Our deterioration modelling software, Horizons, takes condition survey data from roads and footways of the same class, hierarchy, and similar traffic profile over several years, monitors the changes in condition over this period of time and uses this information to predict the future status of defects. This is how we are able to produce a rolling indicative 3 to 5 years works programme based upon the predicted condition of Trafford's roads and the available budget.

Whole Life Costing

This is the result of deterioration modelling. Using accurate figures for treatment costs and factoring likely increases in costs over time, we can produce whole life costs for many of our assets, such as carriageways and footways.

In the case of other indeterminate life assets such as road gullies, it may be more difficult to predict an entire lifespan as assets such as these are rarely decommissioned and some are in place for decades, only being replaced upon sudden failure due to single events (flooding, accidents etc)

This allows us producing scenarios based upon the following drivers:

- The funding required to meet the service levels.
- The expected performance of the asset if the available funding is insufficient to meet performance targets.
- The funding required to maintain the asset in a steady state or any other desired condition.
- The lifecycle plan that delivers the minimum whole life cost.

Scenario Modelling

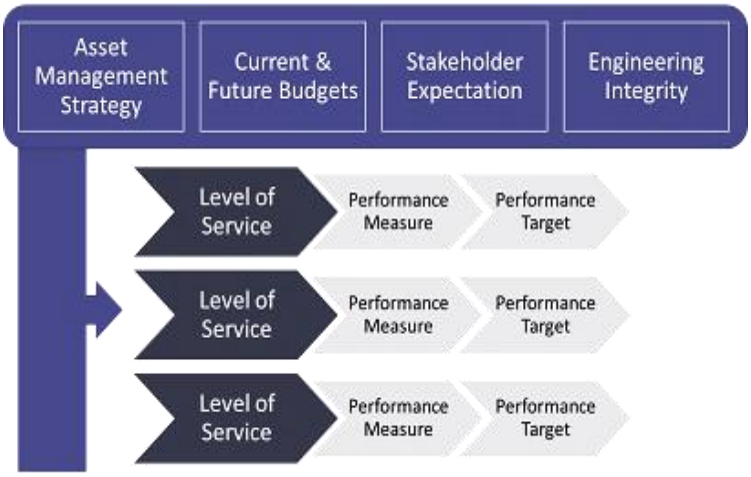
This involves the predicted outcome of taking a variety of options to the maintenance of our highway network. By running such reports through the Horizons 'Analysis' software we can are able to predict the future condition of the network, and indeed individual streets, based upon various investment forecasts over a given number of years. Conversely, we can predict the likely cost of maintaining the network to an agreed level of serviceability. The most likely scenario is to develop our maintenance strategy to maximise the serviceability of the network based upon the predicted budget availability.

Asset Management Performance

The UKRLG Guidance recommends that "*A performance management framework should be developed that is clear and accessible to stakeholders as appropriate and supports the asset management strategy.*

The levels of service, performance measures and targets will form the performance management framework.

Once performance measures are developed and linked with levels of service, the levels of service and individual measures can be banded and described in qualitative terms such as excellent / good / fair / poor. Alternative bandings can be adopted to align with the overall approach to performance management in the authority. This allows performance to be described in a way that is easily understood by all stakeholders."



Trafford Performance Management Framework

Levels of Service

Levels of service refer to a measure of the service quality achieved from highways assets. The level of service reflects the way our service is delivered and how it is perceived by our customers. Levels of service include the performance and condition of the asset itself, the quality of the service that the asset provides and the performance of Trafford Council in delivering that service.

Levels of service are broad statements that describe the performance of highway infrastructure assets in terms that our stakeholders can understand. They will relate to outcomes and cover key aspects of asset performance such as safety, serviceability, and sustainability. They will consider the performance of the whole network rather than that of individual assets.

Developing Our Levels of Service

Our Levels of Service correspond with the broad Objectives, Strategy and Values of:

- The TfGM Transport Vision 2040
- Trafford's Corporate Strategy
- Trafford's 'EPIC' Values, which are:
    - Empowering
    - People Centred
    - Inclusive
    - Collaborative

The National Highways & Transport Public survey (NHT) undertaken in Trafford reveals public priorities for Highways and Transport. These are reviewed each year to identify areas for improvement.

Trafford Council HIAMP Levels of Service

Service Levels applicable are:

- Maintain roads in a safe and serviceable condition.
- Deliver a road and transport infrastructure that seeks to meet the needs of Trafford's residents, visitors, and businesses
- To provide our road users with a reasonable level of confidence that their journeys on the highway will be predictable and timely
- To ensure that the highway network is available and accessible, as far as possible
- To progressively reduce the environmental impact of the highway asset for the benefit of all our road users

Each level of service is supported by a framework of performance measures; Performance and Customer Care Indicators (PI's & CCPI's) which are reported to senior management for regular review. These enable both individual aspects of performance to be measured as well as the overall level of service. These performance measures include both engineering and non-engineering considerations and form the HIAMP's supporting Performance Management Framework.

This performance methodology results in a more holistic approach to performance as Trafford Council can monitor, record and report delivery of the highway service, the asset management strategy, levels of service and our overall approach to asset management linking strategy, corporate vision, and objectives.

Works Programmes

Forward works programmes for each asset group are an effective way to deliver planned maintenance of those assets. The process comprises five stages: the identification, prioritisation, optimisation, programming, and delivery of individual schemes.

Forward Works Programme Process

Identification

Potential schemes are identified from several sources including highway inspections, customer reports, and wider transport or corporate objectives. However, the primary source is from condition surveys.

Technical Surveys Strategy

For carriageways and footways, the condition surveys undertaken are;

SCANNER Survey - SCANNER surveys on our classified road network will be carried out at the following frequencies:

'A' roads - 100% in one direction, alternating each year. One direction one year, the opposite direction in the following year

'B' & 'C' roads - Also 100% in one direction, alternating each year

Course Visual Inspections (CVI) – Trafford is split into 3 separate areas and one of these areas is surveyed each year with all areas completed over a three-year period.

Footway Network Surveys (FNS) – We undertake enhanced FNS for our footway network. The classified network is surveyed annually and the unclassified follows the cycle to mirror CVI for unclassified roads.

Annual Engineer's Inspection Survey (AEI) – Our Highway Inspectors currently complete an AEI for each street annually. We will develop this information to combine with the other condition information for each street to further enhance the current scheme selection process.

Skid Resistance (SCRIM) Survey – In collaboration with other Greater Manchester Authorities we have developed a Trafford Skid Resistance Policy and Survey Strategy for an optimum asset management approach. We use the SCRIM survey information in the treatment selection process and will document this once the policy has received approval.

Scheme Prioritisation

The definitive output from this HIAMP is to have a comprehensive, fully integrated forward works programme in place, for all highway assets, that meets the required Trafford levels of service.

For carriageways, using the 'Horizons Analysis' software from Causeway Technologies, we create a rolling five-year maintenance programme based upon projected asset condition (deterioration modelling) against costs and agreed levels of asset performance.

Prioritisation is a two-stage process whereby engineering parameters are applied to the data in the first instance to establish an indicative programme. The second stage applies non-engineering parameters such as enquiry records, balancing area allocation and proximity of key services, among many others.

Optimisation and Programming

The optimisation and programming process takes into consideration decision making and joint prioritisation across asset groups when determining works programmes.

One significant element of the decision-making prioritisation process is the potential for schemes to be coordinated across asset groups, for example resurfacing a road in conjunction with replacement of a culvert section or road safety scheme. Such alignment of schemes within the works programme is key to optimising available funding across the Highways Service. The prioritisation lists generated by each of the asset groups is cross referenced for identification of potential alignment. Locations that appear near to the top of more than one of the priority lists is considered for engineering judgement as to whether a joined-up scheme may be feasible. If elements are funded through different sources, careful planning is made with regards to aligning year end expenditure restraints.

Consideration is also given to the order in which schemes are undertaken if they are not to be undertaken jointly. For example, a culvert replacement scheme needs to be undertaken prior to a carriageway resurfacing scheme on the same road if the culvert runs under the highway. Similarly, streetlights should be replaced before any footway reconstruction to avoid potential damage to footways.

Coordination with external bodies is also important to service optimisation, including coordination with statutory undertakers. Moving forward, this optimised holistic approach will improve cooperation, network disruption, and help inform the decision-making process.

Delivery

Works Programmes will be made available either via the public website or regular bulletins or both.

The benefits of the outlined works programming process include:

1. Using the predicted condition of our highway network we can plan a more efficient works programme, balancing the needs of 'worst-first' with a greater emphasis on preventative maintenance treatments which can reduce the demands of a 'worst-first' programme over time. We will be able to predict when the optimum point on the deterioration curve is reached where the allocated treatment at that point provides the greatest cost benefit. '***The right treatment, at the right time, for the right price***.'
2. Having an indicative five-year works programme in place helps with co-ordination activities both within and outside of Trafford's highway network. We can better plan the timing and extent of utility works as well as fully co-ordinating our own internal multi-disciplinary functions such as street lighting and structures works.
3. An approach that allows for greater transparency in helping the general public, elected members and other stakeholders to understand what Trafford Council's future maintenance plans are, and how we've come to such decisions, which should remain objective and based upon sound engineering criteria. It allows for a larger amount of self-service and can help, particularly in the case of elected members & parish councillors, etc., to field enquiries about particular locations.

Enabling Asset Management

Leadership and Commitment

Leadership has a strong influence on the culture and behaviour of all organisations. The clear direction and priorities, set out in this HIAMP, will ensure that significant and apparently relatively minor decisions taken across Trafford, all support a consistent approach to delivering highways asset management.

Ensuring the support of senior decision makers is key to the effective application of highways asset management. Engagement is continuous between all parties involved in the delivery of highway maintenance at all levels within Trafford and a sound system of communication in both directions is in place, via monthly strategic and executive member meetings. Reports are presented to Trafford' Council for performance management (monthly), works programming (tri-annually), and budget setting (annually).

Alongside the Highway Infrastructure Asset Management Guidance Document, the UKRLG produced an abbreviated document called *Highways - Maintaining a vital asset (What should councillors know about asset management?)*. Strong leadership and commitment for the HIAMP, from elected councillors and their chief officers is vital in maintaining our highways. This leaflet explains how asset management can help Councils to improve highway maintenance, by ensuring best use of available funds and demonstrating the case for future investment.

We will continue to ensure, through regular communication (committees, frequent update bulletins and website publishing) that the investment case for Asset Management is clearly stated and based upon predicted funding and asset condition.

Risk Management

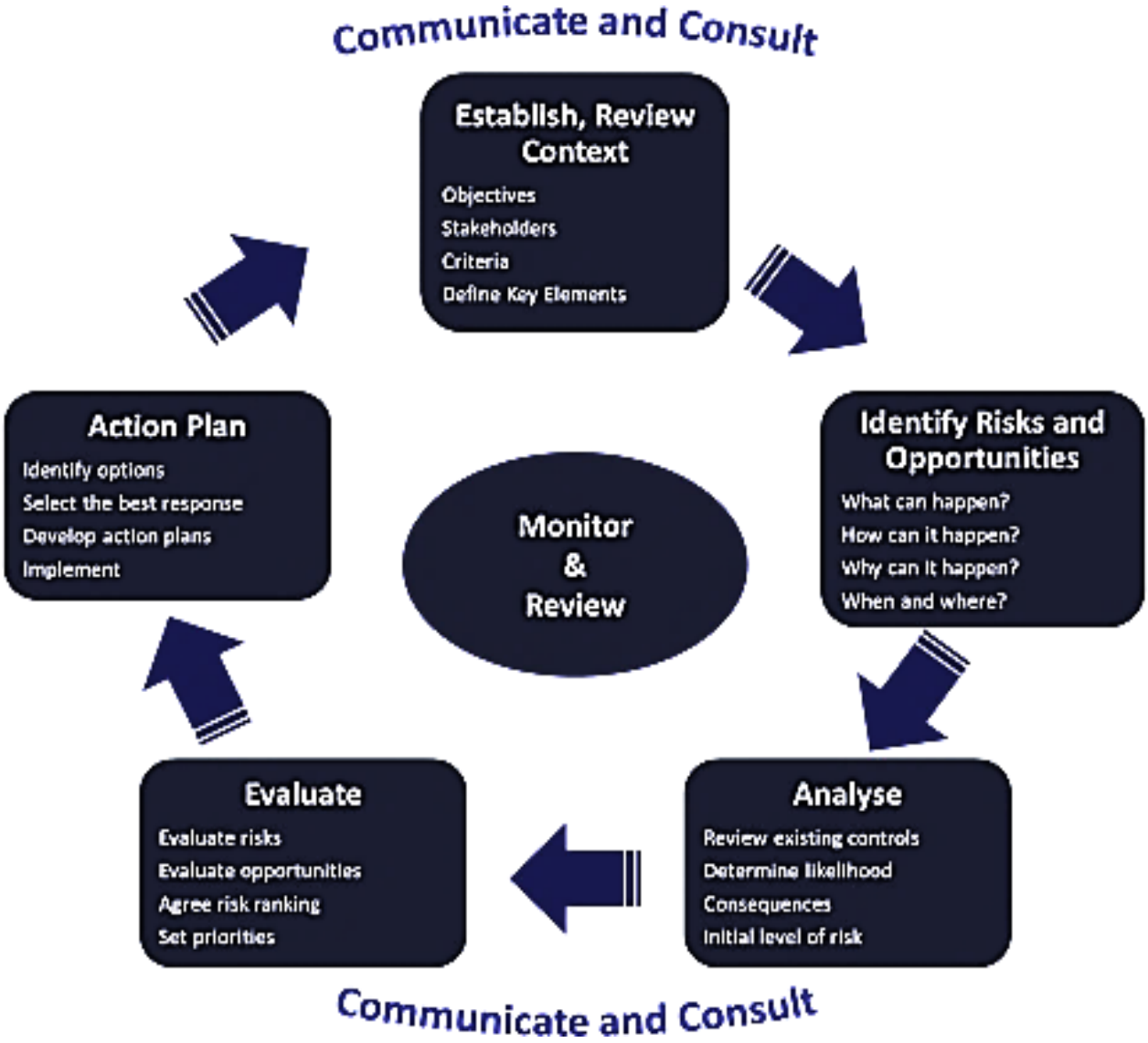
Trafford Council is required to manage a variety of risks at all levels within our remit. The likelihood and consequences of these risks can be used to inform and support the approach to asset management and inform key decisions on performance, investment, and implementation of works programmes.

Risk can be defined as an uncertain event which, should it occur will have negative effect on the performance of the asset, or on the asset directly. The level of risk can be defined as the likelihood of an event occurring, and the magnitude of its impact on the asset which would result from the occurrence.

Our Highway Asset is subject to many risks:

- **Safety** – of staff engaged in works on the highway, or the much wider remit of public user safety
- **Risk to Reputation** – Trafford Council itself and those who rely on the asset for their businesses
- **Loss or damage to the asset** – ranging from total destruction in an instant due to an extreme event to the steady deterioration of the asset due to wear and tear.
- **Service reductions or complete failure** – to lose some parts of the Network would potentially directly threaten lives
- **Environmental** – threats both to and from the environment
- **Financial and Contractual Risks** – for Trafford Council and stakeholders
- **And most importantly - combinations of the above!**

Management of these risks is fundamental to effective asset management and Trafford Council manages this risk in line with the processes illustrated in this process diagram:



Risk Management processes support the Asset Management approach

Management of Risk

Risk can be managed at several levels using a consistent risk framework that enables the comparison of risks across all services.

Corporate – High level risks that include reputation, business continuity, health & safety, political, legal, and financial risk. Our risk policy and management of these risks is undertaken by our senior decision makers.

Strategic & Tactical – Risks affecting the management of the highway infrastructure are considered throughout, at both strategic and tactical levels.

The level of risk to an asset is generally reflected by its place in the network hierarchy; however, this can in many cases be over-ridden by specific local needs. Our asset teams are made aware of these needs by close liaison with other colleagues within Trafford Council, and feedback from highway users.
At the strategic and tactical level, risk types are grouped together.

Risk Categories

Trafford Council's assessment of risks for highway infrastructure form part of a risk register, representing the categories above, which identifies implemented mitigation actions and includes a "lessons learnt" register which is signed off as recorded at all levels of the organisation.

The diagram below shows the four main risk categories and the separate risk elements that are managed effectively in Trafford Council.

Main Risk Categories and Elements

Performance Monitoring

A well-developed approach to performance monitoring provides Trafford with the ability to continuously improve our asset management knowledge, processes, and systems to support effective delivery of asset management and to build on lessons learnt to enable them to continuously improve. Our measures are broken down into:

Strategic Monitoring – To seek assurance that asset management is being operated as intended. This includes monitoring to ascertain whether our asset management strategy outcomes are being met, including stakeholder requirements, that the approach to asset management has been documented and implemented, and that the supporting processes are effective.

Performance Measures and Targets – To assess the effectiveness and efficiency of asset management we monitor using a series of metrics at the strategic, tactical, and operational levels. This includes monitoring against levels of service and supporting performance targets and determining whether they have been met.

System Audits – We monitor the data in the asset management system to determine whether it is fit for purpose, as well as reviewing the output and how it is being used.

Compliance Monitoring – We monitor the performance of our maintenance contractors against their contractual obligations.

Trafford Council has a robust performance management system in place to measure, monitor, assess and compare performance indicators; performance information is collated in the HIAMP's supporting Performance Management Framework and currently takes the form of:

1. **Indicators measuring the condition of the asset**
   Performance Indicators (PIs) for road condition are measured by authorities UK wide and are also bench-marked within the 10 GM authorities. The conditions PIs are reported annually.

   There are several PIs that measure the condition of both the carriageway and footway asset. Condition surveys are carried out following government requirements. 50% of the principal and non-principal classified road network is surveyed each year using a repeatable machine survey and 33% of the unclassified road network by coarse visual inspection survey. The carriageway indicators used are called 130-1, 130-2, and BVPI224b.

   A programme of Footway Network Surveys (FNS) is carried out annually with an indicator for condition. In 2017 we undertook a full Enhanced FNS survey of the footway and presently do an annual 20% of the network. The reduction in survey frequency is because of a nationally recognised need to survey footways less frequently, as there is generally less impact on the network due to weathering and physical impacts than there is to the carriageway

   Condition indicators are also used following national standards for the structures, which uses both General Inspections and Principal inspections data, in accordance with DfT guidance notes and best practices.

