# Tameside Metropolitan Borough



Highway Asset Management Policy & Strategy

December 2018

# Contents

#### i. Abbreviations

### 1.0 Highway Asset Management Policy

- 1.1 Purpose
- 1.2 Introduction
- 1.3 Policy Statement
  - 1.3.1 We will;
  - 1.3.2 We will do this by;

# 2.0 Highway Asset Management Strategy

- 2.1 Background
- 2.2 Tameside Metropolitan Borough Council
- 2.3 Regional Overview Greater Manchester
- 2.4 Implementing Effective Asset Management
- 2.5 Highway Asset Management Framework
- 2.6 Strategy for Individual Assets
- 2.7 Asset Groups and Components
- 2.8 Asset Management Planning
- 2.9 Gross Replacement Cost
- 2.10 Data Management and Information Systems
- 2.11 Good Practice
- 2.12 Review Process
- 2.13 Summary Asset Management Strategy

Appendix A;

# Tameside MBC – Key Highway Assets

Appendix B;

# Maintenance Activerties

# i, Abbreviations

BSI	-	British Standards Institute
CIPFA	-	Chartered Institute of Public Finance and Accountancy
DRC	-	Depreciated Replacement Costs
GMCA	-	Greater Manchester Combined Authority
GMRAPS	-	Greater Manchester Road Activity Permit Scheme
GRC	-	Gross Replacement Costs
НМЕР	-	Highway Maintenance Efficiency Programme
KRN	-	Key Route Network
KSI	-	Killed and Seriously Injured
LED	-	Light Emitting Diode
IAM	-	Institute of Asset Management
ISO 55000	-	International Organization for Standardization 55000
LoS	-	Levels of Service
LTP	-	Local Transport Plan
PAS 55	-	Publicly Available Specification 55
RTC	-	Road Traffic Collision
ТАМР	-	Transport Asset Management Plan
TfGM	-	Transport for Greater Manchester
ТМВС	-	Tameside Metropolitan Borough Council
WGA	-	Whole of Government Accounts

# 1.0 Tameside MBC Highway Asset Management Policy

#### 1.1 Purpose

As Highways Authority, Tameside Metropolitan Borough Council (TMBC) has a duty to act as steward and custodian of all highway infrastructure assets. We ensure they are fit for purpose and maintained with regards to whole life costs in a sustainable way, whilst taking into account associated risks and constraints. We ensure our processes and operations are aligned to corporate objectives and this policy has been produced to give a structure and direction to this approach.

#### 1.2 Introduction

The Council as a representative body, exists to maximise the wellbeing and health of the people within the borough:

- Supporting economic growth and opportunity
- Increasing self-sufficiency and resilience of individuals and families
- Protect the most vulnerable.

Tameside MBC - Corporate Plan 2015-20.

Tameside's highway network is the borough's most visible, critical and valuable asset. It is used daily by nearly all of our residents and businesses. It is fundamental to the economic, social and environmental wellbeing of the community. It helps to shape the character and quality of the local communities that it serves and makes an important contribution to wider local authority priorities, including regeneration, social inclusion, community safety, education and health.

The network has 750km of roads and footways, 250km of public rights of way and bridlepaths, over 400 bridges and 30km of retaining wall, over 28,000 street lights. In line with HM Treasury guidance, the replacement value of the network has been calculated as c£1.36bn. To maintain this network so that it can continue to serve our communities requires a planned and structured approach to ensure its current, medium and long term performance taking into consideration key aspects such as sustainability and funding.

#### 1.3 Policy Statement

#### 1.3.1 We will;

Ensure that the Tameside highway network is safe, accessible and reliable for our residents, businesses and visitors.

Maintain, review and update our asset registers to ensure we hold accurate and up to date data that is available to staff and the public.

Carry out lifecycle planning of the physical assets to understand the level of funding required to maintain the infrastructure over the assets' lifespan.

Use condition information and life-cycle plans to produce investment scenarios against various funding models.

Identify and use existing and innovative maintenance treatments to preserve and extend assets life.

Ensure interventions are carried out at the optimum time in the assets lifecycle to maximise the life of the asset at least costs.

Develop medium term rolling works programmes of between three and five years and long term investment requirements (up to 10 years).

