Manchester City Council
Report for Resolution

Report to: Economy Scrutiny Committee – 25 November 2015
Executive – 2 December 2015

Subject: Highways Asset Management Policy and Strategy

Report of: Deputy Chief Executive (Growth and Neighbourhoods)

Summary

The purpose of this report is:

- To request that the Executive approves the Highways Asset Management Policy; (attached as Appendix 1);
- To request that the Executive approves the Highways Asset Management Strategy; (attached as Appendix 2);

The Highways Asset Management Policy and Strategy provide a commitment to achieving benefits in the management of Manchester's highway network that can be delivered through asset management, and describes the principles that it is proposed to adopt in applying asset management to help achieve the authority's strategic objectives.

Recommendations

That Scrutiny Committee members:

1. Note and comment on the proposed Highways Asset Management Policy and Strategy prior to their consideration by the Executive;

That the Executive:

1. Approves and adopts the proposed Highway Asset Management Policy attached as Appendix 1 to this report;
2. Approves and adopts the proposed Highway Asset Management Strategy attached as Appendix 2 to this report;

Wards Affected: All

Community Strategy Spine	Summary of the contribution to the strategy
Performance of the economy of the region and sub region	Our transport network has a vital role to play in Manchester's economic vitality. Regeneration aspirations will rely on effective transport links to enable employees and visitors to access new homes and workplaces, and for industry in and around our City to grow. Adopting an Asset Management approach will ensure that resources are prioritised to support the growth of the local economy.
Reaching full potential in education and employment	As well as providing links to workplaces there is a need to transport people to training and education sites where they can learn and up-skill to meet the needs of new and emerging local industries. Social exclusion is a significant issue, particularly among the elderly.
Individual and collective self esteem – mutual respect	An effectively maintained local road network will ensure that those people in most need of access to local services have the best ease of movement, whilst also facilitating the support to vulnerable people within their own communities.
Neighbourhoods of Choice	Existence of well maintained roads and footways is an important factor that people consider in deciding whether to live in or invest in an area. Providing affordable access for all to education, healthcare, employment, leisure and social opportunities enables people to make the most of life, supporting stronger communities. This Asset Management approach seeks to ensure that available resources are deployed in the best way to support access to important community facilities and links.

Environmental and Climate Change Impacts

Adoption of the Asset Management Policy and Strategy will support road safety initiatives and low carbon transport choices, including use of more sustainable treatments, to help meet carbon reductions goals for the city, and the Council's climate change strategies. A more effectively maintained highway network will also promote cycling and walking in the City and better and more reliable journey times will encourage modal shift.

Financial Consequences – Revenue
The Asset Management Policy and Strategy will ensure that the most cost effective maintenance treatments are used at the right time to maximise the life of the asset.

Over the longer term, this will help to reduce the pressure on our revenue budgets required for reactive pothole repairs.

Financial Consequences – Capital
The Department for Transport (DfT) have recently changed the way councils are awarded capital funding for highway maintenance. In previous years, all the available capital maintenance funding was allocated to local authorities based on a formula taking into account road length, traffic volumes etc. From 2016/17, the available funding has been sub-divided into three streams. In addition to the element of resources allocated according to standard indicators such as road length two further funds will be created as follows:

- Local Highways Maintenance Challenge Fund – Awarded via a bidding process for specific maintenance schemes. In 2014/15 we were successful in bidding for £6.3m of funding for maintenance of five of our key strategic routes;
- Local Highways Maintenance Capital Incentive Fund - Set up to reward councils who are using good asset management principles and who can clearly demonstrate efficiencies (see section 2).

This means that the amount of maintenance funding based on volumetrics (road length etc) is substantially less than previous years. A large proportion of the available funding is now based on competitive/performance criteria. If Manchester does not adopt a good asset management strategy, over the five years from 2016/17 to 2020/21, this would potentially mean a reduction of around £2m of incentive funding. More importantly it is unlikely that we would be successful in any future Challenge funding bids, where authorities would need to demonstrate good practice; this would mean a potential loss of further significant resources.