   Street lighting and illuminated signs asset groups are tested in accordance with The Streetlighting guidance Notes GN22 for steel and metal units, whilst coarse visual and electronic outputs assess the concrete and cast units

2. **Indicators measuring the operational performance of the contractor**
   A range of PI's are used to measure the operational performance of the contractor for network safety and serviceability and reported monthly.

Operational indicators relating to street lighting are also reported to the government. These measure the number of days taken to repair a street lighting fault for both street lighting faults that are under the control of Trafford Council and where the response time is under the control of the electrical supplier. Data is collected and reported on a quarterly basis.

3. **Indicators measuring customer/stakeholder satisfaction**
   Customer Care Performance Indicators - CCPI's are developed to measure customer/stakeholder satisfaction. They focus on the highway maintenance elements of the Trafford NHT customer survey where areas for improvement in customer satisfaction are identified. Areas where highway maintenance performance stakeholder satisfaction is high is also recognised.

4. **Comprehensive Performance Assessment (CPA) Indicators**
   The performance of Trafford Council in its own right, and in comparison with others, is assessed in part, by a number of highways related performance indicators. The CPA indicators are:

   - All those killed or seriously injured in Road Traffic Collisions
   - People slightly injured in Road Traffic Collisions

5. **Safety Inspections**
   Inspectors carry out safety inspections of the network as per the Highway Safety Inspection Policy throughout the year and the results are reported quarterly in the performance dashboard.

We continue to monitor the performance of our assets against these performance targets to determine whether our approach to asset management is meeting the desired service standards. If not, further analysis of the causes will be undertaken, and corrective action proposed.

We also use a collaborative approach with TfGM, AGMA and other authorities so that lessons may be learnt and shared for the purpose of continuous improvement.

Benchmarking

Benchmarking is a systematic process of collecting information and data to enable comparisons with the aim of improving performance, both absolutely and relatively to others. It provides a structure to search for better practice in similar authorities that can then be integrated into an asset management approach.

As stated previously we continually work with industry leads, Greater Manchester Combined Authorities (GMCA) and the wider regional network on benchmarking our outcomes against others. In recent years we have become a member of the Local Council Roads Innovation Group's (LCRIG) working together on the development of Asset Management for national highway authorities.

LCRIG supports the Department for Transport, working in partnership with the 'highways community', to enable change through using innovative techniques, to help achieve savings and efficiencies to ensure that road users see improved highway services.

The results of this not only provides opportunity to learn and share, but to also strive for more efficient, cost-effective solutions and outcomes in the delivery of the services and working practices.

TfGM and GMCA

Trafford is fully engaged with Greater Manchester Combined Authorities (GMCA) and Transport for Greater Manchester (TfGM), sharing innovation and good practice. The 10 councils (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford, and Wigan) have worked together voluntarily for many years in developing our highway asset management approach and has an active benchmarking group to monitor progress in a local context.

We continue to work with GMCA and TfGM to exchange objective and subjective data on all areas of highways asset management.

National Highways & Transportation Survey (NHT)

Since 2016 Trafford have contributed to the annual NHT Survey for the purposes of both benchmarking alongside similar authorities and for seeking stakeholder feedback on our services. The feedback is very informative for seeking stakeholder priorities and for gauging the level of stakeholder satisfaction with our services.

We will continue to supply data which serves to provide details on levels of customer satisfaction with local authority services and practices. This helps us to understand the long-term effects of our approach and in setting our future levels of service across all asset groups.

CQC (Cost, Quality, Customer) Benchmarking Club

We take part in the UK wide CQC (Cost, Quality, and Customer) benchmarking group and contribute to meetings with the other GM authorities also taking part. This group aims to identify efficient practice in the delivery of highway maintenance, looking at spend and comparing it to condition information. It also has a 'Why Questionnaire' which helps authorities understand why higher performing authorities are doing better than others.

Department for Transport Submissions

Our annual submissions of condition data to the DfT gives us a clear indication of how we are performing relative to other authorities. We use this data as a key benchmark to the performance of the carriageway asset and the wider asset management approach.

Highways Maintenance Efficiency Programme (HMEP)

The work of the HMEP has been at the cornerstone of all strands of highway maintenance activities. Whilst the output from the programme has diminished, the guidance documents which give recommendations on the best way of delivering these services, using asset management principles, are still valid and referenced.

This HIAMP is itself founded on the recommendations which also tie-in very closely with the DfT funding models (the Incentive Fund in particular), the Code of Practice *Well Managed Highway Infrastructure* and the Whole of Government Accounting which requires an ongoing improvement in the detail of asset inventory in future submissions.

Ensuring that Trafford Council has the latest nationally approved guidance at the heart of our approach to highway maintenance now, and in the future, we will also continue to ensure we are properly measured against all other local authorities for all development, programming, and delivery operations.

Training and Competencies

Organisational Considerations

Asset management within Trafford is considered at three levels, namely strategic, tactical, and operational.

Organisation Hierarchy Chart

Strategic

Strategic aspects of asset management include:

- Development and endorsement of Trafford's Asset Management Framework
- Developing and agreeing Trafford's Asset Management Policy, Strategy and Levels of Service and Performance Targets
- Reviewing achievement of outcomes and benefits

Our Senior decision makers are supported to enable them to have a clear sight of the outcomes they wish to achieve.

Tactical

At a tactical level, decisions are made on how to meet the performance requirements arising from our asset management strategy. These decisions require knowledge, information and data in the form of asset inventory, condition data and predicted performance of the network.

Tactical aspects of asset management include:

- Development and implementation of a highway asset management action plan

- Preparation of the Highway Infrastructure Asset Management Plan (HIAMP) and/or other supporting documents
- Continued development of a functional network hierarchy within Trafford
- Preparation of lifecycle plans and financial plans to meet either budgets or performance targets
- Continued development of the approach for prioritising schemes
- Developing works programmes
- Developing annual programmes

Operational

The operational level is about delivery of maintenance activities that align with our approach to asset management.

Operational aspects include:

- Collection of data, including inspections, safety and serviceability defects and asset condition
- Management of our asset data
- Reactive work, including rectification of defects and winter service
- Cyclic maintenance
- Confirmation that works programmes can be implemented to budget and timescale
- Implementation of our works programme
- Co-ordination of works, including utilities, road space booking and or permitting requirements
- Reporting on the performance of our assets

Competencies and Training

We identify the competencies necessary to meet our requirements for asset management. Where these competencies are not available, training of staff is implemented. Recruitment, mentoring and collaboration with other authorities is also considered to ensure full competencies are achieved.

To maintain competency, regular training and professional development is made available for staff undertaking roles in asset management, such as the Highway Asset Manager. This ensures Trafford Council has the continuing ability to prepare, implement and review our approach to asset management efficiently and effectively. Investment in development of staff supports the overall improvement in the implementation and delivery of asset management, supporting the subsequent business benefits.

Long term asset management involves many different people over time. As people change and as the approach evolves, it is necessary to ensure an orderly transfer of knowledge. This can best be achieved where those involved in asset management have clear roles and where due consideration is given to succession planning and the smooth hand-over of responsibilities.

Trafford Council and our service partners continue to ensure suitable competency across staff from all levels, from senior decision makers to frontline operatives.

This takes the form of on-site & off-site training in the use of specific software packages such as Horizons and Confirm as well as training and mentoring in Microsoft Office packages such as Excel, Word, Publisher,

and Power Point. There will be a mixture of tailored training such as HMEP online toolkits and day to day learning through frequent usage. Details of the training associated with Asset Management are shown in the table at the end of this section.

It is also important, alongside the sharing of good practice between authorities, that we share knowledge within our own organisation in the form of mentoring and day to day working together. The principles of Asset Management ~~w~~are communicated to relevant staff, including senior officials and engineers either by one-one desktop study, in presentations and in open forums and workshops.

Business collaboration software is used with increasing effectiveness, to ensure people across the organisation can collaborate on and share information with dedicated asset management groups to facilitate this process.

Asset Management is a principle and as such it relies on knowledge, experience, and skills from a wide range of individuals and organisations to operate effectively. It will not function without the 'buy in' from senior decision makers & elected members and as such we make sure Trafford staff and elected members are kept up to date of the benefits to be had from the proper application of these principles and the ongoing performance of the HIAMP. We ensure that knowledge is allowed to feed in from both ends of the local authority spectrum.

ASSET MANAGEMENT COMPETENCY FRAMEWORK		
Post Title	**Required Competencies**	**Resources**
Corporate Director – Trafford Council, & Service Director - One Trafford Partnership (OTP)	An Overall awareness.	UKRLG HMEP Guidelines HAM Policy & HIAMP
Highway Manager – OTP & Principal Engineering Manager	Knowledge of Corporate Policy & Strategy	UKRLG HMEP Guidelines HAM Policy & HIAMP
Programme Director for Highway Asset Management	Detailed knowledge of national & corporate policy, strategy & plan. Detailed knowledge of Horizons – Explorer, Analyses & Condition modelling, HAMS	UKRLG HMEP Guidelines HAM Policy & HIAMP Horizons Training - Explorer, Analyses & Condition modelling Lifecycle modelling
Highway Asset Team Manager/Principal Engineer	Knowledge of national & corporate policy, strategy & plan. Detailed knowledge of Horizons – Explorer, Analyses & Condition modelling, HAMS	UKRLG HMEP Guidelines HAM Policy & HIAMP Horizons Training - Explorer, Analyses & Condition modelling Lifecycle modelling
Data Management Lead	Detailed knowledge of Horizons – Explorer, Analyses & Condition modelling, HAMS	UKRLG HMEP Toolkits HAM Policy & HIAMP HAMS Training Horizons Training (Explorer & Analysis) including further Analysis Tools (Excel, Access etc)

ASSET MANAGEMENT COMPETENCY FRAMEWORK		
Post Title	**Required Competencies**	**Resources**
Principal Design Engineer	Knowledge of corporate policy, strategy & plan. Horizons - Explorer and knowledge of condition modelling.	UKRLG HMEP Guidelines HAM Policy & HIAMP Horizons Training - Explorer
Design Engineer	Horizons - Explorer and knowledge of condition modelling.	UKRLG HMEP Guidelines HAM Policy & HIAMP Horizons Training - Explorer
All other Highway Staff	An overall awareness	UKRLG HMEP Guidelines HAM Policy & HIAMP

Communication

A Communications Strategy is a way of describing how the asset management approach is actively communicated through engagement with relevant stakeholders in setting requirements, making decisions and reporting performance. Trafford's Highway Infrastructure Asset Management Communication Strategy is developed and included in Appendix A of this HIAMP.

In keeping with asset management philosophy, user and community involvement is a high priority within and for Trafford Council.

Stakeholders

People, groups of people, or organisations that can affect or be affected by the policies and actions of Trafford Council are all stakeholders of the highway network. Managing stakeholder expectations and addressing their needs is a key aspect of asset management.

In the context of the highway service, stakeholders are many and diverse and will be considered in different ways. Stakeholder groups have been identified and included in the strategy.

Effective engagement with stakeholders is ~~a~~ key in managing expectations and therefore satisfaction with Trafford Council services. Stakeholders need to be engaged at various stages in the asset management process so that they can appreciate the challenges and issues that Trafford Council faces. People cannot be expected to understand or accept the level of service provided if they have not been involved in its development or it is not published and transparent.

We ~~will~~ continue to engage with and involve key stakeholder groups such as set out in the strategy.

Elected Members

We ensure clear and accurate information is made available to Trafford's Elected Members to help with the decision-making process and to demonstrate the cost and benefits of lifecycle planning and an Asset Management approach in making investment decisions.
Proposed works programmes are shared with elected members for their consideration and input as part of the approval process.

We aim to produce reports to elected members for consideration on predicted network condition based upon anticipated funding availability. This is a 'scenario' based method whereby we can demonstrate,

using sound engineering data, what the future condition of Trafford's network will be based upon certain budget levels. We can also demonstrate the level of funding required to achieve performance targets, from steady state to measured improvement.

Public

We aim to publish the Annual Maintenance Programme on our public website so that all stakeholders can see an indication of existing and future maintenance plans. We anticipate this will help those who do not share detailed engineering knowledge to be able to see the decisions we are making and the reasons for them, and no stakeholders are excluded from the process. As our systems mature, we also aim to provide a 5-year indicative programme of works for the carriageway and footway assets.

Trafford Council's public website is regularly reviewed to make the user experience more beneficial. This will cover all areas of service including highways and we are working with our web developers to ensure highway maintenance is properly represented in these changes.
Along with our maintenance activities, we plan to publish information on the work we are doing regarding funding bids, policies, and this Highway Infrastructure Asset Management Plan to provide openness to our customers.

We also use customer feedback to inform maintenance programmes and will publish details of the measures taken to respond to feedback and to publish the feedback on service delivery performance on our website.

As mobile technology and use of social media further expands, we will continue the development of the capability for stakeholders to interact with the local authority on highway related matters, and other services using a variety of platforms.

Climate Change and Sustainability

The Climate Change Act 2008 requires that emissions of carbon dioxide and other greenhouse gases are reduced and that risks from climate change are adapted to. In 2019, the government increased its ambition and declared its commitment to achieve net-zero carbon emissions by 2050, incorporating this target within the Act.

Trafford Council declared a climate emergency in November 2018 and has since prepared a Carbon Neutral Action Plan, in December 2020. This is to make progress with measures that will help to reduce our carbon footprint and put us on a pathway to carbon neutrality by 2038.

This latest version of the HIAMP seeks to reduce, adapt to, and mitigate the risks and threats posed by climate change. The way we manage our highway infrastructure assets help make Trafford a resilient borough that can respond to the challenges presented.

New challenges and opportunities that directly affect the highway infrastructure, and the way we work in the future include:

- Increased recycling
- Use of "low energy" manufactured products & materials
- Active Travel and sustainable transport
- Electric Vehicle (EV) Infrastructure
- Tree planting
- Biodiversity
- Provision of LED Street Lighting

Adaption to Climate Change

The National Adaption Programme released by government in 2018 sets out considerations and actions that we must take to respond to the effects of climate change on our infrastructure. These include:

- The importance of applying asset management principles to help achieve a more structured long-term approach to maintaining networks, including considering climate change.
- The effects of extreme weather events on highway infrastructure assets should be risk assessed and ways to mitigate the impacts of the highest risks identified.
- Ensure that they a resilient network as recommended in the 2014 Transport Resilience Review is in place.

Climate change resilience also features throughout the code of practice Well Managed Highway Infrastructure we will respond to the guidance to:

- Ensure infrastructure is located, planned, designed, and maintained to be resilient to climate change, including increasingly extreme weather events
- Better understand the particular vulnerabilities facing local infrastructure from extreme weather and long-term climate change to determine actions to address the risks.

Much of the initial focus of this work has been in relation to intense rainfall events and the effect on our drainage assets. More work to ensure a risk-based gully emptying programme with the identification of flooding hotspots (combining Trafford data with the Environment Agency's data) is being undertaken and will continue to be developed, to ensure a greater resilience for the highway network.

Other extreme weather events such as high winds or hotter temperatures will also now be a major consideration in the maintenance of our assets particularly in the choice of materials and the effect of climate change on the whole life cost calculations.

Resilient Network

In July 2014, the Department for Transport published the **'Transport Resilience Review – A review of the resilience of the transport network to extreme weather events'.** The Review recognises that an economically rational approach should be taken to spending on resilience, *"ensuring that enough is invested, with the right prioritisation, and avoiding wasteful and economically unjustified expenditure"*.

The report made various recommendations about climate change, extreme weather events and network resilience that all local authorities must put plans in place to manage such events and provide a transport network which is robust enough to cope when the worst happens.

The **National Risk Register of Civil Emergencies** is the source document for risk assessment in the UK and is supported by specific guidance and Local Risk Registers within all Local Resilience Forums. These documents help frame the risks faced and the threat they present. Interaction with emergency planning teams within all organisations and partners is key to understanding and aligning responses to the risks.

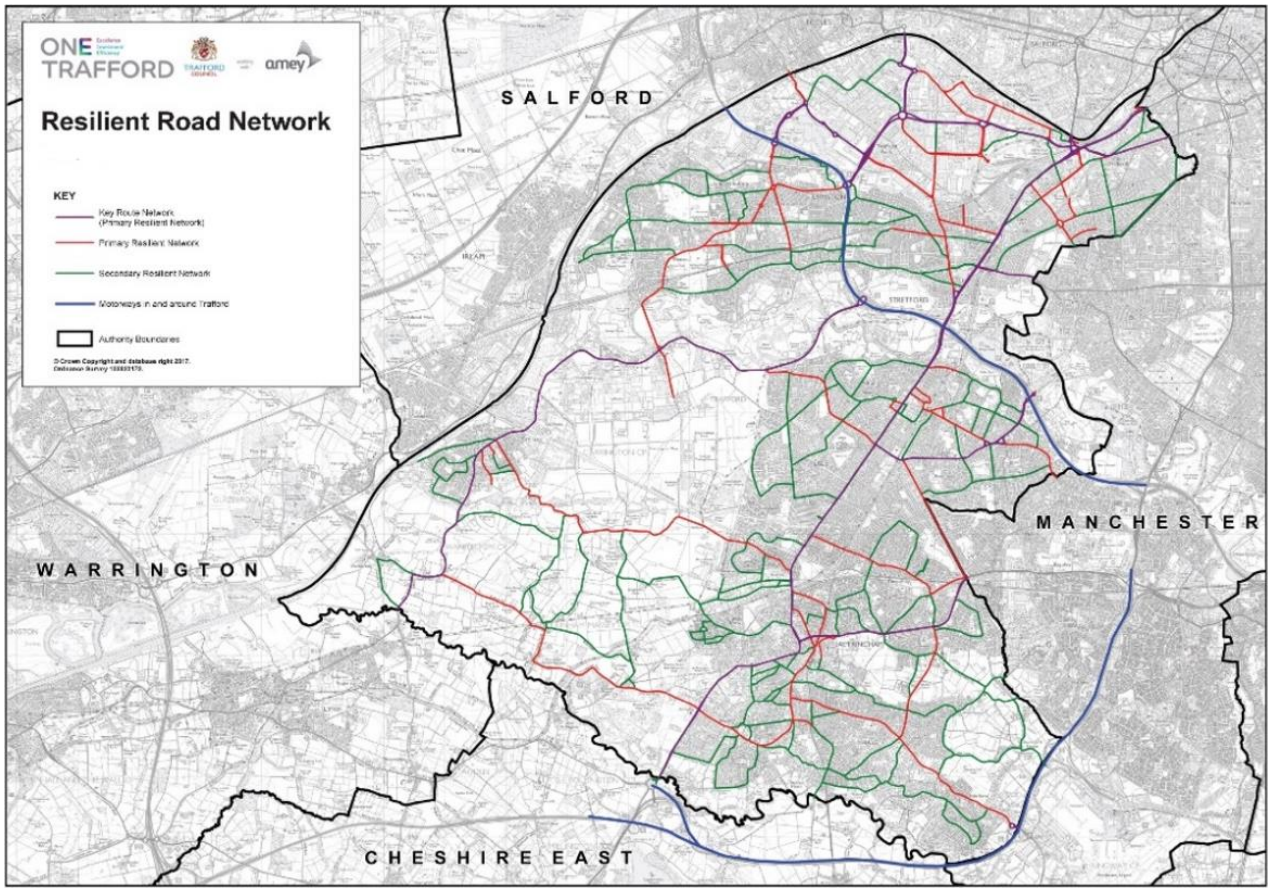
A Resilient Network has been identified throughout Trafford which will receive priority through maintenance and other measures to maintain economic activity and access to key services during disruptive events. The process for identifying the Resilient Network considers which routes are essential, and which may be unavailable for a period of time.