Engage key stakeholder groups to help monitor outcomes and embed a performance management approach.

Ensure staffing and skills required are identified and developed.

Establish appropriate levels of service for key assets.

Maintain records of interventions undertaken in order that we can monitor the performance of treatments and materials over time.

Continue to develop techniques with regards to the prioritisation of highway maintenance works (*Where, When, What*) to take account of whole life costs and risk management.

Undertake appropriate Benchmarking of our policies, procedures and outputs with other similar authorities and learn from best practice.

Engage with and support local, regional and national initiatives with regards to procurement, collaboration and sharing best practice to minimise costs and disruption and maximise outcomes.

Create, manage and regularly update the Asset Management Policy, Strategy and the Highway Asset Management Plan.

We will also ensure that our approach is aligned to our corporate objectives, and key local initiatives and priorities e.g. Pledge 15/15, Vision Tameside etc. Also we will ensure we take due regards to and guidance from national and international principles and best practice e.g. ISO 55000, PAS 55. Guidance and recommendation from the Highway Maintenance Efficiency Programme (HMEP), Infrastructure Asset Management Guidance - Chartered Institute of Public Finance & Accountancy (CIPFA), Code of Practice on Infrastructure Assets 2013.

#### 1.3.2 We will do this by;

Undertaking regular consultation with residents and other key stakeholder (opinion polls etc.), to gauge priorities and satisfaction with regards to our services.

Engage with residents, businesses etc. with regards to how priorities are set against available budgets.

Having a medium term rolling programme of work, and a clear approach for prioritising these works.

Holding appropriate and accurate data that we can use to support our decisions and are able to clearly demonstrate how we have made choices.

Maintain our assets using appropriate, sustainable and cost effective interventions.

Create Levels of Service consistent with our Asset Management approach and record / report continuous improvement in asset condition and the levels of public satisfaction and performance of our assets.

Produce and update 'Service Charters' for the management of various highways services e.g. Winter Maintenance, Risk Management, Street Lighting etc.

# 2.0 Tameside MBC Highway Asset Management Strategy

### 2.1 Background

Our Highway Asset Management Strategy sets out how Tameside Metropolitan Borough Council (TMBC), as highways authority, will manage our highway infrastructure assets and networks taking into consideration customer needs, local priorities, asset condition and best use of available resources.

This strategy should be read in conjunction with the Council's Highways Asset Management Policy and the Transport Asset Management Plan (TAMP). The TAMP is our detailed working document containing lifecycle plans, risk assessments, performance information, current and future demands and future funding requirements.

TMBC is responsible for maintaining all adopted highway assets within the Tameside area with the exception of motorways and trunk roads which are maintained by Highways England.

Poor highway infrastructure can have a number of direct negative effects, such as;

- contribute to an increase in the accident rate and accident compensation claims;
- result in short term and costly repairs;
- add to congestion, increase traffic emissions and reduce air quality (stopping and starting);
- impact on carbon reduction targets due to increased congestion;
- act as a barrier to making walking and cycling journeys;
- increase disproportionately the future financial liabilities for maintenance and renewal;
- increase the medium and longer-term financial burden on the community as a whole.

This strategy will be used to inform priorities in the Business Planning Process and will be used to support the continuous improvement of our highway asset management processes. The national government and particularly HM Treasury increasingly recognise that long term

savings can be made by employing asset management principles.

The Department for Transport has recently changed the way Councils are provided with funding for highway maintenance. Local highway authorities must be able to clearly demonstrate that they manage the their highways network in an efficient way, following asset management principles that are embedded within the organisation and so maximise asset life and value in an increasingly challenging financial climate.

In 2015, by introducing the Incentive Element to the *Maintenance Block* allocations, The Department for Transport challenged local authorities to fully implement asset management within their authority and demonstrate efficiencies over the next five years. By 2020/21, the difference in available finance between being a Band 1 authority (the lowest category) and a Band 3 authority (the highest category) is in the order of £400,000 per year for an authority such as Tameside MBC.