Contact Officers:

Name: Sara Todd
Position: Deputy Chief Executive
Telephone: 0161 234 3286
E-mail: s.todd@manchester.gov.uk

Name: Rachel Christie
Position: Strategic Area Manager
Telephone: 0161 600 8944
E-mail: r.christie@manchester.gov.uk

Name: Fiona Worrall
Position: Director of Neighbourhoods
Telephone: 0161 234 3926
E-mail: f.worrall@manchester.gov.uk

Name: Maria Gil
Position: Client Manager Highways
Telephone: 0161 219 6521
E-mail: m.gil@manchester.gov.uk

Name: Kevin Gillham
Position: Citywide Highways Manager
Telephone: 0161 234 5148
E-mail: k.gillham@manchester.gov.uk

Background documents (available for public inspection):

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

Highways – Maintaining a vital asset, UK Roads Liaison Group and Highway Maintenance Efficiency Programme (HMEP);
Highways Infrastructure Asset Management – guidance document, UK Roads Liaison Group and HMEP;
Self Assessment questionnaire – Incentive fund, Department for Transport;

1.0 Introduction

1.1 The city's highway network is the largest and most visible community asset for which the City Council is responsible. It is used daily by the majority of people who live and work in the city and is fundamental to the economic, social and environmental well being of the community. Over 80% of journeys to work are made using the highway network, alongside a growing diversity of commercial traffic. Our ability to offer a reliable and resilient highways system is not only important for existing businesses; it is also a determining factor in attracting new businesses, particularly those with a time-critical need for logistics and commercial transport links.

1.2 The highway network also helps to shape the character and quality of the local areas that it serves and makes an important contribution to wider local authority priorities, including regeneration, social inclusion, community safety, education and health. The city's highway network is therefore a key enabler of economic prosperity, productivity and social wellbeing. A well-functioning and well maintained network helps to enable growth by reducing business costs, improving access to markets, enabling competition, improving labour mobility, enabling economies of scale and agglomeration, and helping attract inward investment.

1.3 The effectiveness of current investments in improvements to cycling and public transport infrastructure will be compromised if the condition of the highway network is inadequate.

1.4 The identification of adequate financial resources to maintain the city's highway network has become increasingly challenging over recent years. While recent analysis has shown that three pounds worth of benefit can be gained for every pound that is invested in the pre-emptive maintenance of highway assets, the resources available to do so have become increasingly constrained. It is widely recognised that a failure to invest can result in the deterioration of the performance of the network, storing up higher costs for the future and causing an impact the on the delivery of local and national economic growth and productivity priorities. Difficult decisions regarding funding priorities have however increasingly had to be made within the context of an increasingly constrained budget envelope.

1.5 In order to best manage the impact of future funding shortfalls and to ensure that the City Council is in the best possible position to access available Government grant, this report proposes that the Council should adopt a clear Highway Asset Management Policy and Strategy. Adoption of these documents will enable the authority to maximise the value of the level of resource that is available and assist in the allocation of that resource in accordance with agreed strategic priorities.

2.0 Manchester's Highway Network - The Current Position

2.1 Manchester's highway network currently includes over 1,300 km of road length, 2,600 km of footway length and over 350 bridges and structures.

Based on the latest 2014 Local Authority Corporate Accounts (WGA) valuations, the total highway asset has an indicative gross replacement value of over £2.7billion, making it the Council's most valuable asset. For comparison purposes, the property asset amounts to approximately £1.3billion for Council dwellings, land and buildings.

2.2 The level of highways capital maintenance funding in the city has fallen over the over the last 4 years. This follows a prolonged period in which available maintenance funding has not matched need. The reduced level of funding available for the past four years has therefore added to the backlog of maintenance and the current level of funding is insufficient to sustain the network in the current condition. It is therefore all the more important that we use the funds available to deliver the greatest impact and the best overall value for money.

2.3 In order to prepare for the increasingly competitive and constrained funding environment, detailed work was undertaken in the city by Gaist Solutions Ltd in 2013. The company surveyed the entire highways asset so that a robust financial model could be developed that enabled effective prioritisation to be undertaken and that also identified the level of investment required to maintain the highways network to a satisfactory condition. The condition survey identified that the level of additional investment required at that time, to minimise the total of both revenue and capital expenditure on the highway network over the next 10 years, amounted to £125m on top of the existing capital maintenance budget (approximately £155 million in total). This level of investment was considered to be the optimum based on future cost avoidance and minimisation of disruption. If applied, it is projected that the City's network maintenance backlog figure would be reduced to £27m at the end of the ten year investment period. The survey data is currently being updated but it is considered likely that the funding requirement will have increased rather than decreased In the intervening period.

2.4 This level of resource is however not currently available. As identified above, conventional maintenance funding from Government has been reduced over recent years and on current projections only around £30 to £40 million is likely to be available over the next ten year period. In order to try to remedy this shortfall, as part of a detailed submission in advance of the Comprehensive Spending Review (CSR), the Combined Authority has made an economic case to Government for an additional £300 million of road maintenance resources to be made available to Greater Manchester over the next ten year period to support maintenance of a network of major roads known as the Key Route Network (KRN). The results of the CSR process will be known during the next month. If the bid is successful this will clearly be welcome but will not address the totality of the funding requirement, hence the need for a clear process of prioritisation of investment.