Our Resilient Network includes:

- those routes crucial to the economic and social life of the local or wider Trafford area
- take account of repeat events, e.g., flooding, and
- local factors.

The resilient network is reviewed every 2 years, including liaison with key stakeholders, and to also update after any events, based on lessons learnt. This will include not only resilience against snow, ice, and flooding, it will also cover exceptional heat, industrial action, major incidents, and other local risks. The network was last reviewed in January 2018, although the planned review in 2020 has been delayed by the impact of Covid 19. 2023 will see a review taking account of the changing network, climate change impacts, lessons learned, cross partner / stakeholder / Greater Manchester requirements and network hierarchy changes and needs.

Trafford Council already has emergency planning in place for operational response and protection of the vulnerable and less abled in times of crisis however, they will remain under review for updates.
Allied to this is a comprehensive understanding by our Flood Risk Management staff of known and potential flooding hotspots based upon recent history events and shared data from other organisations, such as the Environment Agency and Internal Drainage Boards.



Resilient Road Network in Trafford

Critical Assets

Critical assets are those that are essential for supporting the social and business needs of Trafford, GMCA, TfGM and national economy. They are currently identified as those on the Key Route Network (KRN). They will have a high consequence of failure, but not necessarily a high likelihood of failure. These assets are identified separately and assessed in greater detail as part of the asset management planning process by TfGM with a separate KRN Asset Management Plan.

Trafford will continue to identify 'Critical Assets' such as bridges, junctions and routes that form the backbone of resilient network planning

Biodiversity

The highway network includes many green spaces which can contribute to a positive impact on the biodiversity of the local area, but the highway network can also adversely affect the local environment.

In this latest revision of the HIAMP, we aim to ensure that our highway verges, trees, and landscaped areas are managed to protect and maximise their nature conservation value and biodiversity as well as having regard to highway safety and serviceability.

The latest Incentive Fund questionnaire, for 2021/22, included several additional questions relating to sustainability, climate change and biodiversity. Whilst these questions do not at present affect our Band 3 funding status it is possible that this will change going forward and therefore, we need to ensure that these challenges are embedded into our future asset management plans.

Improvements and Achievements

Since the introduction of the first HIAMP in 2017 much work has been undertaken to embed the asset management principles throughout all our highway asset groups. Each year, as part of the self-assessment for the Highway Maintenance Incentive Fund, we undertake a comprehensive review and evidence gathering to support this work.

This approach has ensured that we are able to secure and retain our Band 3 Status which unlocks the maximum funding available from the Department for Transport. This evidence gathering has also helped identify future improvements which are reflected in this latest version of the HIAMP.

Notable improvements and achievements over the initial period of the HIAMP are recorded below:

- Programme of comprehensive condition surveys of carriageway and footways to meet current guidance
- Development of the Horizons Carriageway and Footway deterioration and investment scenario modelling.
- Ability to provide investment scenario modelling, supporting robust business cases to inform future investment decisions and quickly respond to potential grant funding opportunities
- Introduced a new risk-based highway inspection policy to ensure safety of the public and to protect against future third party liabilities
- Completed a street lighting LED replacement programme resulting in reduced energy usage, reduced carbon emissions and fewer maintenance visits.
- Improvement in street lighting performance with improved response times to resolve faults, and year on year reduction in street lighting faults
- Response to national change in street lighting and illuminated sign structural assessments guidance.
- Introduced a programme of structural testing of lighting columns in order to comply with latest safety standards
- Resultant information to enable informed investment decisions to secure long-term column replacement programme
- Widened our asset management approach to standardise across most highway infrastructure assets
- Continued to build our inventory and comprehensive condition of our highway structures. Working with colleagues across Greater Manchester to improve the lifecycle planning capabilities of our joint asset management system.

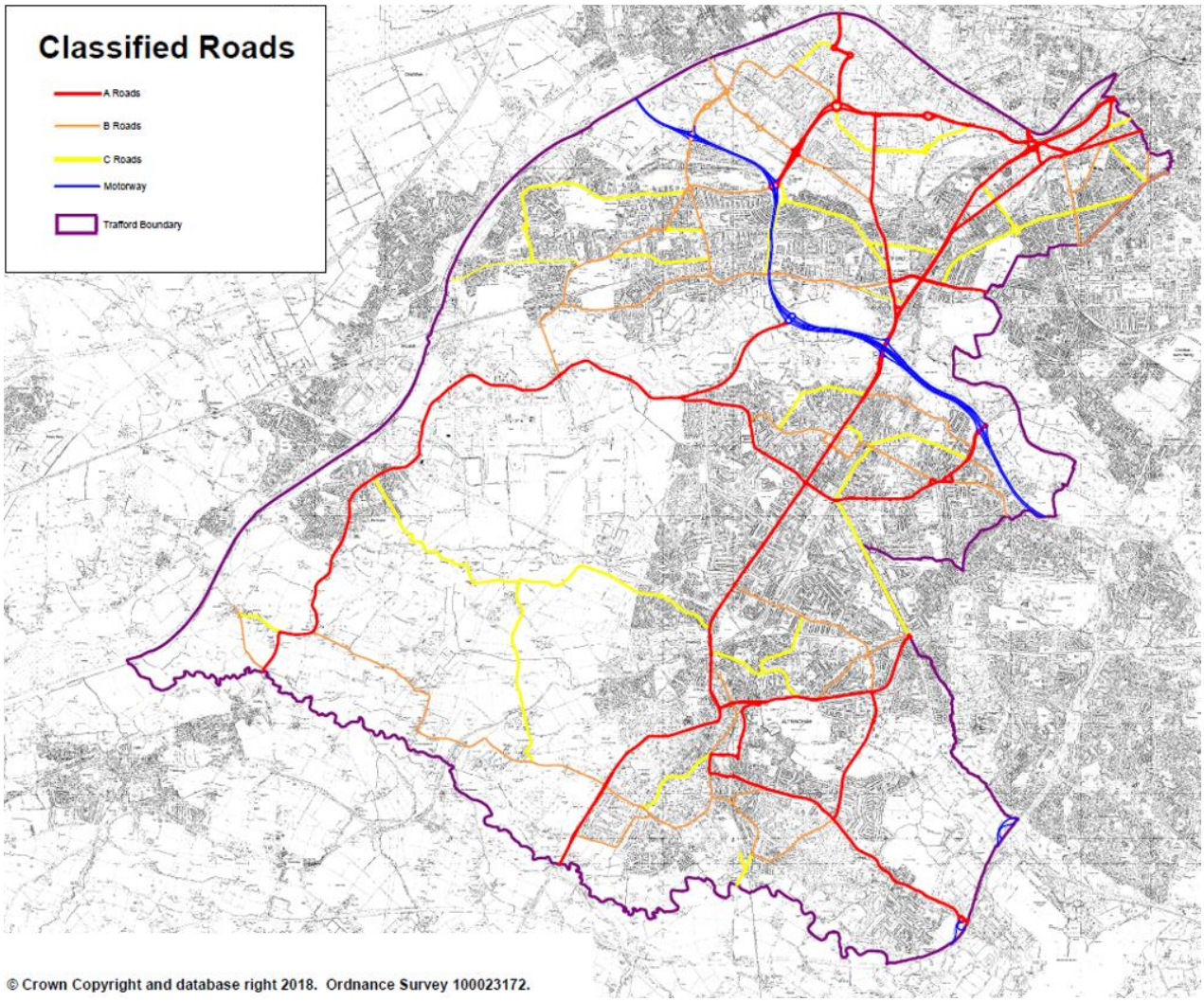
Asset Management Plan for Roads

The Roads Asset

The roads assets or carriageway asset is the largest and highest replacement value of all the highway infrastructure assets, whose primary function is to allow the safe and efficient passage of vehicles and cycles for residents and businesses.

Roads in Trafford are mostly of standard flexible bituminous construction. This method is a long-proven construction that provides a reliable, skid-resistant running surface, transfers vehicle loads effectively to the sub-soil and maintains structural integrity over many years, providing an optimal whole life cost solution. Trafford does however have several composite roads, constructed from a concrete base, and overlaid with bituminous material. Whilst this construction technique has some structural advantages it also presents problematic maintenance issues over time, due to uneven movement and settlement of the concrete slabs at the joints.

Roads are classified by the DfT based on their strategic importance, Motorways being the most strategically important, and in Trafford these are maintained by the government owned company National Highways. The rest of the roads network in Trafford is maintained by the Council. A map of the classified road network and the length of roads, by DfT classification, is shown below:



The Council is required to submit valuations for the highway infrastructure assets to government known as the Whole of Government Accounts. The last submission in 2019 valued the carriageway asset at £1,042,240,000 gross replacement cost. 2020 -22 have been impacted by Covid and therefore, DfT have not asked for WGA returns on highway matters.

Condition Assessment

Every road in Trafford receives a safety inspection at least annually and the more strategically important roads receive more frequent inspections. We also undertake a series of surveys as outlined earlier in this HIAMP to ascertain the condition of the carriageways.

All classified roads (A, B and C) condition is assessed using the nationally accredited SCANNER survey which identifies and measures several different defect types to produce an overall road condition indicator, ~~of~~ or RCI. These RCI results are placed into three condition bands:

Red roads in poor condition and likely to require maintenance within the next twelve months
Amber roads where some deterioration is apparent
Green roads in a good state of repair

Unclassified roads (U) are measured using a different national survey protocol know as Course Visual Inspections (CVI), which produces two condition bands:

Red roads in poor condition and likely to require maintenance within the next twelve months
Green roads in a reasonable state of repair

Asset Performance and Life Cycle Planning

Roads Condition

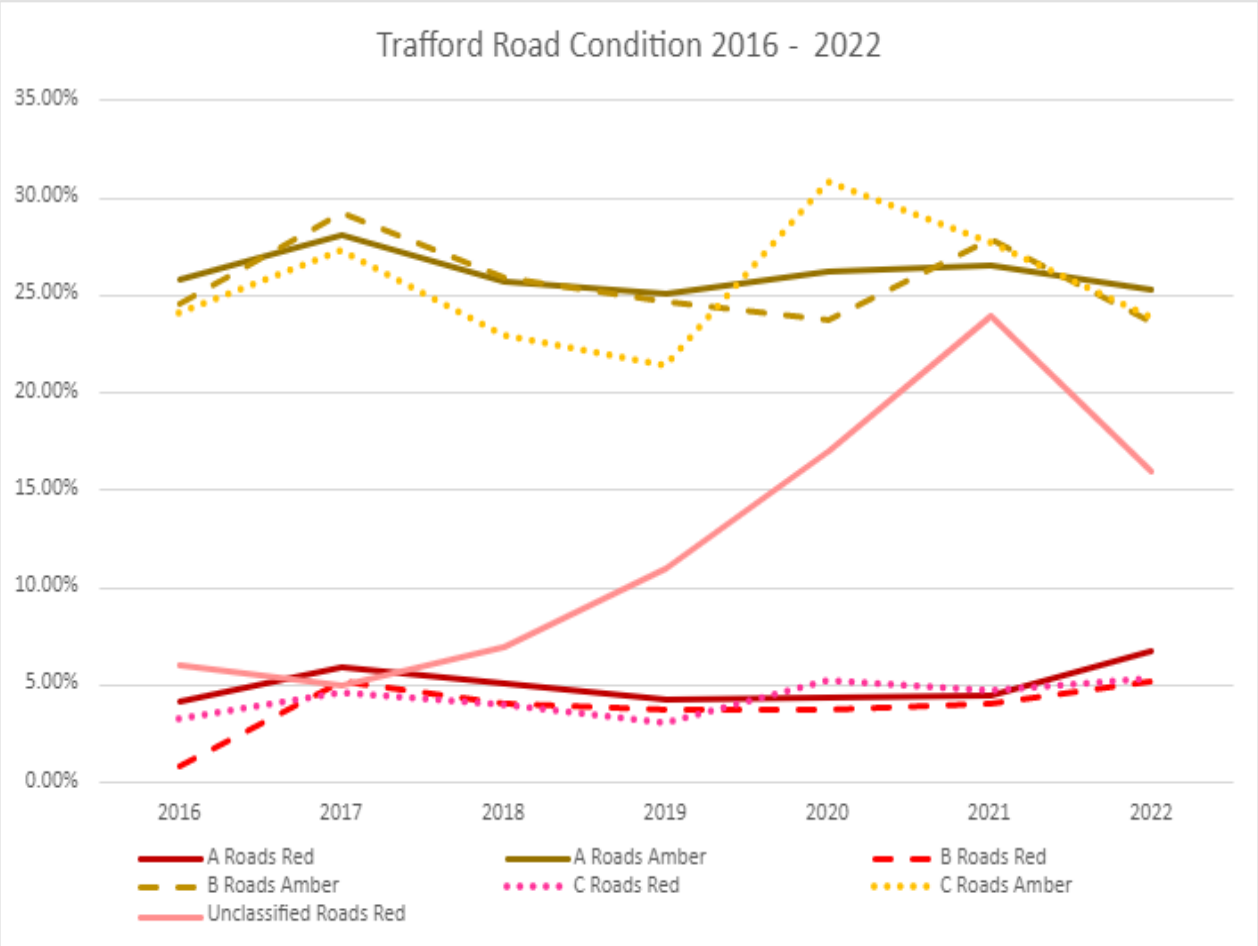
Results from the SCANNER and CVI surveys are fundamental to the asset management process, enabling us to have an accurate picture of the performance of the carriageway asset over several years. The results for the Trafford's Road network are shown below in both table and graph formats:

	A Roads		B Roads		C Roads		Unclassified Roads	
Year	Red	Amber	Red	Amber	Red	Amber	Red	Amber
2022	6.70%	25.30%	5.20%	23.60%	5.30%	23.90%	16.00%	N/A
2021	4.50%	26.50%	4.00%	27.90%	4.70%	27.70%	24.00%	N/A
2020	4.31%	26.22%	3.76%	23.70%	5.20%	30.80%	17.00%	N/A
2019	4.30%	25.10%	3.70%	24.70%	3.00%	21.40%	11.00%	N/A
2018	5.10%	25.70%	4.00%	25.90%	3.90%	22.90%	7.00%	N/A
2017	5.90%	28.10%	5.20%	29.20%	4.60%	27.30%	5.00%	N/A
2016	4.20%	25.80%	0.80%	4.60%	3.20%	24.10%	6.00%	N/A

As a comparator, figures from the DfT are available for up to and including 2022, as an average of all local highway authorities in England. For roads in the red condition band, these are;

- A Roads – 4%,
- B&C Roads – 6% and
- Unclassified Roads – 15%.

In 2022-23 Trafford are investing £6 million over 2 years on 'U' class network treatments, over and above the normal Capital investment, to stem the decline in the U class network. This has already had a notable impact on U road condition, as denoted in the graph below.