# 2.2 Tameside Metropolitan Borough Council

The local highway infrastructure is used every day by our residents, businesses and visitors. The expectation is that the network is safe, accessible and reliable. Like all infrastructure, highways need to be maintained to be able to continue to underpin the day to day activerties of our residential and commercial communities. Accordingly, an on-going maintenance and renewals process is required.

The Council, as the Highway Authority, has a statutory duty to maintain the highway network in a condition to enable the safe passage of the travelling public. The borough's highway network comprises many diverse assets. This strategy describes how the principles of asset management are applied to highway infrastructure assets that are the responsibility of the Council. These key assets are summarised in Appendix A.

Tameside MBC is one of the 10 district Councils that make up the administrative county of Greater Manchester. The borough is formed of nine towns; Ashton-under-Lyne, Audenshaw, Denton, Droylsden, Dukinfield, Hyde, Longdendale, Mossley and Stalybridge with a population of approximately 220,000 and covers an area of approximately 40 square miles.

Growth in travel demand is continuing, along with an expectation by network users of high maintenance standards. Streets are places where people interact and go about their daily business; often serving functions beyond providing transport links and shaping the desirability of areas as places to live. The condition of highway infrastructure continues to be a key issue for local voters and informs their perception of their local community and ultimately the Council.

#### 2.3 Regional Overview - Greater Manchester

In April 2011 the Greater Manchester Combined Authority (GMCA) was established. A key point in the creation of the GMCA was to place a statutory duty on the 10 Greater Manchester Highway Authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan) to work together in the delivery of transportation projects and the management and maintenance of the highway network. The strategies and policies of Transport for Greater Manchester (TfGM) are set by GMCA.

In exchange for more powers and control over local budgets, Greater Manchester agreed to elect a regional Mayor who would act as a single point of accountability – to both local people and central government. The regional Mayor was elected in 2017. This was followed by a devolution agenda which means having more control over how and where funding is allocated.

The highway network is the backbone of the economy with virtually all freight movements locally, nationally and internationally, relying on the network for at least the first and final parts of their journey. A well maintained strategic road network and its associated bridges and structures are essential to a prosperous and sustainable economy. A high quality, safe, efficient and reliable road network is essential both for a successful passenger transport system (particularly the delivery of Quality Bus Partnerships) and for encouraging more people to walk or cycle.

Through a collaborative approach, the Greater Manchester authorities have developed a single Urban Traffic Control unit which has the responsibility for the design, implementation, management and maintenance of the Traffic Signal controls and communications assets for all of the 10 Authorities. Additionally, the GMA's have introduced a highway permit scheme that will allow better co-ordination and management of working on the highway network within each authorities own area and across authority boundaries.

A *Key Route Network* (KRN) of major local roads across Greater Manchester has been developed. This is viewed as a single multi-modal network in terms of performance and ability to support growth. Also, the GMCA is working in close partnership with Highways England with regards to the performance of the motorway and trunk road network and the KRN. Across Greater Manchester, the KRN represents approximately 7% of the total local road network i.e. non HE roads. In Tameside, the KRN represents 8.8% (66km) of the local road network.

We fully support performance measures established for ensuring the efficiency of KRN and as importantly our local highway network in Tameside. These networks must operate jointly in a consistent and complementary manor to ensure the service standards for highway users, our residents and businesses.

# 2.4 Implementing Effective Asset Management

Asset Management is about the holistic (whole life) management of assets. This has been further defined by the Institute of Asset Management (IAM) in their publication PAS 55. They summarise Asset Management as:

"Systematic and co-ordinated activities and practices through which an organisation optimally and sustainably manages its assets and asset systems, their associated performance, risks and expenditure of their life cycles for the purpose of achieving its organisational strategy plan"

The Institute of Asset Management - Publicly Available Specification: PAS 55-parts 1 & 2: 2008 published by the British Standards Institution (BSI).

We have been developing our asset management approach and processes for a number of years, and recognise the importance of a strong link between policy strategy and alignment to our corporate objectives. Efficient and effectively managed assets play a significant role in achieving corporate goals and meeting stakeholders' expectations. The sound use of asset management principles offers potential benefits and we are now reviewing and aligning our asset management plan to better reflect this approach.

Priority is given to the management of asset information and its effective use, as well as the development of processes that deliver required outcomes, through the use of appropriate data analysis or predictive condition profiling tools which support budget and lifecycle management planning.