2.5 By defining a KRN at Greater Manchester level we have sought to identify those routes which are most critical to the city region's economy. The strategy is that available funding will be prioritised to this network. Within Manchester the current KRN contains the main radial routes and other key links such as

the inner ring road. The intention is to keep the network under review and officers will seek to ensure that it best reflects the key economic priorities of the city. There is a mechanism in place to review the KRN in the future in the light of experience of its operation and this may involve its scope being broadened.

2.6 In addition to efforts to make the case for a step change in the level of funding, it is also essential that the Council works to ensure that it is best placed to maximise the level of funding that it is able to attract through conventional sources. The proposed Highway Asset Management Policy and Strategy described in more detail below and attached in draft form at appendix 1 seeks to achieve this.

3.0 Highways Capital Incentive Fund Overview

3.1 The Government recognises that long term efficiencies can be made by applying robust asset management techniques aimed at achieving:

- long term reduction in reactive maintenance costs;
- clearer decision making over planned work;
- a reduction in third party accident claims, better customer satisfaction and stakeholder involvement;
- improved journey times and reduced delays;
- a better customer and stakeholder awareness of the value of our assets;
- a clearer understanding of future demands; and
- a better managed network.

3.2 In December 2014, the Secretary of State for Transport announced that £6 billion will be made available between 2015/16 and 2020/21 for local maintenance capital funding. Rather than allocating all of this to local authorities based on a generic formula, £578 million has been set aside for an incentive fund scheme, to reward councils who demonstrate they are delivering value for money in carrying out cost effective improvements. Although £6billion sounds a huge sum, when divided between all the highway authorities over 5 years, it equates to approximately the current provision we have been awarded over recent years;

3.3 Every local highway authority in England (excluding London) will be invited to complete a self-assessment questionnaire which will determine the share of the incentive fund they are eligible for from 2016/17 onwards.

3.4 Each authority has to score itself against 22 questions and place itself in one of three bands on the basis of the available evidence. The questions are divided into the following sections:

- Asset Management
- Resilience
- Customer
- Benchmarking and Efficiency

- Operational Delivery

3.5 The bands in which an authority places itself is based on the maturity of the authority according to its response to each of the 22 questions.

- Band 1 – Basic understanding
- Band 2 – Can demonstrate that outputs have been produced and working towards improvements
- Band 3 – Can demonstrate outcomes have been achieved because of a continuous improvement process

The overall score is calculated based on the combined number of Band 1, 2 and 3 scores.

3.6 Asset management is the main driver of the incentive fund and as such particular emphasis has been placed on 3 specific questions:

Q1 Asset Management Policy and Strategy
Q2 Communications
Q5 Lifecycle Planning

Regardless of the overall score, any authority scoring Band 1 in any or all of questions 1, 2 or 5 will automatically be placed in Band 1.

3.7 The incentive funding awarded to each authority will be based on their overall score in the questionnaire. Over the coming years the share of the fund authorities will receive is based on their overall performance, with funding being reduced on a sliding scale as shown in the table below.

Year	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Band 1	100%	90%	60%	30%	10%	0%
Band 2	100%	100%	90%	70%	50%	30%
Band 3	100%	100%	100%	100%	100%	100%

3.8 Manchester is currently scoring itself as a Band 2 authority which means we can evidence a band 2 score in at least 15 of the 22 questions.

3.9 However, as stated above, this score is dependant on achieving at least Band 2 in questions 1, 2 and 5 and to achieve Band 2 in question 1 the Council is required to adopt both an asset management policy and an asset management strategy. Both documents need to be agreed by the Council's Executive and published on the Council's website.

3.10 Department for Transport guidance indicates that the Asset Management Policy needs to be a short and concise statement that describes the principles adopted in applying asset management to achieve the authority's strategic objectives. The policy needs to describe the authority's commitment to highway infrastructure asset management. It should be endorsed by elected members, published on the Council's website and be visible to all staff

involved in related activities. A copy of the proposed draft asset management policy is attached at appendix 1

3.11 The Asset Management Strategy should be a clear and concise high level document setting out how highway infrastructure asset management is delivered for the authority to meet its long term corporate goals and objectives. This document should also be endorsed by elected members and published on the Council's website. A draft asset management strategy that complies with this requirement is attached for members' consideration at appendix 2

3.12 Without an asset management policy and strategy we automatically lose 10% of this capital funding next financial year, and more over subsequent years. Over the five years from 2016/17 to 2020/21, this could mean a shortfall of around £2m of funding. As previously stated, it is also unlikely that we would be successful in any future Challenge funding bids, where authorities would need to demonstrate good practice; this would mean an even more significant loss of resources.