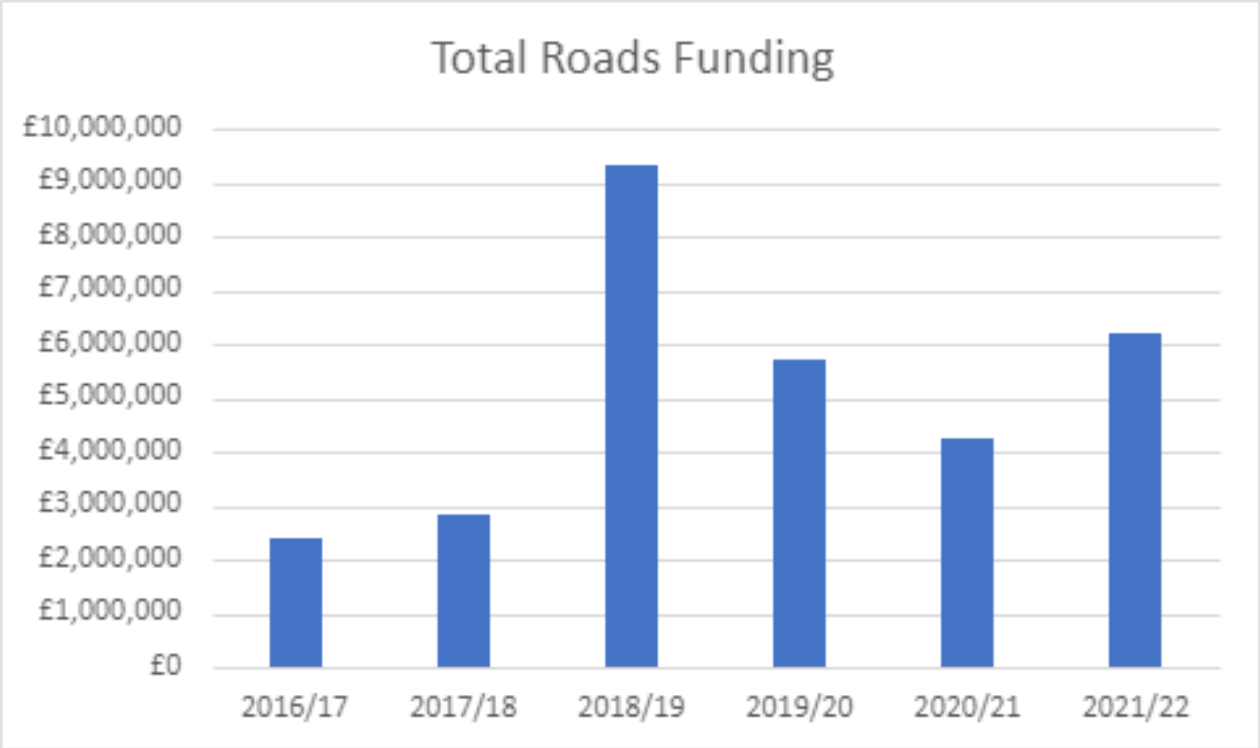


Road Condition Trends 2016 – 2022

Roads Investment

Before examining future investment scenarios in roads maintenance, it is important to compare the road condition trends with the historical asset investment ~~asset~~. This is a useful comparison over time; however, it should be remembered that as the unclassified network is surveyed on a 3 yearly UKPMS cycle * (i.e., each street is assessed once every 3 years) a direct correlation cannot be made between a one-off increase in investment and the road condition result the following year.

* Annual Safety inspections are undertaken on all streets annually but technical UKPMS CVI's are every three years.



Some of the above funding relates to other highway infrastructure assets such as a one-off investment in 2018/19 which was also used for drainage works. 2018/19 also saw an additional £1m secured with a Pothole bid submission.

Current Road Maintenance Requirements

Using the Horizons software, we assess the type of treatments, quantities, and values of those treatments to bring the current road network condition to the desired condition. This would be the condition from which longer term and cost effective, planned preventative maintenance programmes could be put into place, reducing the future cost of more extensive repairs or replacement. This one-off, catch-up cost is referred to as a **maintenance backlog**.

These treatments would be a combination of preventative treatments such as surface dressing which extends the life of the road and structural treatments, such as reconstruction of the bituminous layers. This maintenance requirement at current rates, is estimated to be over **£72 Million**. This figure is assessed each year and is based on the detailed results from the surveys and current market rates for the different treatments.

Using the Horizons software, we can also predict the amount of funding that would be required each year to keep the road condition at its current level. This is known as **steady state** funding. If we invest at steady state funding levels over any given period, of time, we will still effectively have the same maintenance backlog (plus inflation) at the end of this steady state funding programme. To remove the maintenance backlog would require additional investment above the steady state level. A lower amount of funding than the steady state funding level would result in an increasing maintenance backlog.

Roads Investment Scenarios

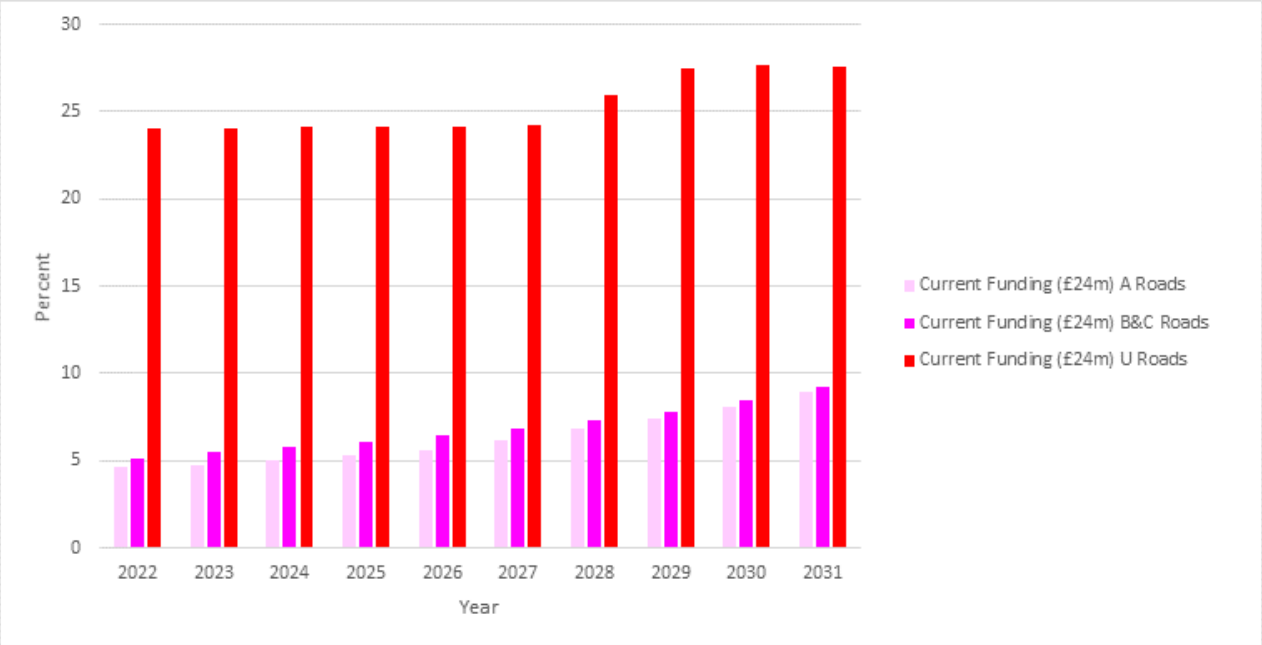
We can use the information to model several different investment scenarios and the effect of these on the future road condition. We have modelled two scenarios.

- A continuation of current funding levels (Approximately £2.4M each year/ 10-year programme)

- An increase in current funding levels to improve the condition of the unclassified road network (Approximately £6.4M / 10-year programme, required each year)

The two following graphs illustrate the effect of these investment scenarios on the proportion of carriageways in the red condition band.

Scenario 1 – Continuation at Current Funding Level



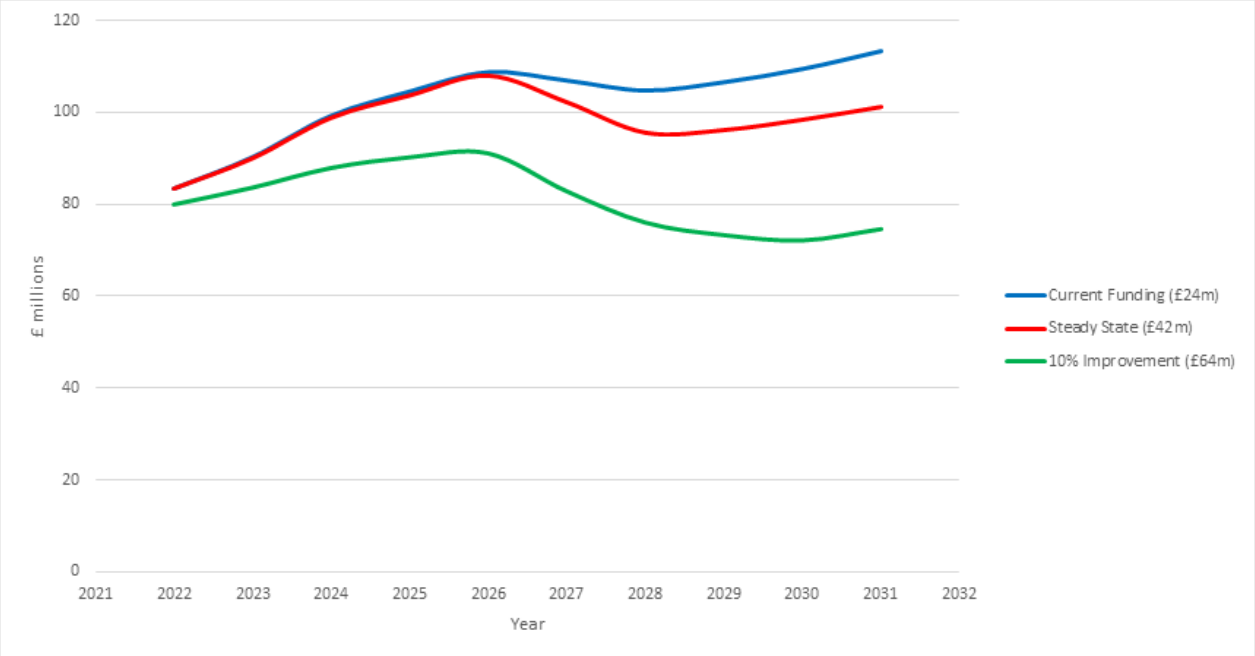
Roads investment at current funding levels - % in red condition band

Scenario 2 – Increased Funding Level model to Improve Unclassified Roads Condition

Increased investment in funding targeted at unclassified network – % in red condition band

Effect of Investment Scenarios on Maintenance Backlog

The following graph demonstrates the effect on the carriageway **maintenance backlog** on the two investment scenarios along with the funding profile required to keep the number of carriageways in red (poor) condition at the same level as current levels over the period (**steady state**). Note that due to modelled inflation, whilst the amount of maintenance required on the steady state profile remains constant over the period, the actual value of the backlog increases.



Effect on maintenance backlog for varying investment scenarios

Modelled Scenarios:

- Investment at current levels - £2.4M per year over 10 years = £24M total 10-year investment
- Investment required to keep the maintenance backlog at current levels (steady state) - £42M over 10 years = £4.2M per year
- Investment required to reduce the number of carriageways in the red (poor) condition band over the 10-year period - £64m = £6.4M per year

Asset Management Plan for Footways and Cycleways

The Footways and Cycleways Asset

Footways form part of the highway and usually run alongside the carriageway of a road. Their primary purpose is for the safe passage of pedestrians to make their journeys.

Cycleways are routes specifically designated for bicycle traffic. They usually form part of the highway or may form a separate way. Their primary function is for the safe passage of bicycle users to make their journeys.

It should be noted that Public Rights of Way (PRoW) include footpaths and bridleways and are managed separately outside the scope of the HIAMP.

Provision and maintenance of the footway and cycleway assets is growing in emphasis, as active travel modes are encouraged to help reduce the effects of climate change on the environment. It is likely that active travel networks will continue to be developed and the effects of this on highways asset management needs to be accounted for in this, and in future HIAMP's.

Approximately 80% of footways are of standard bituminous construction, but only designed to be able to withstand the occasional load from light vehicles at crossings. The remaining 20% of footways are mainly of modular construction, comprising precast concrete modules (flags or blocks) laid on a sand course.

To adopt a risk-based approach as recommended by the code of practice *Well-managed Highway Infrastructure* (WMHI), we have split the footway network into the hierarchies detailed in the table below:

Hierarchy	Category	Description	Length
1	Primary Walking Routes	Busy urban shopping and business areas and main pedestrian routes.	19.793 km
2	Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.	12.572 km
3	Link Footways	Linking local access footways through urban areas and busy rural footways.	1,190.919 km
4	Local Access Footways	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.	18.736 km
	Cycletrack	Not forming part of the footway or carriageway	12.95 km
		Total	**1,242.02 km**

Condition Assessment

Every footway and cycleway receive a safety inspection annually, and some are inspected more frequently due to their strategic importance or usage with reference to the above hierarchy. These inspections are carried out to ensure that any defects in the footway or cycleway, that could present a hazard to users, are identified for repair.

All footways are also surveyed to assess their condition. These surveys conform to national standards and are known as Footway Network Surveys (FNS). These are walked surveys designed to support and develop a condition-based, prioritised programme of schemes for footways.

Like the carriageway condition surveys, the information from the FNS is input into the Horizons software, which is then able to provide an overall condition indicator but in eight condition bands: condition index 0 (As New) to condition index 7 (Structurally Unsound).

For the purposes of clarity for this report, these have been grouped together into four condition level bands Green to Red, as follows:

- **Condition level 1**: As New (AN) – Condition Index 0
- **Condition level 2**: Aesthetically Impaired (AI) – Condition Index 1
- **Condition level 3**: Functionally Impaired (FI) - Condition Index 2 to 4
- **Condition level 4**: Structurally Unsound (SU) – Condition Index 5 to 7

Footways have a different deterioration profile to carriageways because they do not suffer the same stresses. They do not, therefore require the same condition assessment cycle to provide an accurate deterioration model. The whole Trafford footway network was surveyed between 2009/10 and again in 2017/18. The borough has now been split into five survey areas and the FNS is undertaken on a rolling 5-year cycle.

In addition to the FNS and safety inspections, the highway inspectors also record a basic condition score for the footways during the annual safety inspection. This annual engineering survey result is used to supplement the information from the FNS assessment in identifying and prioritising footway maintenance schemes.

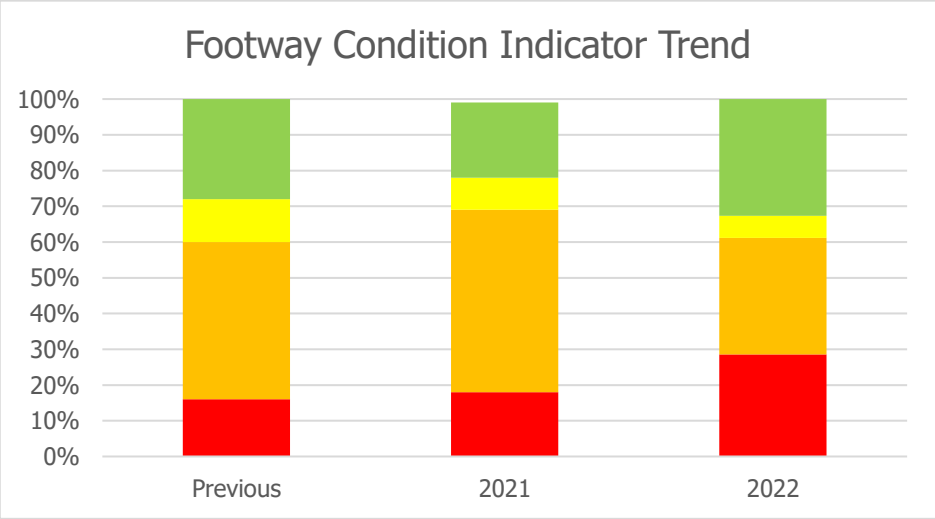
Asset Performance and Life Cycle Planning

Footway Condition

The latest assessed footway condition is shown in the following table:

	Footway Hierarchy				
Condition Band	**1**	**2**	**3**	**4**	**Total Network**
Red - SU	13.9%	26.9%	29.1%	16.8%	28.6%
Amber - FI	21.4%	33.1%	33.0%	16.8%	32.6%
Yellow - AI	9.0%	9.1%	5.8%	25.1%	6.1%
Green - AN	55.6%	30.9%	32.2%	41.3%	32.7%

For comparison the current assessed full footway network condition is shown alongside the previously assessed condition in the following graph:



Footway Investment

As our asset management approach has developed over the lifetime of the HIAMP, we are now able to provide much improved modelling capabilities to better understand the level of investment required to achieve a steady state funding profile.

It has been difficult in the past to make a robust case for further investment in the footway asset, for several reasons:

- Structurally, footways have a longer life than carriageways as they are not subjected to the constant flexing from vehicle loads, although flagged footways may suffer in parts from heavy vehicle overrun.
- The risk-based approach to maintenance has favoured investment towards carriageways due to the higher incidence of third-party claims and the need to reduce this risk.
- The introduction of an asset management approach commenced with carriageways as the largest asset and the learning from this is now being developed for footways.
- The overall condition of a footway is often improved by reactive maintenance repairs identified through the safety inspections.
- Early modelling of investment scenarios does not produce the same level of investment return for footways as can be demonstrated for carriageways.

The available budget for planned preventative or structural footway works has in recent years averaged approximately £150,000 per annum. In 2022/23 Trafford are to invest £400,000 in footways to reduce the rise in the length of red and amber conditions on the network. The whole footway budget is generally targeted towards the higher category footways where the higher footfall and increased risk provides the maximum cost / benefit ratio return.

Current Maintenance Requirements

As the amount of survey data available for footway condition improves, we will be able to assess the type of treatments, amount, and value of those treatments more accurately, to bring all of the current footway network condition the desired standard.

For example, on bituminous footways the main preventative treatment to prolong the life would be the application of a thin bitumen slurry seal, which seals the surface and prevents the breakdown of existing bitumen through the action of ultraviolet light and other weather damage. Structurally unsound footways are likely to require full replacement of the bituminous layers or a thin surface course overlay where possible.

Treatments for modular footways are likely to require replacement of damaged blocks or flags and relaying of sunken and uneven flags / blocks. Concrete footways are likely to require replacement or repair to damaged or cracked sections.

As the model is still being developed, we are currently unable to provide an accurate assessment of the maintenance backlog, but this will be made available to assist with future investment decisions and scheme selection.