# 2.5 Highway Asset Management Framework

This strategy sits within the wider highway asset management framework and is one of the key strategic documents related to the delivery of the council's highways service.

Encompassed within the framework are two key documents;

Highway Asset Management Policy & Strategy Tameside Transport Asset Management Plan (TAMP).

These documents reflect the guidance laid down in the national Codes,

'Well-managed Highway Infrastructure', October 2016 which replaced the previous codes;

Well-maintained Highways, Management of Highway Structures and Well-lit Highways.

In addition, the Department for Transport has worked with the highways sector to develop the Highway Maintenance Efficiency Programme (HMEP) which supports local highway authorities and encourages the sharing of best practice.

The Council has established an organisational structure (Figure 1) that reflects the importance that asset management plays in the delivery of its highways function. This structure enables the development, continual review and embedment of strategic documents and promotes asset management practices.



This strategy serves as a basis for the development of the detailed TAMP and Its implementation, including enabling the organisation, its technology and its processes to adapt to change.

This strategy is based on the framework shown schematically in Figure 2 below;



# Asset Management Framework

The framework identifies the relationships between asset management, the influences of corporate and national drivers.

This strategy covers maintenance led activities including activities funded by capital and revenue allocations

This strategy explains how individual asset groups and components fit into the framework, describes how the asset management planning process is implemented within the Directorate and refers to tools currently employed, as well as links to other key documents. Finally, the strategy describes how the Service will embed a continuous improvement approach to highway infrastructure asset management, including how national developments and good practice are taken into consideration, as well as how the work carried out in Tameside can influence the regional and national asset management agenda.

#### 2.6 Strategy for Individual Assets

As part of the highway asset management framework, and in accordance with other national guidance, the highway infrastructure assets have been divided into individual asset groups.

Each group is then broken down into asset components and maintenance activities. The asset groups and components are described in the following sections.

A key function of the asset management process is to understand the investment needs of each asset group and its components, maintenance activity and performance, aims and objectives etc.

This means understanding funding needs to meet, amongst

- National and Regional objectives,
- Local objectives,
- Service Delivery / Charters and
- Performance Expectations.

Inherent to this process is a need to understand the influence of budget decisions on performance and customer satisfaction.

Furthermore, the impact that investing on one asset component may have on the overall performance of other asset components, as well as the whole asset needs to be considered. For undertaking the stewardship with regards to managing and maintaining of our highway assets, Tameside MBC has a skilled and experienced engineering base which delivers the technical management and operational works for reactive, routine / cyclic and planned operational functions, including;-

- Routine highway inspections and repairs.
- Procuring and programming preventative maintenance works e.g. joint sealing, microasphalt resurfacing works etc.
- Street lighting reactive works, planned maintenance works and renewal programmes.
- Highway drainage maintenance works (gully cleansing, culvert maintenance, investigation / repairing collapses) etc.
- Major renewal programmes e.g. resurfacing works, bridges & structures maintenance.

In line with national guidance and good practice, we have developed a lifecycle plan based approach for many of our key assets.

Understanding the individual asset's condition, its rate of decline, how long specific maintenance treatments (interventions) can extend its life by, the relative cost of these interventions and the desired Level of Service (LoS) are the essential pre-requisites to good asset management.

Our aim is to improve public satisfaction with our highway assets, whilst maintaining value for money and continuing to provide a safe and accessible highway network.

Our approach is to understand and act based on our;

where, what, when model for interventions (maintenance);

Where	-	Where is maintenance needed or going to be needed
What	-	What maintenance is needed
When	-	When is the optimum time to undertake maintenance

Accordingly accurate and timely condition data is required for assets and their components.

# 2.7 Asset Groups and Components

The Council's highway infrastructure has been divided into key assets groups and components, as described in Table 1.

Asset Group	Asset Component
Highways	Carriageway Footway (inc Kerbs)
Drainage	Culverts Gullies (inc connecting pipes)
Structures	Bridges Retaining Walls
Street Lighting	Street Lights Illuminated Signs Bollards
Traffic Signs	Warning Signs Information Signs Street Nameplates Variable Message Signs
Street Furniture	Litter bins Street Seats Planters
Fences, Barriers	Fences Guard rails Traffic barriers
Road Markings	Symbols White markings Yellow markings

# **Table 1: Asset Groups and Components**

A number of maintenance activities are included under each component, as described in Appendix B.