3.13 In parallel with the development of the strategy an exercise is underway to pursue the reform of our highway services at both a Greater Manchester and city – wide level. Ensuring that the Council, and indeed the other Greater Manchester authorities have access to the right skills to deliver our highway priorities is challenging and a thorough review of the options is currently underway.

4.0 Prioritising capital maintenance programmes

4.1 The Strategy proposes that future programmes prioritise interventions according to:

- the importance of any road in supporting economic growth;
- condition rating;
- value for money;

4.2 The Asset Management Strategy also proposes that:

- A longer term rolling programme of capital maintenance work should be developed in liaison with local Members, which allows for investment decisions to support strategic priorities, provide better coordination with other work programmes and projects, better allocation of resources and budgets and greater clarity of what can be expected for stakeholders.
- A preventative strategy should be adopted as this will deliver the best value for money. A programme of preventative works will be prioritised for delivery;
- Investment in resurfacing will be targeted in the following priority order - the KRN network, roads of local strategic importance in accessing employment (described as the Community Network in the Strategy) and finally local roads;

- Maintenance works may also be programmed to coordinate with other capital projects being carried out in Manchester, which will be cost effective in terms of delivery and add additional value to the project;

4.3 For a given highway asset an optimum asset management strategy involves a long term programme of maintenance works with a combination of resurfacing schemes as well as applying cost effective preventative treatments (microasphalt or surface dressing) at the optimum time before the road has deteriorated too far. Over the last few years we have included a programme of microasphalt treatments into our capital maintenance works in order to maximise value for money. In practice, this means that 3 year rolling programmes of work will be developed, and the capital maintenance allocation for schemes will be used to fund a resurfacing programme and a preventative programme based on the priorities set out in 4.2 .

4.4 In determining these programmes the intention is that Neighbourhood Teams will work with Members at a ward level to identify preferred schemes within priority lists. These schemes will be costed and a preferred set of schemes agreed with the Executive Member.

5.0 The Key Route Network and the Community Network

5.1 At a Greater Manchester level a Key Route Network (KRN) has been defined which includes all major routes in Manchester and covers 7% of our road network. This network will be our priority for investment..

5.2 The criteria used to define the KRN were developed to limit the network's extent to the most heavily used routes and to those roads that provide the highest level strategic connections across Greater Manchester. If funding is available after maintenance of the KRN then other routes in the city that provide particularly important local functions, from both an economic and community perspective should be prioritised. This network is referred to as the Community Network.

5.3 The Community Network is aimed at providing a strategic focus on those more local roads that, should funding be available, then investment would best meet the city's strategic objectives relating to growth and liveability.

5.4 The proposed Community Network has been developed to ensure that local people are connected directly, and indirectly through transport hubs to locations where there are concentrations of jobs and education facilities. There will also be reference to the following criteria:

- Core Areas – roads within:
  - District Centre areas;
  - Strategic Employment site areas;

- Education – roads within:
  - 100m of schools or colleges;

- Health – roads within:
  - 200m of Hospitals;
  - 100m of Health Centres;

- Travel:
  - Key Bus Routes;
  - Cycle Routes (on road);

5.5 The Community Network developed using this criteria comprises a total road length of approximately 360 km. This makes up about 35% of our local road network (outside the city centre). A similar exercise will consider the need to prioritise those roads in the city centre that are most critical to delivering our growth ambitions This criteria is proposed to be used to help prioritise programmed maintenance funds and will inform other highway spend as appropriate.

6.0 Conclusion

6.1 This report proposes that the City Council should formalise its approach to the prioritisation of maintenance spending on the highway network through the adoption of a Highways Asset Management Policy and a separate Highways Asset Management Strategy. The Greater Manchester wide Key Route Network has been identified focused on the busiest routes and the most strategic connections and will be kept under review. The Council's Asset Management Policy and Strategy sets out the Council's approach to investment in this network and in the complementary Community Network. In the currently constrained funding environment the Strategy seeks to maximise the benefit that will be derived from the available resources and to focus in particular on those elements that support economic growth.