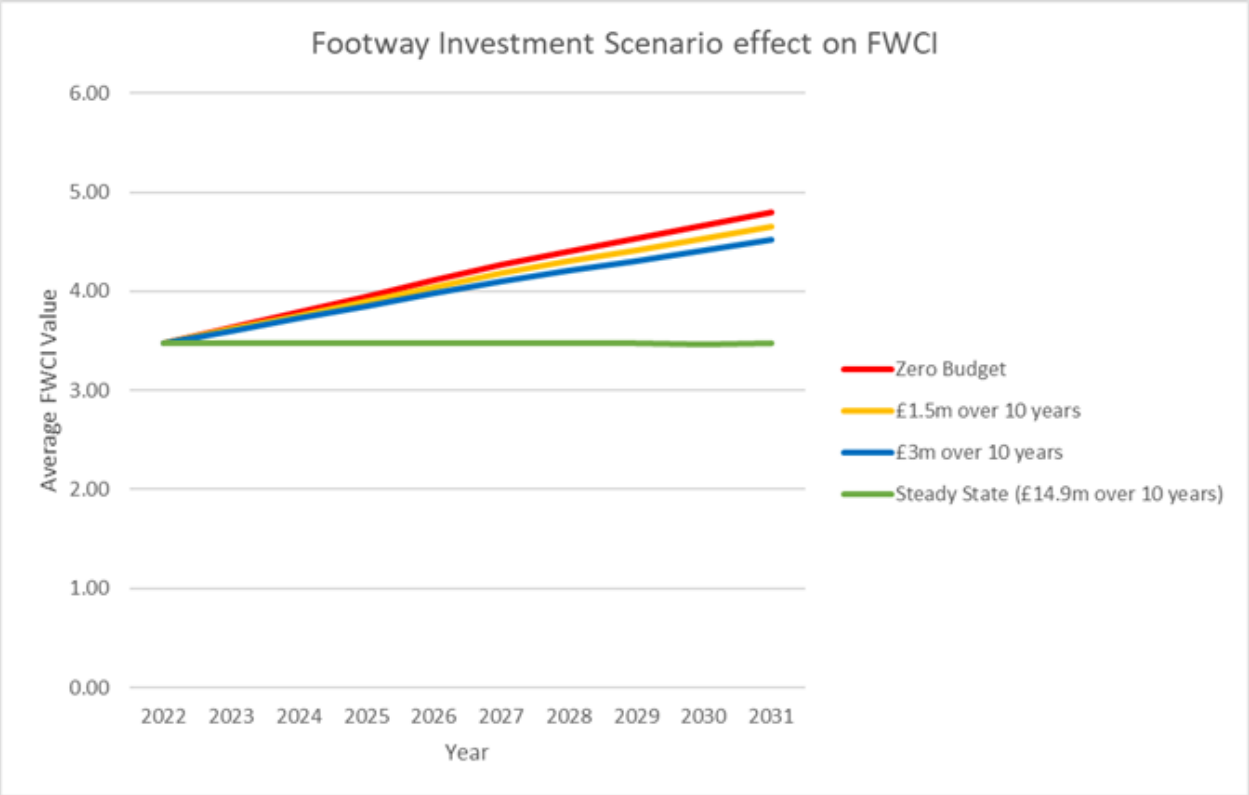
Investment Scenarios

Using the survey data and the Horizons software, we have modelled various investment scenarios and the predicted effect of these on the future footway network condition.

We have modelled four scenarios:

- Zero budget (No planned programme of improvement works, reactive repairs only)
- £150k per year over 10 years in planned improvement work = £1.5 Million total
- £300k per year over 10 years in planned improvement works = £3.0 Million total
- £1.49M per year over 10 years in planned improvement works to maintain the overall footway condition in the current condition (Steady State) = £14.9 Million total

The following graph illustrates the effect of these different investment scenarios on the predicted condition of the full footway network;



Cycleways

Work will continue developing the inventory and condition survey information for cycleways. At present we are unable to provide the same level of lifecycle planning for the cycleway asset as for the footway or carriageway asset. Cycleway information is enveloped in the footway and carriageway survey work and criteria of assessment, where cycleways already form part of these assets. The increase in usage of the active travel choice has increased the need to isolate the cycleway risk modelling and provide a further focused inspection regime based on risk and therefore long term its own investment works programme as we move forward. One Greater Manchester wide initiative is The Bee Network.

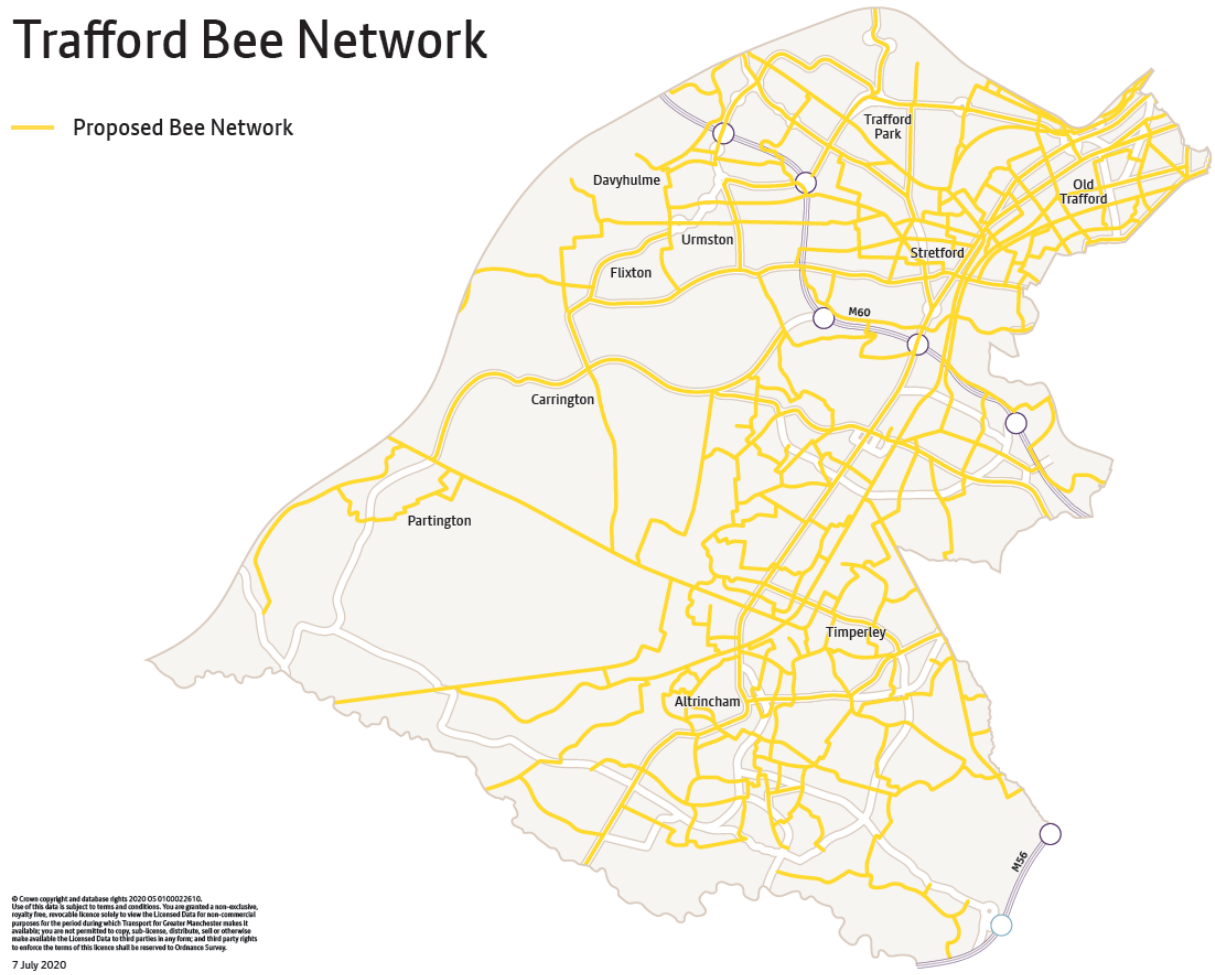
The Bee Network proposal is a vision to make Greater Manchester an easier place for people to get around on foot or by bike. The plan consists of more than 1,800 miles of routes and will be the largest joined-up system of walking and cycling networks in the UK.

The original vision for the Bee Network was unveiled in 2018 by former Cycling and Walking Commissioner Chris Boardman as a 10-year, £1.5 billion plan to create 1,800 miles of routes and 2,400 new crossings connecting every neighbourhood, school, high street, and public transport hub in the city-region. Since then, the Bee Network has evolved and it now represents a vision for a fully integrated London-style transport system which will join together buses, trams, cycling, walking and rail.

The plan is to revolutionise travel across the city-region, making active travel the number one choice for travelling to work, to school and to the shops. But we can only do this if trips by foot or by bike are a safe and pleasant experience.

That means we hold ourselves to the highest standards for quality – routes that are fit for a 12-year-old, a double buggy, or a wheelchair user. We are delivering fully segregated cycling and walking routes on busy roads, quality signage and crossings on quieter routes and creating areas where people are prioritised to make streets safer and quieter.

With this greater focus on active travel facilities and corridors, our inspection, survey, and maintenance regimes will come under further scrutiny. Therefore, our management of highways that align with the Bee Network must adapt to the needs and changes this brings.



Asset Management Plan for Highway Lighting

The Asset

Highway lighting forms an important part of the highway asset of Trafford. Whilst there is no legal obligation on the Council to provide highway lighting it is greatly valued by our stakeholders in helping to make journeys safer at night and contributing to community safety. The provision of effective street lighting is therefore a key component in the delivery of a safe, secure, and prosperous Borough.

Street lighting enables safe use of the highway for road users and supports strong and safe communities. It represents a key part of the street scene, can provide an area with a strong visual identity, and support economic growth objectives. However, it is also a significant consumer of energy and contributor to carbon emissions and light pollution.

Most of the asset group consists of over 27,000 street lighting columns, but also includes illuminated sign poles, bollards and belisha beacons. We are also responsible for some sections of underground electrical supply cabling to the columns, where it is not possible to directly connect to the network supply.
Our street lighting stock varies in age from recently installed lighting columns to cast iron 'gas conversion' columns on residential roads, which can be older than fifty years old.

Asset	Quantity	Estimated Value (The cost of a like for like replacement)
Street Lighting	Lighting Columns – 25,130 Illuminated bollards – 680 Illuminated signs – 2323 Feeder Pillar 80 identified	£70,532,500

Known Highway Lighting Assets: May 2023

As part of the Council's carbon reduction programme and to reduce energy costs, there has been a major programme to replace the entire stock of sodium (SOX and SON) lighting, changing them to new LED lanterns. This programme was substantially completed in June 2017, with approximately 23,000 new LED lanterns being fitted.

The new LED lanterns enable monitoring via a Central Management System (CMS) with lighting levels varied between the hours of 10pm and 7am on multiple dimming schedules, for the optimum balance of lighting provision and energy reduction. The CMS also enables automatic fault reporting which delivers quicker identification and rectification and reduces the need for night-time driven inspections.

The combined benefits of LED's operating at a much lower wattage than the sodium lamps, together with the ability to intelligently reduce lighting levels, has resulted in reduced energy consumption and a reduced carbon footprint. As such, both interventions are a major contributor to the Council's carbon reduction programme.

An additional benefit of the move to LED is that the new lanterns have a much longer expected lifespan of approximately 25 years, as opposed to the sodium lamps average lifespan of 4 years resulting in a much-reduced number of maintenance visits.

Approximately 2,000 SON/SOX lanterns are still in operation that would benefit for replacement to LED. These need to remain under review to see if they reach the criteria for replacement to LED. The criteria for selection take account of efficiency, safety, and conservation.

Around 900 cast iron columns remain in conservation/sensitive areas and need further consideration when being replaced due to their ornate nature. Consideration will be given for these inefficient assets to be replaced by LED in forthcoming capital programmes.

Additionally, these columns present challenges concerning their structural integrity, and these will be considered as part of the column replacement programme.

Condition Assessment and Inspections

A regime of regular inspection is required to ensure that the lighting apparatus does not present any potential hazards to the highway users and to keep a record of the condition. The structural inspection of all lighting columns is a key activity, as many of the street lighting columns are older than their expected design life of 30 years.

The Institute of Lighting Professionals has produced a guidance note '*GN22 Asset Management Toolkit: Minor Structures* (ATOMS)', to assist the relevant authorities in the asset management of minor structures including street lighting columns.

This guidance note replaced the former Technical Report TR22 in 2019 and recommends changing from reliance on specific guidance and recommendations in the previous codes, to a risk-based approach determined by each asset owner.

This approach also aligns with the recommended risk-based approach in the Code of Practice, Well Managed Highway Infrastructure.

In accordance with the recommendations of GN22, there are two forms of structural assessment undertaken on our street lighting asset:

1. Visual inspections of the structural condition of lighting columns
2. A structural test that is to be completed at set intervals based upon the history of the asset

Visual inspections of the structural condition of lighting columns are carried out to coincide with bulk lamp replacement. The operative is asked to comment on the condition of the column using a severity scale of 1 to 5 observed over an extent scale of A to E.

A1 implies that the item is visually in excellent condition and no action is necessary, whereas E5 implies that there appears to be a significant problem. During these inspections a hammer test is also undertaken, and any columns classed as being in poor condition are noted for inclusion in the annual programme of non-destructive structural testing using x-rays.

The condition of each column in the Borough has been assessed and allocated a condition-based banding with a number from 1 to 5; 1 being a relatively new column with several years life expectancy remaining, to a column marked with a score of 5, which identifies that the column requires immediate removal or making safe.

The inspection/replacement intervals in relation to the condition scoring are as set out in the Table below:

Condition Band		Condition
1	Green	As New
2	Green Vis	Recommend further inspection between 36 months and 72 months
3	Amber	Recommend further inspection within 36 months
4	Red upg	Further inspection at the earliest opportunity. Removal likely in 12 – 24 weeks
5	Red	Non-functional / failed

Additional ad hoc condition reviews are carried out by maintenance operatives, who through annual or two-yearly routine maintenance visits, or day to day on-going maintenance visits, assess the condition of the column being visited and assign it one of the condition bands. The latter would for example identify a particular road on which all the columns are of the same age, style and material and therefore can be considered as being of the same condition, thus requiring reconsideration of their classification

Electrical inspections and night-time inspections on main roads are also undertaken. During these inspections additional information may be recorded to supplement or update the condition data.

The results of these inspections are captured in our asset management system and the data analysed to determine the condition of the asset stock. This information is used to identify the maintenance and repair works required for each individual asset.

Asset Performance and Life Cycle Planning

Column Condition

Visual Inspections

Whilst the visual inspection is vital in formulating the structural testing programme there is not sufficient consistency in its current form to be used as a robust tool for determining the overall condition of the street lighting stock.

Structural Testing

Results from the structural testing programmes is provided below for information on the work that has been undertaken to ensure the safety of the street lighting asset and has been used to formulate a detailed column replacement programme.

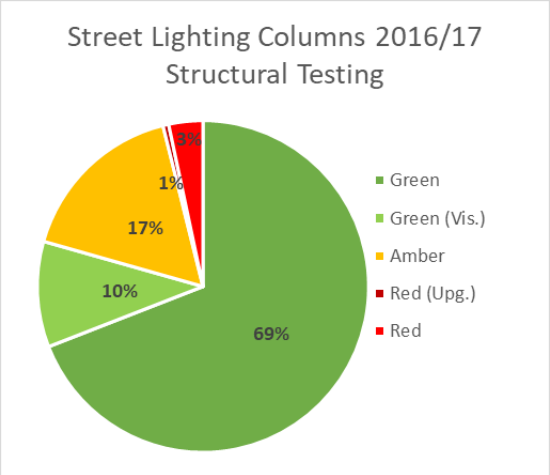
Whilst the initial programme covered the full steel column lighting stock, subsequent testing programmes were targeted on those columns identified from visual inspection, or previous structural testing as requiring further testing. The later testing programmes did not include columns selected randomly which may be in good condition or indeed columns which clearly needed replacement and were later removed. **These results should not therefore, be used to monitor the overall condition of the street lighting stock.**

Structural testing can be an expensive and time-consuming process, particularly given the number of street lighting columns potentially involved. It is important that any testing is carried out as economically as possible. It is therefore essential that only columns suspected of needing attention are targeted for inspection on a priority basis. This is the only way to ensure that limited budgets can be used to provide additional lighting or maintain existing lighting, rather than spending it on inspecting otherwise sound columns

2016/17 Survey

In 2016/17 a structural survey of all the street lighting stock was undertaken. This provided a complete baseline for future Structural Inspections. The results of which are shown below:

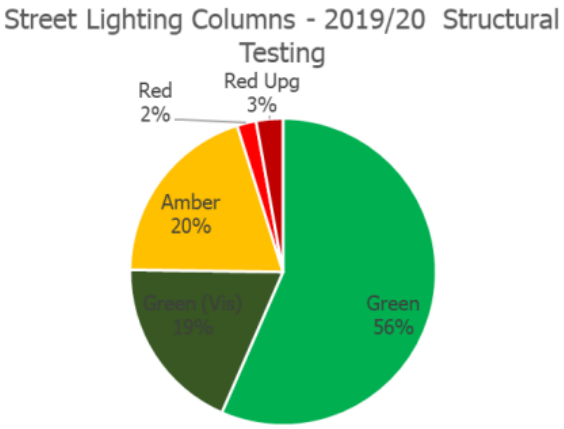
Structural Condition	Columns Tested	% of Columns Tested
Green	16255	69%
Green Vis	2423	10%
Amber	3935	17%
Red upg	131	1%
Red	783	3%
Total	23527	



2019/20 Survey

To compliment the LED replacement programme structural testing was undertaken across the non-LED apparatus in 2019/20.

Structural Condition	Columns Tested	% of Columns Tested
Green	6,869	56%
Green Vis	2,269	19%
Amber	2,420	20%
Red upg	344	3%
Red	245	2%
Total	12,147	

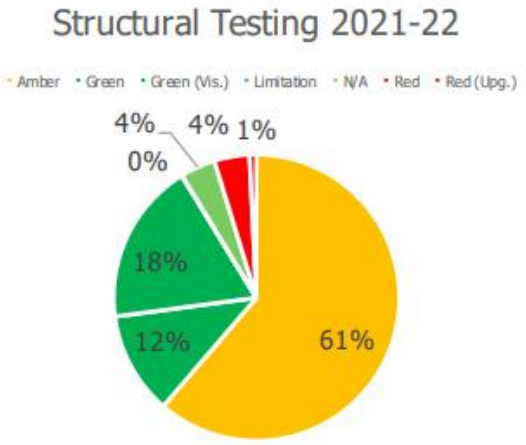


2021 Survey

The latest programme of structural testing was completed in October 2021 and the results are shown below. It should be noted that this cannot be used as a comparator for overall condition as it is not a statistically representative sample of the overall street lighting stock. It is focused on the condition baseline established in 2017, and the trigger is based on the condition status.

Assessment schedules and inspection types are based on the actual condition. During 2021, assessment was focussed only on the columns that were recorded, in 2017, as an "Amber" status, as suggested in GN22 (and its predecessor TR22).