This approach has been adopted to allow a clear understanding of budget allocation across the different asset components and facilitating the recording of where money is invested. Identifying where money is invested, allows the Council to monitor performance against service delivery and the implementation of a continuous improvement process, within the constraints of available funds.

#### 2.8 Asset Management Planning

The asset management strategy supports continual review and improvement of its processes and procedures, ensuring, as far as possible, that the standards identified in relevant legislation and codes of practice are adopted and that our customers receive a good and efficient service consistent with available resources.

Below are examples of the factors taken into consideration with regards to service priorities;

#### • Safety;

Accessibility, Claims received, Killed and seriously injured (KSI) records, Safe use of the network

#### • Environmental;

Air Quality Carbon footprint Climate change Congestion Recycling/ Waste minimisation

#### • Economic;

Contractual Supporting local business, Contractual, Procurement Value for money Whole life cost

#### • Qualitative & Legislative;

Equalities Council policies Corporate objectives Legal requirements Targets and performance indicators

#### • Customer Focus;

Community need, Public perception, Member perception, Reputation At the asset group level, forward looking work programmes are developed and aligned to reflect the government's Comprehensive Spending Review period, which runs from 2015-2021. This can be used by the Council to develop longer term programmes of work.

In broad terms, three maintenance categories have been developed for our

Asset Groups;

- Planned Maintenance / Renewals replace or enhance;
- Preventative Maintenance arrest deterioration, prolong asset / component life;

• Reactive Maintenance – maintain public safety.

• Tameside MBC has adopted the national formula for the apportionment of

highway capital funding as outlined by the Department for Transport;

Asset Type	DfT apportionment%
Highways	75.17
Bridges	18.12
Street Lighting	6.71
Total	100.00

Targeted investment and informed decisions are therefore encouraged, to deliver the 'right treatment, at the right time, in the right place', our - *where, what, when* - approach by identifying the level of service that can be achieved for a given budget allocation.

We have also developed a number of tools to assess the impact of changing funding levels of each activity to the overall service. At the service level, a tool for carriageways and footways has been developed, which allows lifecycle aspirations to be considered and compared with condition targets, budget constraints and stakeholders' wishes, offering options for route and treatment strategies, with 'preventative' treatments having higher priority weightings.

To further support and inform regional needs, TfGM is formulating programmes of work that relate high level aspirations, for the KRN across the conurbation, bringing customer focus and economic influences into the decision making process.

Where suitable data is available and where appropriate, this concept will be extended to encompass other asset groups, such as Street Lighting, Structures and Traffic Management. This will allow decisions to be made that consider criteria other than condition and determine programmes that are not necessarily 'worst condition first' -unless the asset condition could pose a risk to public safety.

# 2.9 Gross Replacement Cost and Depreciated Replacement Cost

To accord with H.M. Treasury's Whole of Government Accounts (WGA) reporting requirements, the value  $(\pounds)$  of highway assets are calculated each year.

The last reported figures are;

GRC; £1,357,415,000 (TMBC highway assets May 2018 – not including traffic signals, Pedestrian Pelican / Puffin crossings)

To ensure returns are robustly calculated, there is a clear need for accurate and detailed inventory information and performance data. Reporting these figures each year will support asset management by providing an improved understanding of network performance (improvement /deterioration) when compared with investment undertaken.

### 2.10 Data Management and Information Systems

We recognise that good and robust data is critical to implementing asset management and delivering potential benefits. However, we believe that the collection, management and use of data should to be based on a process, which identifies;

- Ownership;
- Data Requirements;
- Responsibilities; and
- Costs to store, manage and maintain data;

To this end, we have developed a comprehensive asset information system, based on the latest asset condition surveys and data. Systems covers data collection, highway infrastructure data management, reporting requirements (business information) and corporate IT needs. It is used to inform current data collection needs for both inventory and condition information. Key drivers for this include:

- WGA (Gross Replacement Costs, Depreciated Replacement costs etc.);
- Resources;
- Performance;

We also recognise that effective asset management and its implementation relies on systems which can be used as tools to support decision making at all levels. The following tools are currently in use by the Authority:

- Symology Insight Enterprise highway, street lighting, streetworks covering most of highway infrastructure management needs, including works ordering, public enquiries, asset register, street works register and inspection regimes.
- Symology Greater Manchester Road Activity Permit Scheme (GMRAPS)
- Greater Manchester Bridge Management System inspection and condition data for bridge structures;
- GIS (as the corporate asset management mapping system); and CRM customer service system.