6.2 Members are asked to comment on or otherwise approve the attached documents.

7.0 Key Policies and Considerations

(a) Equal Opportunities

7.1 A well maintained highway network will improve access for vehicles and enhance pedestrian and cycling facilities, contributing to the corporate objectives of making the environment accessible to all and creating neighbourhoods of choice. Where appropriate Equality Impact Assessments will be undertaken.

(b) Risk Management

7.2 Where appropriate a risk management approach will be undertaken.

(c) Legal Considerations

7.3 There are no legal considerations arising from this Policy & Strategy.

Appendix 1

MANCHESTER CITY COUNCIL

Highways Asset Management Policy

1. The City Council understands the vital role played by Manchester's highway network in supporting the authority's vision and its three strategic priorities, namely:

   - **Growth** - Transport plays a vital role in Manchester's economic vitality. Regeneration aspirations will rely on effective transport links to enable employees and visitors to access new homes and workplaces, and for the business in and around our City to grow.

   - **People** - Providing infrastructure access for all to education, healthcare, employment, leisure and social opportunities enables people to make the most of life, supporting stronger communities;

   - **Place** - An effectively maintained local road network shapes the character and quality of the local areas that it serves and is essential to the functioning of our district and local centres. It will ensure that those people in most need of access to local services have the best ease of movement, whilst also facilitating the support to vulnerable people within their own communities.

2. A well maintained highway network is key to the future economic prosperity of Manchester and the quality of life of its residents.

3. The City Council is committed to making the best use of its budgets, and advocates an asset management approach for the maintenance of its highway network, in order to help deliver the best long term outcomes for local communities.

4. To help meet the City Councils key priorities, as well as the challenges identified in Greater Manchester's Local Transport Plan (LTP3) we will aim to achieve the following outcomes:

   Support the growth of the Greater Manchester economy;
   - Maintain effective transport links to drive growth and enable employees and visitors to access new homes and workplaces;
   - Maintain appropriate levels of reliability and journey times;
   - Prioritise the condition of strategic routes to development areas;

   Support neighbourhoods of choice and minimise the adverse impact of transport on public health, community safety and climate change;
   - Comply with our statutory obligations to maintain safety;
   - Support road safety initiatives and low carbon transport choices;
   - Prioritise the condition of routes providing access to key services;

Maximise value for money in the provision and maintenance of transport infrastructure and services;

- Develop long-term, sustainable, rolling programmes of work to ensure greater value for money by allowing investment decisions to support strategic priorities and provide better coordination with other work programmes and projects; Use the most cost effective maintenance treatments at the right time to maximise the life of the asset and deliver value for money;

5. We will achieve these by developing strategies, plans and processes that will:

- define desired levels of service for highway assets, in consultation with stakeholders and monitor our performance against these targets;
- adopt a life-cycle approach to planning asset investment and management decisions;
- balance competing needs across the highway network and select options that best meet desired outcomes;
- monitor, evaluate and, where required, improve service delivery;
- Continually assess, manage and control Risk to highway users using coordinated and systematic approaches.
- Continue to benchmark and support Greater Manchester local authorities, other national and international groups and other stakeholders in developing collaborative working practices, ensure efficiency savings using innovation and best practices so that our performance is further enhanced;
- adopt a continuous improvement approach to asset management policies and practices;

6. Our approach will be to prioritise the roads that are most important to our Growth objectives. The Key Route Network will be our first priority in terms of investment. However we recognize the importance of a well maintained and safe road network for communities and where funding allows we will also seek to invest in more local priorities, again prioritizing those road that best support local growth in particular through targeting access to local transport hubs, district centres and local facilities.

MANCHESTER CITY COUNCIL

Appendix 2

Highway Asset Management Strategy - Draft

Growth & Neighbourhoods Directorate
November 2015

V1.18 - DRAFT

Table of Contents

Highway Asset Management Strategy

Record of Amendments

Issue No:	1.18 / 2015
Status:	Draft
Date:	November 2015
Author:	Tony King
Reviewed by:	Maria Gil
Owner:	Manchester City Council
Approved by:	
Target Review Date:	

Amendments List

Version	Amendment	By	Date

Introduction

- As the Highway Authority we have a duty to act as custodian of the highway asset to ensure that it is fit for purpose and maintained accordingly.

- Manchester City Council recognises the importance of its highway infrastructure and how an effectively maintained and managed network contributes to the achievement of its corporate goals. This strategy sets out an approach for the management of all streetscape assets including lighting, drainage, cycling infrastructure, signage and traffic signals.