Structural Condition	Columns Tested	% of Columns Tested
Green	316	12%
Green Vis	501	18%
Amber	1674	61%
Red upg	21	1%
Red	109	4%
Not Tested / Limitation	109	4%
Total	2730	



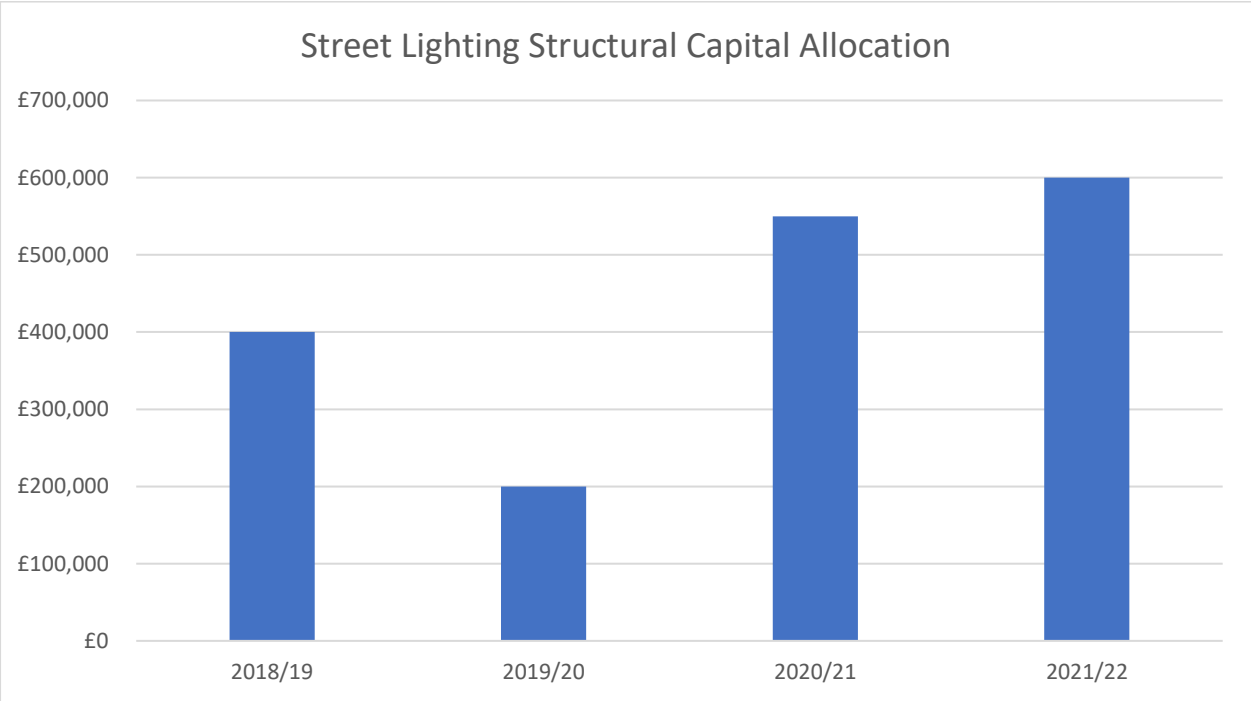
Highway Lighting Investment

The annual street lighting capital programme is used to fund the replacement of columns which have reached the end of their useful life, such as concrete columns with bracket arms and / or cracking; cast iron columns with failing bracket arms; or the older stock of steel lighting columns with excessive metal loss at ground level. Addressing problems with older existing street lighting underground cabling systems which are failing or have failed completely is also covered through the capital programme

The prioritising of the annual capital replacement programme is ordered by reference to the condition scoring and structural testing. The draft programme is co-ordinated with the highway maintenance programme to accelerate column replacement works where the footways are to be resurfaced to avoid reinstatements in relatively newly laid surfacing.

The capital allocations to manage the structural condition of the highway lighting asset has varied to try and meet the demand. The allocations have not only included the structural testing and replacement of columns but also investment in replacement of illuminated sign poles and other electrical street furniture.

The specific allocations for structural column testing and replacement are shown below:



Current Maintenance Requirements

Assessment of performance and lifecycle planning for the street lighting assets is different to carriageways and footways. These assets continue to operate safely in a deteriorated condition, and it is possible to apply differing levels of treatment throughout the lifecycle to restore the condition of the carriageway and extend its life, without the need for total replacement. This isn't the case with street lighting assets. There are some preventative treatments that may be applied, such as painting, but no preventative treatment programme over the lifecycle will significantly extend the structural life of the columns. The cost of etching /treating and painting remains prohibitive and requires a constant programme of repainting. We now only use galvanised steel finishes to reduce ongoing maintenance costs with painting.

Once a column has been found to be structurally unsound it must be removed to ensure the safety of road users and replacing a column before it has reached the end of its life does not offer the optimum value for money. Results from surveys and visual inspections are therefore used to establish an annual programme of column replacement which helps predict and optimise the investment required.

Investment Forecast

To assess the likely investment required in future years, results from past structural testing programmes and data from visual surveys has been used to predict the likely number of assets that will require replacement in the relevant year. Data from the surveys helps predict the number of columns which will need to be tested (those in the amber category) and the number likely to fall into the red category needing replacement.

If the available budget is insufficient to meet the demand, columns falling into the worst condition category would need to be removed.

Several street lighting assets were not included in the LED replacement and column testing programme. These include 963 cast iron lighting columns, which will need replacement in the future due to the obsolete light fittings, age, and poor overall condition. 1101 Cosmopolitan and 718 Sodium (SON) type lanterns will also need to be replaced in the near future with the associated column testing, many of these are also fixed on concrete columns which have reached or are nearing end of life.

Asset Type	2022/23	2023/24	2024/25	2025/26
Street Lighting Columns	£0.60	£0.60	£0.50	£0.50
Cast Iron Replacement	£0.65	£0.65	£0.65	£0.65
SON & Cosmopolitan	£1.26	£1.26	£1.26	£1.26
Illuminated Sign Poles	£0.50	£0.50	£0.50	£0.50
Total (£m)	£3.01	£3.01	£2.91	£2.91

Forecast budget, based on 2022 costs, required to replace all street lighting assets requiring replacement as identified by the structural testing and inspection programme (£millions)

For the purpose of the capital projection, the Cosmopolitan, Cast Iron and Sodium full replacement programmes have been spread over the 4-year period shown in the above table. All values are derived from current market rates which are currently volatile due to increasing costs of raw materials and general construction costs.

Illuminated Signs and Bollards

In accordance with the Traffic Signs, Regulations and General Directions 2016, some signs are no longer required to be illuminated. Where it is safe and appropriate to do so, the adopted strategy is to replace defective posts and signs with non-illuminated signs. Where it is not, the affected signs are gradually replaced with LED luminaires, which provides a positive impact on energy efficiency. Similarly, any illuminated bollards that reach the end of their useful life or have been damaged are replaced with non-illuminated reflective bollards.

In 2019/20, 392 illuminated sign poles (12% of total stock) were identified as requiring replacement. The programme was extended to run over a 2-year period in line with available funding. 163 poles (5% of total stock) were replaced in 2020/21 with a further 229 (7%) were scheduled for replacement in the financial year 2021/22.

Asset Management Plan for Highway Drainage

The Asset

The primary function of the highway drainage assets is;

- Removal of surface water from the highway to maintain safety for road users and prevent nuisance.
- Minimisation of surface water runoff across the highway
- Effective removal of sub-surface water to protect the structural integrity of the highway

The drainage assets include some visible assets such as road and footway gullies, chambers, manholes and balancing ponds, but most assets are buried such as pipework, culverts, and soakaways.

The highway drainage asset does not carry any foul water drainage. This is carried over a separate network which is maintained by the local water utility company.

Our drainage asset is an ageing infrastructure. Much of it was installed over a hundred years ago and is still in service, with renewal only taking place over the intervening years, either when the infrastructure has become damaged, or when highway improvements have taken place.

The nature of the buried asset and the costs of survey means that we do not have a reliable complete inventory of all the drainage assets. The inspection and cleansing programmes have enabled the compilation of an inventory for the gullies with 40,638 in operation. Like most highway assets this number varies as new developments are adopted and some gullies become obsolete following changes in the highway network.

Drainage assets are not currently required to be valued separately for the WGA calculation, but an effective value is included in the calculations for the highway asset value.

Condition Assessment and Inspections

Maintaining the drainage assets is a continuous activity and whilst the deterioration profile is not straightforward to predict, several known issues influence the requirements for future maintenance. These include damage from utility operations, tree roots, flooding events, ground settlement and general silting up of the assets.

Cost effective measurement of the condition of the drainage assets is difficult, but data on the effective operation of them is obtained through regular inspections, routine operations, and reactive works to remedy issues.

- **Inspections**

  Condition of the operation of gullies is recorded during the programmed highway safety inspections. Any gullies that are full of silt or damaged are recorded on the Confirm asset management system and considered for repair or further investigation.

- **Operations**

  During the routine cleansing operation of road gullies, information is recorded about the silt levels in the gully, any issues with the gully connection, and any damage to the cover and frame or gully pot. At the end of the cleaning process water is added to the pot and observations recorded about the effectiveness of the flow through the gully connection.

- **Reactive Maintenance**

  Reactive inspections are undertaken following reports of damage, excessive surface water or flooding related issues. These may generate ad-hoc and emergency works, for example, cleaning blocked drains that are causing the road to flood and repairing collapsed road drains.

The costs of surveying pipework using CCTV can be very expensive and our current practice is to identify the requirement for further investigations at known hotspots, where significant flooding events occur, to help us understand the causes and identify potential solutions. It is important for us to understand the size and condition of our surface water network, considering the whole catchment, as the solution to a specific problem is often in a different location to the site of the flooding itself, usually an upstream/ downstream blockage caused by collapse, tree root ingress or third-party works that have caused damage.

As Lead Local Flood Authority (LLFA) Trafford have a register of flood risk assets including watercourses which helps build an overall picture for identifying and investigating flooding hotspots. It can also be the case, in a fully functioning system that its capacity is insufficient to cope with sustained periods of heavy rain. In these circumstances the capacity of our drainage systems against predicted future rainfall can be investigated to directing funding and technical expertise in the right areas.

Asset Performance and Life Cycle Planning

Without the ability to accurately predict the deterioration of the drainage assets, prioritisation of available budget is undertaken using the following considerations, ~~are used~~ in assessing the level of risk:

- The level of risk to road users. This considers the speed of the road, location of the surface water e.g., on a bend, increased potential to freeze in winter.
- The potential level of disruption, the hierarchy of the road, the volume and type of traffic using the road and the strategic importance (e.g., key Route or Resilient Network)
- Whether residential or business properties are likely to be affected by the surface water

This method in line with the guidance in *Well Managed Highway Infrastructure* (WMHI), provides the most effective way for all local authorities to make the most of limited budgets.

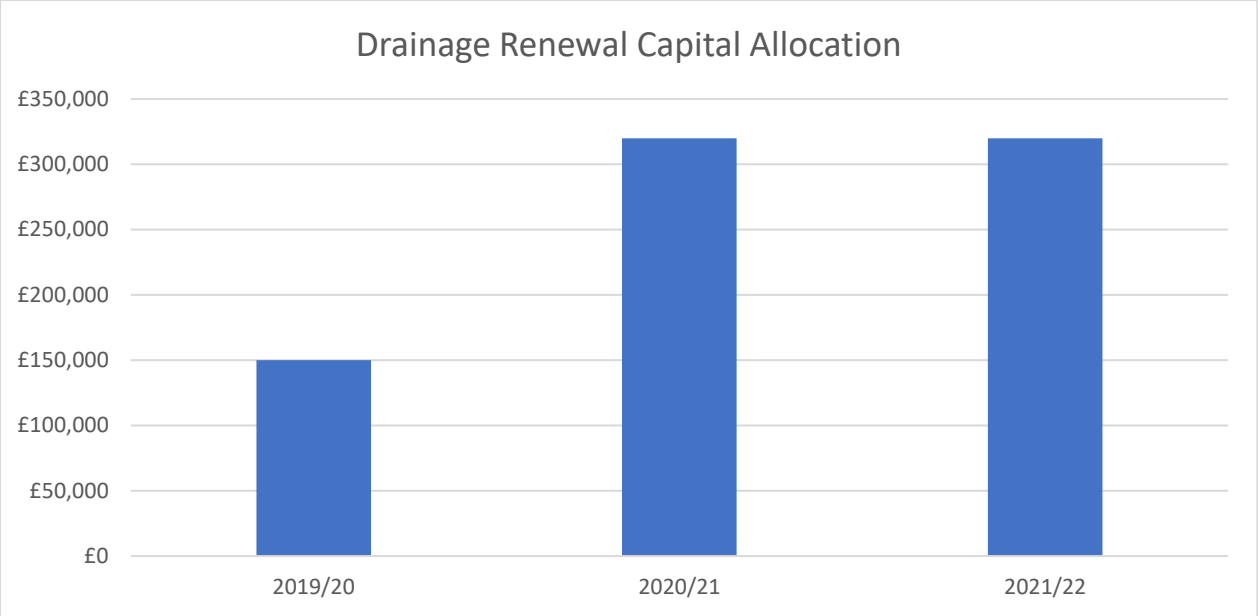
We utilise condition data from a network wide inspection and cleansing programme to form a maintenance regime which takes account of how drainage assets perform over a period of time, in respect of their capacity, location and any other localised conditions. We combine this information with historical information from the Environment Agency on known surface water flooding to prioritise our work programme of drainage investigation and renewal.

We continue to develop a system where assets such as road gullies are placed on a matrix, based upon the severity and the frequency with which their condition changes i.e., how often and at what rate the silt level rises within the gully chamber. This informs and refines our regime where some assets are inspected and maintained more, or less, frequently than others based upon on the relative risk of their becoming a hazard to highway users or residents.

Drainage Renewal Investment

Due to the difficulty of accurate assessment of the highway drainage assets, and as most of the asset is out of sight, there has been a long-standing, historical lack of investment in the infrastructure. Increased rainfall and flooding events due to climate change has placed greater emphasis nationally on the need to ensure that this essential asset receives a greater share of available funding in future allocations and grant applications.

The chart below summarises the recent level of capital investment into structural renewal of damaged or end of life drainage assets.



Investment Forecast

Effective lifecycle modelling would require full knowledge of the assets and a deterioration model. At present the savings from a lifecycle planning approach would not justify the level of investment required to undertake comprehensive condition surveys on the below ground assets. Instead, the adopted strategy outlined previously will, over time enable a more informed assessment of future investment needs.

Asset Management Plan for Structures

The Asset

The structures asset often provides essential links in the highway network, which if broken can have a disproportionate effect on the operation of the highway network. Their primary function is to provide structural support for the highway, and they comprise a variety of asset types including, road bridges, footbridges, retaining walls, culverts and some other specialist structures associated with use of the highway, such as gantries and high mast lighting.

Structures Asset Type	Quantity
Road Bridges	62
Footbridges	39
Culverts	51
Subways	10
Retaining Walls	12
Other structures	4
Total	**178**

In 2022, the Gross Replacement Cost (GRC) of the structures asset was valued at £378,986,972.

Highway structures often have complex construction with numerous and varied elements. They also vary in type and age from culverts, retaining walls and modern structural concrete, to historic masonry arch bridges. This large variety of age and construction makes nationally comparable condition and deterioration modelling problematic. However, there is national guidance which prescribes methods of assessing the condition and remaining life of the structures.

All structures, irrespective of their type and structural form, deteriorate over time. Each structure is made up of many individual components that deteriorate at different rates and to different extents. It is therefore impractical to consider the deterioration of a structural asset in its entirety for asset management purposes, but instead to consider specific common components of structures across the Trafford network.

If these are then managed and maintained appropriately, it will minimise the deterioration of the whole structures asset, as deterioration of these components leads to the majority of other maintenance issues either directly or indirectly.

Condition Assessment and Inspections

All highway structures are subject to planned inspections, to ensure safety and to collate and retain information regarding the condition of the existing structures stock. An effective inspection regime is essential to providing key condition data, against which performance can be measured and future predictions can be made.

The inspection regime fulfils three main objectives:

- to check on the current condition and ensure that the highway structures stock is safe for use and fit for purpose
- to provide the condition information required to assess the future maintenance requirements and support the lifecycle planning process

- to compile and maintain an inventory of all the highway structures stock

Inspections are undertaken in accordance with DMRB Standard CS 450 'Inspection for Highway Structures'. There are two main types of planned inspections.

- **General inspections** (GIs) are usually undertaken not more than 2 years after the previous GI or Principal Inspection. They comprise a visual examination of all parts of the structure that can be inspected without the need for special access or traffic management arrangements. The GI is also used to verify the principal inventory data held for the structure.
- **Principal inspections** (PIs) are usually undertaken every 6 years unless a risk assessment has determined an alternative interval. Principal Inspections comprise a close examination, within touching distance, of all accessible parts of the structure. Access and traffic management arrangements are made to enable close inspection of all parts of the structure.

In addition,

- **Special inspections** are undertaken when an issue requiring further investigation has been identified, or inspection of a particular element is beyond the requirements of the GI and PI regime but could also include inspection following a bridge strike ~~has~~ having taken place or a flooding event that may have caused scour damage.

A special inspection may comprise a close visual inspection, testing and measurements, or monitoring. Eligible structures are to undergo Structural Review in accordance with CS 451 'Structural Review and Assessment of Highway Structures', to establish whether a structural assessment and/or further inspection or investigation are required.

The data used and information gathered during inspections enables completion of proformas and calculation of the Bridge Condition Index (BCI). Using the BCI system, a consistent national form of reporting the condition of the whole bridges asset stock can be presented, as average and critical values.

The average value BCI Average (BCI_{AV}) is calculated from the range of scores for each element of a structure. It is a good indicator of the overall condition of a structure.

The BCI critical (BCI_{CRIT}) value reflects the condition of structural elements deemed to be of very high importance and provides a better indicator of the level of risk of failure and whether urgent repairs or maintenance are required to ensure ongoing safety of the structure for road users.

In a similar way to other highway assets, the BCI system categorises structure condition in several bands as shown in the table below.