# 2.11 Good Practice

We are committed to the development and implementation of good practice and benefits from lessons learnt at National, Regional and Local levels. Our officers regularly attend and play an active role in:

- National and Regional conferences;
- The Chartered Institute of Public Finance and Accountancy (CIPFA);

- Greater Manchester Highways Asset Management Partnership Network, its groups and sub-groups;
- HMEP events; and
- CIPFA Highway Asset Management Updates.

### 2.12 Review Process

This strategy will be updated regularly with minor amendments and fully reviewed on a five yearly basis to align with our policies and practice with regional and national best practice.

### 2.13 Summary - Asset Management Strategy

The benefits of implementing our approach are summarised below:

- To have a clear understanding of condition and rate of change, of our key highway assets.
- Understand the medium and long term performance of our key assets.
- Maximise the effectiveness of available funding in extending the life of our assets

   Maintenance (Where, What, When).
- Encourages engagement with stakeholders, including Elected Members, Senior Officers and the public.
- Be in a position to bid for additional funding and demonstrate the effectiveness of our staff and systems.
- Be able to respond to the challenges of climate change by increasing the resilience of our network and our service.

# Tameside MBC – Key Highway Assets

Highway Asset Category	Gross Replacement Costs – May 2018 (HM Treasury Definition)
	£,000
Carriageway -(Including drainage elements)	830,980
Footways & Cycle Tracks	204,525
Bridges & Retaining Walls	248,331
Street Lighting & Illuminated Signs	49,789
Traffic Management	1,306
Non-illuminated Signs & Street Furniture	22,484
TOTAL	1,357,415

# <u>Appendix B;</u>

Asset Group	Asset Component	Activity	Details
Highways	Carriageways Footways Cycleways	Reactive / Routine Inspections and Repairs	Reactive repairs carried out from highway safety inspections and customer enquiries that fit the Council's policy criteria for repair
		Preventative maintenance processes	Carriageway joint sealing microasphalt. Footway slurry seal. Inc preparation
		Planned patching and resurfacing.	Carriageway patching, resurfacing, reconstruction Footway resurfacing and reconstruction

Asset Group	Asset Component	Activity	Details
Drainage	Gullies Connections Culverts & Gratings	Planned Cleansing	Routine routes / schedules Programmed Repairs
		Unprogrammed / reactive works	Urgent repairs / reports

Asset Group	Asset Component	Activity	Details
Highway Structures	Bridges, Retaining Walls etc.	Routine Maintenance	Inspections – general, principal, special Structural reviews and assessments Routine maintenance Monitoring of sub-standard bridges for weight and height restrictions
		Planned Maintenance	Preventative maintenance, minor repairs – waterproofing- painting and reforming Component renewal – renewal of bearings and expansion joints Upgrading – strengthening parapet replacements – waterproofing Replacement of structure nearing end of life or becoming unmaintainable
		Reactive	Painting of structural steel. Urgent repairs for safety. Repairs following RTC's, Vandalism etc. Including repairs due to scour or linked to other parties issues

Asset Group	Asset Component	Activity	Details
Street Lighting	Street Lights, Illuminated Signs and Bollards	Upgrading	Replacement of assets nearing end of life or investment programmes e.g. LED
		Structural and Electrical Testing and Inspection	Includes planned structural, visual and electrical testing and inspection
		Structural Routine repairs, including Reactive repairs	Routine and High Priority from inspections, emergency and accident / vandal damage
		Lighting Column and Pole Renewals	Replacement of lighting columns and poles nearing end of life or becoming structurally unsound
		Painting	Painting of structural steel lighting columns and poles