- The Council understands that effective asset management will deliver clarity around standards and levels of service, and help it to make best use of its available resources. This approach is set out in the accompanying Highways Asset Management Policy. However we also recognise that further funding is required to ensure that our asset is maintained to a standard that meets our strategic aims. We will aim to maximise value out of our current resources but also look to identify potential new funding streams, invest through savings, development opportunities and seek additional resources through competitive funding bids.

- The Highway Asset Management Strategy sets out a long term approach to achieving the aims in the Policy and how the long term objectives for managing our highway assets will be met. It provides the framework for delivering our corporate priorities through effective, informed and consistent decision making. This strategy sets out an approach for the management of all streetscape assets including lighting, drainage, cycling infrastructure, signage and traffic signals.

- This document has been produced following assessment of customer needs, local priorities and asset condition. It also ensures that both short and long term needs are appropriately considered, whilst delivering a minimum whole life cost approach to our Highway Assets.

- The Strategy will be used to prioritise schemes that are to be implemented within the Council's capital maintenance programmes.

- The Strategy covers all highway maintenance activities funded by revenue and capital streams.

- Throughout this document the term "Highway" refers to all assets within the highway boundary which have been officially adopted by the council. Assets that have not been adopted, or are located on private streets, are not maintainable at public expense and have not been included within our Highway Asset Management Strategy.

- This is not a static document. It will be reviewed and updated regularly in response to changing legislation, funding and the expectations of highway users.

1. The Importance of Highway Infrastructure to Manchester

1.1 The city's highway network is the largest and most visible community asset for which the City Council is responsible. It is used daily by the majority of people who live and work in the city and is fundamental to the economic, social and environmental well being of the community. Over 80% of journeys to work are made using the highway network, alongside a growing diversity of commercial traffic. Our ability to offer a reliable and resilient highways system is not only important for existing businesses; it is also a determining factor in attracting new businesses, particularly those with a time-critical need for logistics and commercial transport links.

1.2 The highway network also helps to shape the character and quality of the local areas that it serves and makes an important contribution to wider local authority priorities, including regeneration, social inclusion, community safety, education and health. The city's highway network is therefore a key enabler of economic prosperity, productivity and social wellbeing. A well-functioning and well maintained network helps to enable growth by reducing business costs, improving access to markets, enabling competition, improving labour mobility, enabling economies of scale and agglomeration, and helping attract inward investment.

1.3 The effectiveness of current investments in improvements to cycling and public transport infrastructure will be compromised if the condition of the highway network as a whole is inadequate.

1.4 The identification of adequate financial resources to maintain the city's highway network has become increasingly challenging over recent years. While recent analysis has shown that three pounds worth of benefit can be gained for every pound that is invested in the pre-emptive maintenance of highway assets, the resources available to do so have become increasingly constrained. It is widely recognised that a failure to invest can result in the deterioration of the performance of the network, storing up higher costs for the future and causing an impact the on the delivery of local and national economic growth and productivity priorities. Difficult decisions regarding funding priorities have however increasingly had to be made within the context of an increasingly constrained budget envelope.

1.5 In order to mitigate the impact of future funding shortfalls this Highway Asset Management Strategy will help to maximise the level of resource that is available and assist in the allocation of that resource in accordance with agreed strategic priorities.

2. Asset Management Principles

2.1 The Government recognises that long term savings can be made by employing asset management techniques. By carrying out more long term planned works rather than short term maintenance repairs we can achieve:

- long term reduction in reactive maintenance costs;
- clearer decision making with our planned work;
- improved management of the risks on our critical assets;
- a reduction in third party accident claims, better customer satisfaction and stakeholder involvement;
- improved journey times and reduced delays;
- a better customer and stakeholder awareness of the value of our assets;
- a clearer understanding of future demands and a better managed network;

2.2 For a road, an optimum asset management strategy involves a long term programme of maintenance works with a combination of resurfacing schemes as well as applying preventative treatments (microasphalt or surface dressing) at the optimum time before the road has deteriorated too far.

2.3 These preventative treatments mean that the whole life costs to maintain the road can be minimised, as illustrated below for a road 500m long (6m wide) over 40 years:

i) Reconstruction / resurfacing (approx £40/m^2):

Initial construction =	£150k
After 20 years, resurfacing =	£120k
After 40 years, resurfacing =	£120k
TOTAL COST =	£390k – Plus high reactive costs / third Party claims

ii) Preventative treatment (approx £5/m^2):

Initial construction =	£150k
After 8 years, treatment =	£15k
After 16 years, treatment =	£15k
After 24 years, treatment =	£15k
After 32 years, treatment =	£15k
After 40 years, treatment =	£15k
TOTAL COST =	£225k

2.4 Whilst it may appear that we are spending money on roads that do not need treatments, this approach is the most cost effective use of the budget because it means that far more roads can be treated.