	Condition Band				
Condition Index	**Very Good**	**Good**	**Fair**	**Poor**	**Very Poor**
BCI_{AV}	>=90 & <=100	>=80 & <90	>=65 <80	>=40 & <65	>=0 & <40
BCI_{CRIT}	>=90 & <=100	>=80 & <90	>=65 <80	>=40 & <65	>=0 & <40

Service Levels

The desired condition of the asset is not currently defined by any specific nationally recognised standard. However, ~~the~~ many of the structures are essential links in the Trafford road network, contributing to

strategic transport objectives and need to be maintained or improved to fulfil these goals. The BCI rating system implies that the desired bridge stock condition should be somewhere in the categories 'good' to 'very good', scores between 80 & 100.

The desired level of service, subject to funding, is to move or maintain bridge stock condition in the 'good' category for both critical and average indicators. Irrespective of the level of service achieved, individual structures must always be safe and fit for purpose, as set out in the Highways Act 1980. This will necessitate safety and other related work not always supported by the pure asset management, whole life costing approach. These works typically include emergency repairs to parapets and safety fencing following road traffic collisions.

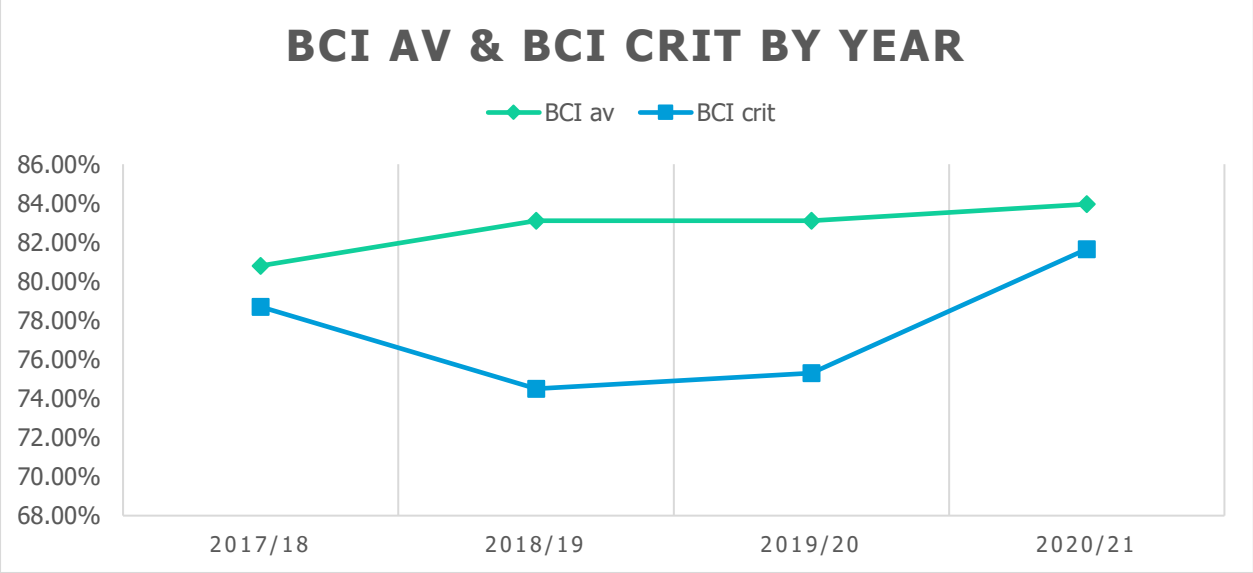
Asset Performance and Life Cycle Planning

Current Bridge Condition

The data produced and information gathered during inspections, enables completion of an inspection pro forma and calculation of the Bridge Condition Index (BCI). A BCI is calculated for the whole structure (BCI $_{AV}$) and just for the critical structural elements (BCI $_{CRIT}$).

During a principal inspection a thorough examination of every accessible part of the structure is undertaken and an assessment of any significant change in condition is made. These recommendations are fed into a review of the load carrying capacity (ALLC) and also consider any change in use of the bridge or new / revised national standards.

The current and recent condition of our structure assets can be represented by a plot of the overall Bridge Condition Index (BCI $_{AV}$ and BCI $_{CRIT}$) as reported annually as part of the submission for the Whole Government Accounts (WGA) shown below (higher percentage = better condition).

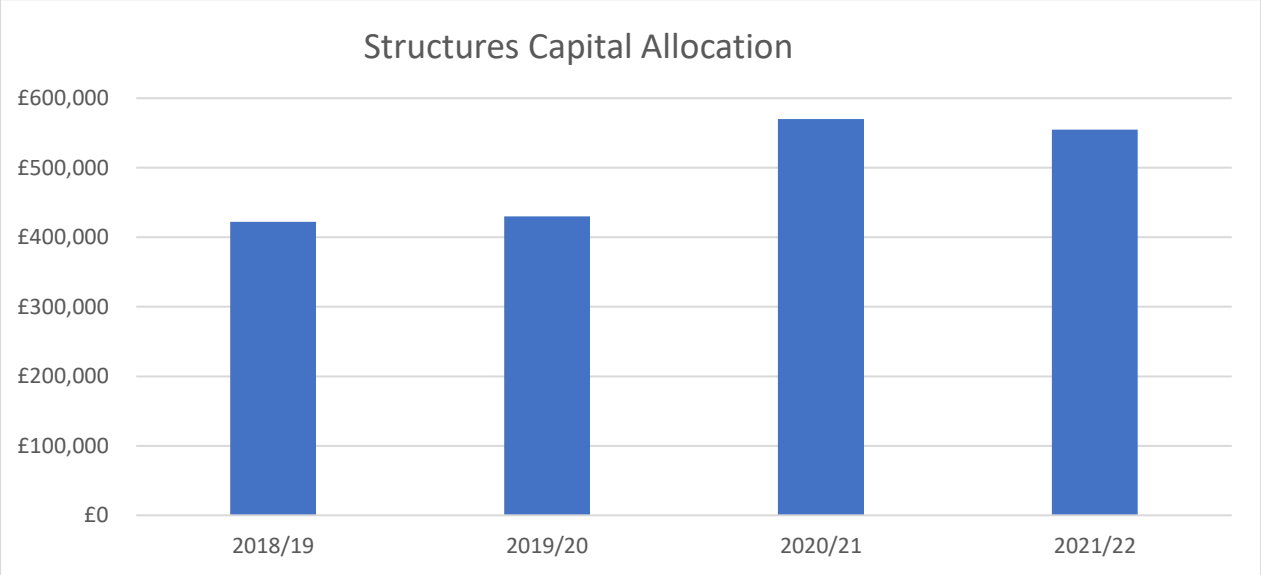


It can be seen from that the overall average values for all structures inspected in 2020/21 on both measures lie in the range 80% to 90% which is categorised as 'good'. It should be noted that these values are an average and therefore include a number of structures that fall below the 'good' value and will required maintenance to ensure their continued serviceability.

Highway Structures Investment

Capital allocations for highway structures in Trafford are shown in the table below. These values include specific allocations for Inspections, Asset Management, Assessments & Studies, and Minor Works.

Much of the investment is for specific identified structural renewal schemes.



Current Maintenance Requirements

Information from the inspections is held and processed in the PONTIS asset management system. From this, various maintenance works and repairs are identified for each structure. A risk-based approach is used to prioritise the works and match this to the available investment.

The risks assessed include:

- Level of risk to users of the highway. Considerations include the strategic importance of the road, the level and type of traffic using the road.
- Level of risk to third parties that could be affected by the structure, such as bridges crossing railway lines, or near to properties
- The type of defect and how critical it is to the function of the structure.

In addition to the risk-based prioritisation, an asset management consideration is also applied to maximise the value for money of the final programme. The application of some maintenance treatments such as waterproofing or painting can be the correct intervention at the right time to extend the life of the structure. These interventions are given careful consideration, as sometimes it represents better value to completely replace a structure rather than a long-term programme of maintenance.

An indicative prioritised forward programme of maintenance is produced and regularly updated following the completion of each programme of inspections.

Investment Forecast

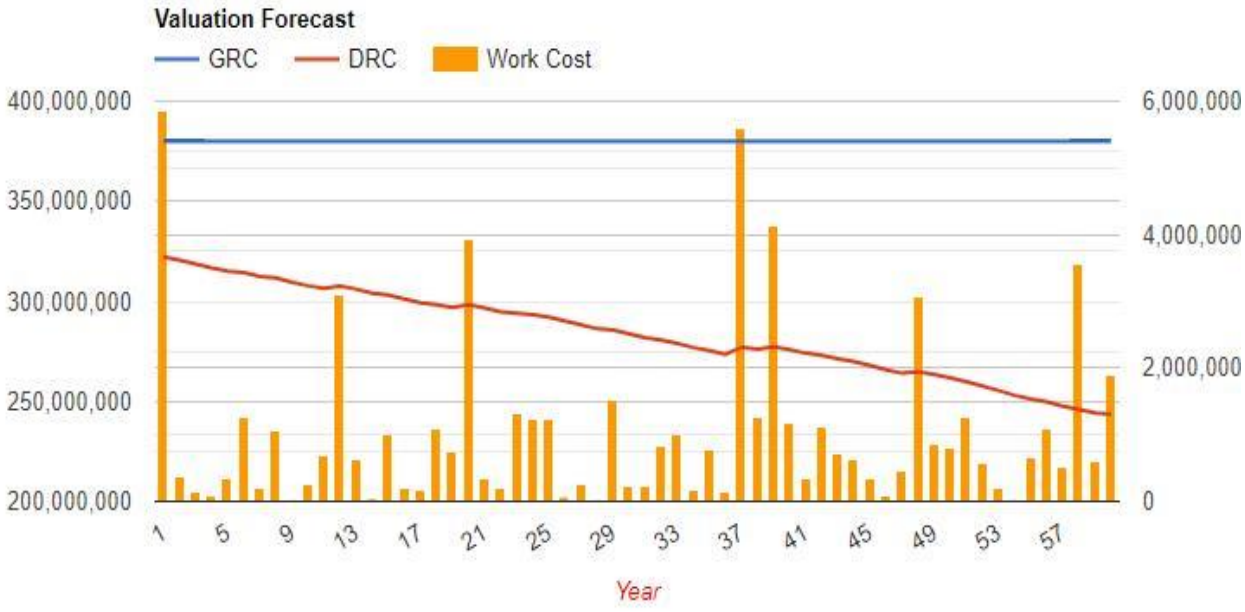
The PONTIS asset management database allows the predicted Bridges Condition Index to be modelled for different investment scenarios.

The 'current' scores are being developed, updated, and checked after inspections & GI and PI surveys.

The 'desired' score is also under review for each structure, to account for SLA and investment needs with adjustment depending on structure types (concrete, masonry etc. which can be slightly different).

By simply averaging the Work Cost this gives us approx. £975k per year. Clearly some works still need to be done on PONTIS before we have reliable figures.

A 60-year forecast using our current (2022) data looks like the chart following



Show ○ Approved Strategy ◉ Planned Preventive ○ Planned Targeted ○ Planned Do Minimun ○ Unplanned Reactive

APPROVED STRATEGY SUMMARY

Year	DRC	Work Cost
1	322,181,067	5,870,569
2	320,547,232	370,946
3	318,679,682	151,986
4	316,745,209	92,883
5	315,085,085	349,910
6	314,341,561	1,249,614
7	312,505,610	205,496

Asset Management Plan for Road Signs and Markings

The Asset

This asset group comprises unlit or non-illuminated road signs, road markings and road studs or 'cats-eyes'

Road signs are provided for ~~road~~ highway users including drivers, equestrians, cyclists, and pedestrians, for the purposes of warning, information, or regulation. They are designed and situated in accordance with the Traffic Signs Regulations and General Directions 2016 (TSRGD).

The maintenance of illuminated signs is included and accounted for in the street lighting asset management plan. Trafford's adopted strategy of replacing illuminated signs where possible with non-illuminated signs means that the inventory is in a state of change, however the latest available data shows that there were 11,910 non-illuminated signs.

Whilst providing an essential role, provision of road signs can also cause difficulties for people with mobility issues and can be a visual intrusion on the streetscape. As such, the provision of road signs is under constant review with the intention to keep obstruction and visual intrusion to an absolute minimum whilst still meeting all regulatory, information and safety requirements for highway users.

Road markings and studs are provided to assist with the safe movement of traffic, regulate movement and parking, and help warn of hazards. Types of marking included white centre line, junction and carriageway edge, yellow box junction and parking restriction and white arrows and letters.

Due to the volume, variety, and relatively low value of this whole asset group and with current constraints, it is not economically viable at the current time to keep an inventory and updated condition system. This will be reviewed in the future as video and technology solutions are improved.

Condition Assessment and Inspections

This asset group is inspected as part of the cyclical highway safety inspections of all roads. Road signs are checked for clarity, security of fixing or damage, and any defects in the structural condition of the posts are also recorded.

Road markings are checked to ensure that they still provide an adequate level of visibility, and missing, or damaged road studs are also recorded on the inspection records. Ad-hoc inspections are also undertaken following any third-party reports or from the Police following incidents.

Road markings and/or road studs are also replaced routinely following any road resurfacing works.

Asset Performance and Life Cycle Planning

Without a comprehensive inventory and condition ~~driven~~ based process, investment in the maintenance of this asset group is largely a reactive process. Information from cyclic and reactive inspections is used to target the necessary renewal works. This is a risk-based approach primarily driven by the safety of road users, with consideration given to the more vulnerable road user groups and the type, volume and speed of traffic using the road.

This process may require further inspections of the wider area particularly in the case of road marking maintenance. An area-based programme of maintenance can often provide the best value solution and provides opportunities to align with the wider highway maintenance and improvement programmes.

In 2019/20 a specific capital allocation of £120,000 was made to fund the maintenance of road signs, markings, and street furniture. In subsequent years £100,000 each year has also been allocated.

Asset Management Plan for Fences and Barriers

The Asset

This asset group includes

Asset Type	Sites	Quantity
Pedestrian Barriers	1354	13,947m
Vehicle Restraint Barriers	372	16,402m
Vehicle Bollards		Not surveyed
Highway Fences		Not surveyed

Pedestrian barriers are placed primarily for safety reasons to protect pedestrians from vehicular traffic. They are often placed near to crossings to guide pedestrians to safe crossing points. They are not designed to protect pedestrians from vehicle incursion. They are usually of a standard design and constructed of galvanised or painted steel.

Vehicle restraint barriers, sometimes referred to as crash barriers are provided to protect vehicle occupants by reducing the collision forces involved if the vehicle leaves the designated carriageway. They may also protect pedestrians from harm of collision and structures from damage. Many are placed on central reservations of dual carriageways to prevent vehicle incursions into the opposite flow of traffic. The design of these barriers has changed over the years and many of the legacy designs do not now meet current design standards.

Vehicle bollards are used to prevent vehicles over-running their designated space to protect pedestrians or to prevent footways and verges from damage. They vary in design and construction but are usually painted cast metal or concrete.

Most fences adjacent to the highway are placed at the boundary of properties and the responsibility for maintenance lies with the relevant landowner, however some fences have been placed within the highway such as around sites of amenity.

An inventory of the pedestrian and vehicular barriers has been undertaken, for two thirds of the network, and the information is stored in the Confirm Highways Asset management system. There is currently no available inventory for vehicle bollards and highway fences.

Condition Assessment and Inspections

All the types of assets in this group are inspected as part of the cyclical highway inspections of all roads. They are checked for damage and any signs of structural distress. Any defects are recorded and considered for repair. Any damage causing an immediate safety concern is either made safe or an urgent repair is carried out. Higher risk locations such as large differences in vertical levels between the highway and adjacent land, or the presence of deep water (rivers, canals, etc.) are referred for further investigation and repairs to these locations prioritised.

Ad-hoc inspections are also undertaken following any third-party reports or from the Police following incidents and any damage recorded. In many instances the cost of repairs from incidents will be recoverable from the relevant third party's insurance.

All fences and barriers, whether for safety purposes or general use, are prominent features of the streetscape and their overall appearance is an environmental consideration. Minor maintenance and cleaning may be undertaken where the overall appearance is unsightly or as part of a wider area-based initiative.

Asset Performance and Life Cycle Planning

As with some of the other smaller and relatively lower value asset groups, investment in the maintenance of this asset group is largely a reactive process. Information from cyclic and reactive inspections is used to target the necessary renewal works. This is a risk-based approach primarily driven by the safety of road users, with consideration given to the more vulnerable highway user groups and the type, volume, and speed of traffic.

The visual appearance of the assets may add further weighting to the prioritisation process particularly if the renewal work is part of a wider environmental or area-based improvement and maintenance programme.

There is a general move towards a decluttering of highway apparatus. This has led to an ongoing review of the absolute necessity of above ground highway apparatus, on a site-by-site basis, usually when apparatus is damaged or needs maintenance. This may in some cases lead to the decommissioning or reduction in the asset stock.

In 2020/21 a specific capital allocation of £100,000 was made to fund the maintenance of barriers and pedestrian guardrail renewals. In 2021/22 this allocation was increased to £120,000. Repairs to vehicle bollards and highway fences are funded from reactive works budgets and any renewal works from the capital allocation for Road Markings, Signs and Street Furniture.

Asset Management Plan for Soft Landscape

The Asset

The soft landscape asset comprises parts of the highway given over to green infrastructure and includes, grass verges, shrubbed areas and highway trees.

These areas satisfy some primary functions:

- To improve the aesthetic of the highway area and provision of public amenity
- To help in reducing the impact of emissions and greenhouse gases associated with the use of the highway
- Absorb noise from the highway
- Contribute to biodiversity through providing a habitat and diversity for native species
- Reduce surface water runoff from the highway

With increased emphasis on climate change and biodiversity, this asset group has grown in importance and is now a significant contributor to many of the Council's strategic objectives.

The asset group also faces several challenges which must be overcome, such as damage to infrastructure from tree roots, maintenance costs caused by the impact of green infrastructure related to road safety, and the threat to the health of trees from the effects of climate change or disease.

These assets are increasingly valued by the public, and maintenance of them needs to be carefully considered and consulted on but does provide an opportunity to demonstrate the sensitivity of our maintenance policies. Whilst included in the overall highway maintenance function, maintenance of these areas does rely on specialist expertise.