2.5 This strategy is the roads equivalent of painting wooden window frames regularly, rather than waiting for them to rot and need expensive replacement.

2.6 Essentially asset management is ‘looking into the future’ of the whole life of a particular asset.

3. Asset Management Framework

3.1 The Asset Management Strategy is one of the key strategic documents relating to the Council's Highway Services. The Asset Management Framework table below encompasses these key documents and illustrates the local and national influences and dependencies that are in place to deliver these services.

3.2 As well as linking in with the City Council's own vision and objectives, the framework shows the link with the wider objectives of Greater Manchester Combined Authority (GMCA) via its Transport for Greater Manchester Committee, who defines the strategies and policies for transport in Greater Manchester.

3.3 The Greater Manchester (GM) devolution agreement, announced in 2014, included a commitment for GM to identify a Key Route Network (KRN) of local authority roads for unified management in the interest of the growth agenda.

3.4 This KRN network has now been identified Transport for Greater Manchester (TfGM) will co ordinate all activity on the KRN. Baseline reviews of all the KRN are currently being undertaken to begin shaping and informing what the 'cohesive' strategy should be and ultimately set performance targets.

3.5 Management and operation of the KRN will still be retained by individual highway authorities with TfGM overseeing. In addition, TfGM would be responsible for preparing capital budgets, coordinating funding bids and identifying priority projects, in consultation with the local authorities.

3.6 A key element of the Asset Management Framework are the operational procedures, policies and guidance, service standards and interventions that reflect the Highway Authority's legal requirements.

3.7 This strategy reflects the guidance laid down in the suite of national Codes, in particular the Code of Practice '*Well-maintained Highways'* and the guidance issued by the Highway Maintenance Efficiency Programme (HMEP) on the use of asset management principles.

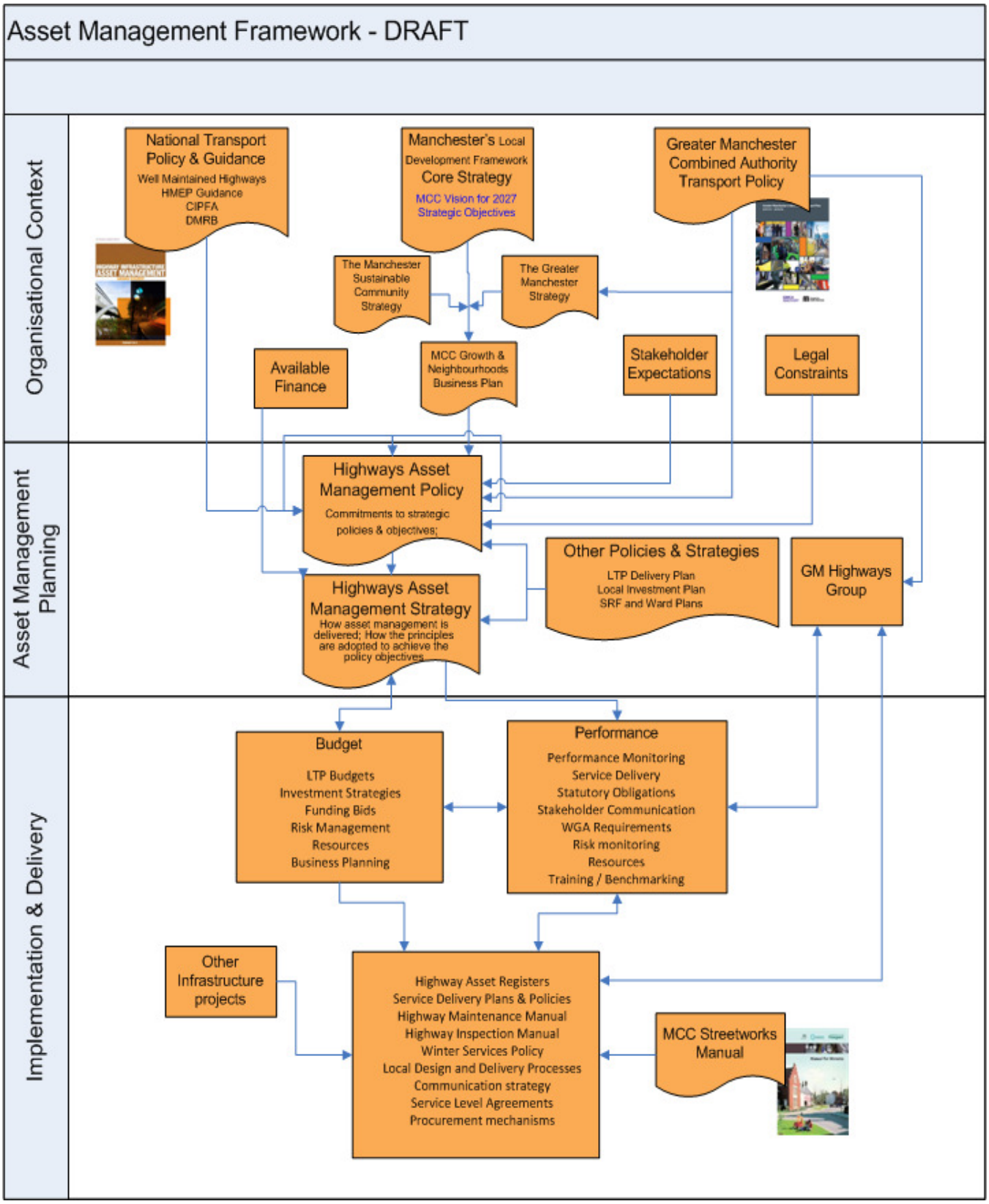
3.8 Responsibility for planning and delivery of Highway works within Manchester City Council sits within the Growth & Neighbourhoods Directorate. The structure for governance and decision making relating to highways functions have been produced,and will be made available alongside the final version of the strategy.