The table below indicates the larger groups within the soft landscape asset group:

Asset	Quantity
Highway Trees	20,191 no.
Urban Grass Verges	21km
Grass or other landscape areas	133 no.
Shrubs	167 no.
Hedges	114 no.

Condition Assessment and Inspections

The soft landscape asset is subject to both planned and reactive inspections.
Most of the asset group is inspected as part of the cyclical highway safety inspection routine and highway trees also receive cyclical safety inspections carried out by a tree specialist.

During the highway inspections the inspector will note the condition of verges and report any damage, such as that caused by vehicles and any growth which may cause visibility issues particularly at junctions.

They will also note any apparent issues with highway trees such as unstable branches, diseased trees, overhanging branches which could obstruct users of the highway and the visibility of road signs and lighting. They will also note any root growth which is affecting the profile of the highway.

Every highway tree is inspected by Trafford's Tree Management Unit on a cyclical programme. These specialist inspections will update the asset inventory held on the highway asset management system, check and note the condition of the tree, and identify any work that may be required to maintain the safety or health of the tree.

Unplanned inspections of this asset group are also undertaken following any third-party reports and following a risk assessment work may be undertaken for safety reasons.

Asset Performance and Life Cycle Planning

The soft landscape asset requires a different approach to asset management than other asset groups, as the assets are generally self-regenerating. A lifecycle planning approach is therefore not appropriate, but this asset group does require regular maintenance to either restrict growth, make safe damage, or in the case of trees keep them in good health. An approach to management of this asset group is best taken by matching the required service levels to the available funding.

Maintenance Operations and Frequencies

The following table sets out the current soft landscape cyclical maintenance activities and frequencies.

Soft Landscape Maintenance Activity	Frequency
Urban Grass Verge Cutting	14-day cycle – April to October
Weed Control	Footways and Carriageway edge annually commences September
Tree Maintenance	As required for safety / lighting purposes
Shrub Maintenance	As required to prevent obstruction

The intention of these maintenance frequencies is to seek the optimum balance between providing the maximum level of service with the minimum level of revenue expenditure.

Reductions in frequencies may have a negative effect on public satisfaction due to scenarios such as damage to the other highway assets through weed and root growth, and potential safety issues such as visibility and reduced lighting from streetlights. Offsetting this, benefits may include greater biodiversity from increased pollinators, and habitats for wildlife.

Biodiversity

Biodiversity is the variety of plants, animals and habitats that make up our natural environment. Biodiversity plays an important role in nature conservation, with benefits for human health and quality of life. The planning policy document '*The Greater Manchester Spatial Framework*' (GMSF) sets out to achieve an overall increase and enhancements (a net gain) of biodiversity across the whole of Greater Manchester. Whilst not one of the key parts of the green infrastructure, the highway soft landscape assets nevertheless is an important contributor.

As a result of climate change, street trees are increasingly important, helping to cool overheating urban areas, manage flood risk and enabling wildlife to adapt. One of the aspirations of the GMSF is to considerably increase the provision of street trees within urban areas. Currently we have 20,191 street trees in Trafford and this number will be monitored as a key biodiversity indicator in future updates of this plan.

Appendix A: Communications Strategy

Communications Strategy

Highway Infrastructure Asset Management

Communications Strategy 2022 - 2027

1. Introduction

Asset management has been widely accepted by central and local government as a means to deliver a more efficient and effective approach to management of highway infrastructure assets through longer term planning, ensuring that standards are defined and achievable for available budgets. It also supports making the case for funding and better communication with stakeholders, facilitating a greater understanding of the contribution highway infrastructure assets make to economic growth and the needs of local communities.

The Highway Infrastructure Asset Management (HIAMP) Communication Strategy document for Trafford Council has been developed to raise awareness and understanding of the council's highways asset management objectives, as outlined in Trafford Council's Asset Management Policy:

- Maintain roads in a safe and serviceable condition
- Deliver a road and transport infrastructure that seeks to meet the needs of Trafford's residents, visitors, and businesses
- To provide our road users with a reasonable level of confidence that their journeys on the highway will be predictable and timely
- To ensure that the highway network is available and accessible, as far as possible.
- To progressively reduce the environmental impact of the highway asset for the benefit of all our road users.

This includes the work that goes into maintaining and improving the county's roads, pavements structures and street lighting, ensuring that all communications are timely, positive, informative, and accessible.

1.1. Trafford's Highway Infrastructure

Trafford's highway network comprises just over 842 km of carriageway, most of which is in an urban environment. The unclassified network accounts for around 656km of the asset which is approximately 78% of the whole network. The footway and cycleway network is approximately 1,256 km in length. The asset also includes:

- over 11,900 traffic signs and approximately 28,000 lighting columns & other illuminated apparatus
- 178 road bridges, footbridges, underpasses, subways, culverts, and retaining walls.
- The highway asset also includes safety fences, drainage, street furniture and road markings.

Trafford Council has calculated the asset value in accordance with the requirements for Whole of Government Accounts (WGA). All highway assets have been valued over £1.86 billion[2]; this makes them the most valuable asset owned by Trafford Council.

1.2. One Trafford Partnership

Amey and Trafford Council are working together, through the one Trafford Partnership (OTP), to deliver environmental and infrastructure services for Trafford.
The new partnership, formed in 2015, delivers commercial and domestic waste collections, street cleaning, grounds maintenance, highways services, bridges, road safety, street lighting and furniture, drainage, and property services.

With an overarching asset management framework, this contract aims to produce a leaner delivery model, efficient and optimised programmes of work and introduce, innovative and new technologies across the services to deliver a more efficient approach for the Council and the residents of Trafford.

[2] Based on WGA 18/19 Gross Replacement Cost (not including land value)

1.3. Communications Strategy – Our approach to engagement

The HIAMP Communications Strategy covers the period 2022-2027, and will direct both external and internal communications efforts to engage the OTP's customers, stakeholders, and workforce.

Core to the strategy will be the requirement to raise awareness and understanding of how the highway asset is maintained. Highways are increasingly at risk of damage from wear and tear, ageing, increasing traffic and severe weather. This regularly results in visible defects like potholes, damaged road signs, defective streetlights, and in extreme cases, damage to bridges. These defects are seen and felt by all and often result in negative media coverage.

Raising awareness will be achieved through using a range of communication channels tailored to reach our target audiences. This strategy is required to consider messaging by audience, selected approaches, risks (including mitigation), and key implementation projects. To support this strategy, a comprehensive communication plan detailing the highway capita, programme will be developed/updated each year and will include delivery timescales, measurable performance indicators and key milestones. It will be reviewed annually to ensure it is up to date and fit for purpose.

This strategy will support and sit alongside the umbrella OTP Communications Strategy and **follow its brand positioning and top lines messages.** In addition, detailed supporting plans and communication protocols will also sit alongside this strategy to provide detail and clarity on specific communication aspects; specifically:

- The use of social media
- Elected Member engagement

All communications will be delivered through a variety of channels and formats. However, through the strategy, all OTP communication will be:

- Honest, open, and accurate
- Clear and simple
- Up to date and relevant

The OTP will engage with, and promote about how, we make decisions in the identification, assessment, programming, delivery, and completion of asset management activities. This includes maintenance works, and how people are involved in making decisions for the service provided by the network.

2. Strategic Aim

The One Trafford Partnership aims to ***"deliver effective communications with all stakeholders so they are aware of the services it delivers and feel engaged and empowered to get involved in the community activities it undertakes."***

3. Target Audience

People, groups of people, or organisations that can affect or be affected by the policies and actions of Trafford Council are all stakeholders of the highway network. Our key audiences include:

- Government - through HM Treasury, DfT and other Departments, that have an interest through legislation, provision of funding
- Trafford Council elected ward members
- Trafford residents

- Trafford businesses
- Representative groups e.g., Parish Councils
- Other interest groups e.g., cycling, walking, conservation, equestrian groups etc.
- Emergency and Utility services
- Neighbouring authorities and Transport for Greater Manchester, taxi trade etc.
- National Highways

4. Communication Channels

The OTP currently employs a range of different communication methods. These include both external and internal channels providing a mix of push and pull messaging:

4.1. External communication channels

- Trafford Council website
- Social media
- Email
- Campaign collateral – such as leaflets
- OTP community newsletter
- News releases and press statements
- Doorstep engagement – face to face and/or letter drop

4.2. Internal communication channels

- OTP community newsletter
- Amey's Hub Magazine
- Monthly OTP report to Trafford Council elected ward members
- Yammer
- Email
- Teams Groups and SharePoint collaboration
- Staff briefings and posters

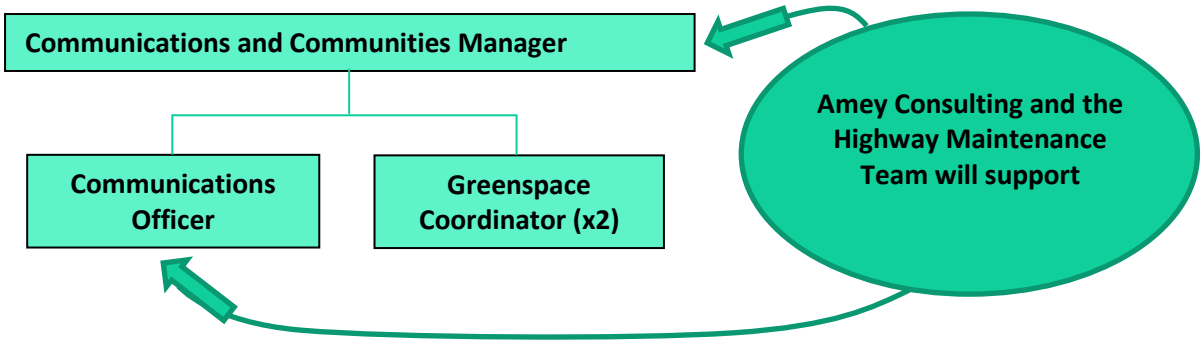
These communication channels will be used to promote the HIAMP and engage with all stakeholders. Communication channels will be continuously reviewed to ensure they reach our target audience.

5. Resource - Communications and Communities Team

Every member of staff has a role to play in supporting the delivery of this strategy to ensure good and effective communication takes place internally, the delivery of key messages externally, engaging with partners and the public or by helping to gather good news. Communication is everyone's business and cannot be left to the Communication and Communities team alone. Amey Consulting and the Highway Maintenance Team will work closely with the Communications and Communities Team to ensure messages are developed and released in a timely and consistent manner.

However, the Communications and Communities Team will lead on specific roles. The team will provide leadership, technical expertise, advice, and guidance. It has a lead role in protecting the partnership's brand and reputation, developing communication channels, co-ordinating media relations and ensuring the accessibility of information for staff, the public and all stakeholders. The team will add value to others to enable them to do their work.

The Communications and Communities Manager is responsible for the formulation and delivery of this strategy, supported by the team for the implementation and campaign delivery:



Through the partnership, the Communications and Communities Team will work closely with Trafford Council's Communications Team.

6. Strategic Approach

The OTP will take a strategic approach to deliver effective communications and meaningful community engagement. To this end, the strategy has been split into three commitments, with clear objectives and key targets set against each one.

6.1. External Communication

Commitment 1: Raise awareness of the HIAMP and the highway maintenance work delivered by the partnership, by developing a consistent approach to PR, stakeholder engagement and brand collateral.

Note – All communications will ensure the partnership's reputation is maintained, in line with the umbrella OTP Communications Strategy.

Public engagement

Direct engagement with the public and stakeholders will be carried out using the following channels:

- Website - Trafford Council's public website is regularly reviewed and cover all areas of service including highways. Along with our maintenance activities, information on the work we are doing with regard to funding bids, policies, and asset management approaches, is also published to provide openness to our customers. We also use customer feedback to inform maintenance programmes and will publish details of the measures taken to respond to feedback and to publish the feedback on service delivery performance
- Social media – The partnership will use it social media platforms to engage on highway maintenance and consultations
- Letter drop – residents and businesses affected by highway maintenance receive a letter explaining the upcoming maintenance works and what they can expect in terms of how it will affect them and how long for. Affected services receive an email update, where an address is known

Customer Experience

The experience residents receive through the services the OTP delivers is intrinsically linked to the brand's reputation. Likewise, the experience residents receive through interacting with the partnership to raise service requests or complaints will determine how the OTP is perceived by the public.

To manage expectations, the communications team will collaborate with the Contact Centre to ensure any changes in process or service SLAs are clearly communicated, along with any campaign key messages. The communications team will also support the contact center with key messages linked to complaints resolution to ensure issues can be mitigated in future.

To help manage the programme of work, an annual communications and community planner will be developed to ensure all activities and campaigns are scheduled and undertaken in a timely manner. This will be updated as new activities come online.

6.1.1. Strategic Objectives

- Ensure that the OTP's identity and branding is used on all public facing communications
- Ensure social media is used to promote proactive messages and that enquiries are answered in a timely manner
- Identify press and media opportunities throughout the year to promote the OTP and its services to residents – ensuring these are recorded on the yearly planner
- Engage with local and regional media to deliver and contribute to emerging stories
- Liaise with both Trafford Council's and Amey's press office regarding proactive and reactive news to ensure everyone in the partnership is aware and can mitigate risk
- Investigate new ways in which the OTP can provide information to residents and
- stakeholders
- Support the delivery of excellent customer experience through regular contact with the Contact Centre – reporting back on the results of the resident satisfaction survey

6.1.2. Key Targets 2022 – 2027

- Issue a minimum of two highways news releases each year
- Deal with all press enquiries clearly and accurately with 48 hours
- Issue up to two highways social media posts per week
- Deal with all social media enquiries accurately by the end of each working day
- Publish the One Trafford Community Newsletter each quarter
- Provide affected residents and businesses with a letter explaining the upcoming maintenance works and what they can expect in terms of how it will affect them and how long for
- Review Contact Centre scripts annually

6.2. Internal Communication

Commitment 2: Ensure that our workforce is involved and engaged in the OTP's aims and objectives through good internal communications – allowing colleagues to champion the OTP in the community.

This includes engaging with Trafford Council's Elected Ward Councillors.

Employee engagement

With a considerable proportion of the OTP workforce TUPE'd to Amey at the start of the contract, the OTP's success will depend on our ability to maintain a committed, motivated, and well-informed workforce. Clear and effective communication will help develop the capacity for continuous improvement.

Elected Ward Member engagement

Elected ward members are key stakeholders for the OTP. The partnership will ensure clear and accurate information is made available to help with the decision-making process and to demonstrate the cost benefits of lifecycle planning and an Asset Management approach.

Trafford is developing an indicative, rolling multi-year works programme. This programme effectively remains live, and an annual 'snapshot' of this programme will be passed to Trafford Council for consideration and approval. The benefit of an 'organic' rolling programme means all parties will be able to analyse and feed into this programme, such that views can be considered where appropriate, at an earlier stage than was previously possible.

A dedicated communications plan for Elected Ward Member engagement has been developed; outlining how the partnership will engage with Elected Members on all aspects of the contract. This includes how the partnership will engage with regards to highway maintenance and will be reviewed on an annual basis.

6.2.1. Strategic Objectives

- Ensure all communications are focused on campaign and corporate messages to help staff become ambassadors to promote the OTPs vision and objectives
- Publish the One Trafford Community Newsletter and make it available via email and hard copy each quarter. Make it available to employees, Elected Ward Councillors, and community groups, as well as accessible on the Trafford Council website
- Issue the monthly Elected Ward Councillor update report
- Issue Elected Ward Councillor briefings as appropriate, throughout the year

For all other employee objectives, please refer to the umbrella OTP Communications Strategy.

6.2.2. Key Targets 2022 – 2027

- Develop and review an internal communications plan by April 2022 and every April after that
- Develop and review the Elected Ward Councillor communications plan by April 2022 and every April after that
- Review the One Trafford Community Newsletter content to ensure a minimum of one HIAMP story is included each year.

6.3. Monitoring and Reporting

Commitment 3: Ensure that Trafford Council, elected ward councillors, residents and other community stakeholders are regularly updated and kept informed of activities delivered by the OTP and the successes achieved as a result.

All communication activities will be monitored to establish success.

Monitoring and reporting on activities is a vital part of the Communications and Communities Team's work – allowing the partnership to identify successes and manage the reputation of the brand. The partnership will ensure that all communication is

- Proactive and planned
- Re-active (responding to criticism of the partnership and taking advantage of opportunities to highlight excellent work)

- Interactive (engaging in two-way dialogue through face-to-face, digital, and other communication tools)

The OTP is committed to constantly improve communication and deliver an effective service. By planning, managing, and evaluating communication well, the partnership will be able to anticipate and manage reputational risk and ensure the perception of performance matches the experience of their service users and stakeholders.

To provide the OTP with ongoing assurance that the Communications and Communities strategy is robust, the Communications and Communities Team will provide regular updates using the following metrics:

6.3.1. Strategic Objectives

- Monitor and evaluate monthly press coverage; collating activity and successes in a monthly report
- Monitor and evaluate monthly social media coverage; collating activity and successes in a monthly report
- Monitor campaign specific coverage; collating activity and successes in campaign reports. This includes reviewing the number of website hits
- Undertake the National Highways & Transportation Survey (NHT) each year to gauge the level of stakeholder satisfaction with our services
- Undertake and review the performance of customer satisfaction surveys and identify potential for improvement with our action plan

6.3.2. Key Targets 2022 – 2027

- Identify contract KPI's and SLAs to establish benchmarking to identify campaign and activity success
- Develop and deliver the Highway's Communications Plan by April 2022, and review each year that
- Develop an annual communication planner to include the highway maintenance works – both cyclical and capital

7. Mitigating Reputational Risk

Whatever the activity, there is always a certain element of risk to the reputation of the OTP. This may be associated with:

- Unforeseen reactions from stakeholders or other audiences
- Unforeseen elements of a campaign or initiative
- The evolving nature of campaigns and services being delivered

To reduce reputational risk, only the OTP's communications and Communities Team will issue proactive news releases and answer reactive press enquiries.

Any identified risks are outlined in the umbrella OTP Communications Strategy. This includes a risk register, outlining potential reputational risks resulting from all the work and services delivered and how the OTP will mitigate them.