3.9 Under the structure of the department, highway functions are overseen by the Transport Strategy Board, which has a wider remit in ensuring that all activities are in line with the Council's strategic priorities as well as those of Greater Manchester.

3.10 The Council has set up a Highway Asset Manager role to promote and deliver asset management practices in the delivery of highway services, develop strategic documents and embed and promote asset management practices.

3.11 Appropriate training and knowledge sharing with other authorities and national organisations will be maintained to ensure continual good practices are utilised.

3.12 The organisational structure and practices will be continually reviewed to ensure the most efficient and cost effective means of managing the highway assets is provided and that the organization responds to changing circumstances.


Asset Management Framework - DRAFT
Organisational Context
Asset Management Planning
Implementation & Delivery
National Transport Policy & Guidance
Well Maintained Highways
HMEP Guidance
CIPFA
DMRB
Manchester's Local Development Framework
Core Strategy
MCC Vision for 2027
Strategic Objectives
Greater Manchester Combined Authority Transport Policy
The Manchester Sustainable Community Strategy
The Greater Manchester Strategy
Available Finance
MCC Growth & Neighbourhoods Business Plan
Stakeholder Expectations
Legal Constraints
Highways Asset Management Policy
Commitments to strategic policies & objectives;
Other Policies & Strategies
LTP Delivery Plan
Local Investment Plan
SRF and Ward Plans
GM Highways Group
Highways Asset Management Strategy
How asset management is delivered; How the principles are adopted to achieve the policy objectives
Budget
LTP Budgets
Investment Strategies
Funding Bids
Risk Management
Resources
Business Planning
Performance
Performance Monitoring
Service Delivery
Statutory Obligations
Stakeholder Communication
WGA Requirements
Risk monitoring
Resources
Training / Benchmarking
Other Infrastructure projects
Highway Asset Registers
Service Delivery Plans & Policies
Highway Maintenance Manual
Highway Inspection Manual
Winter Services Policy
Local Design and Delivery Processes
Communication strategy
Service Level Agreements
Procurement mechanisms
MCC Streetworks Manual

4. Asset Management Objectives

4.1 Our Highways Asset Management Strategy has set out the below performance objectives to provide guidance to the delivery of our service, and establish alignment for our performance management framework.

4.2 Delivering Customer Satisfaction with our Service:

4.2.1 Manchester's road network provides the backbone of its economy and the maintenance of its highways in an appropriate condition is paramount. This is reflected in customer contact data captured through our CRM process which indicates on-going customer interest in the condition of carriageways.

4.2.2 Engaging with stakeholders to understand their needs and expectations provides the information needed to determine and review the service provided by highway infrastructure assets and hence the asset management activities.

4.2.3 This will be achieved by:

- Regularly communicating and consulting with internal and external stakeholders. A list of key stakeholders has been identified, with an associated communication statement which will be made available alongside the final version of the strategy. A Communication Strategy is being formulated which will document this process formally;

- Obtaining, measuring and reporting outcomes from regular consultation and feedback to ensure that we take into account the values and important views of our stakeholders when making decisions about our asset management service. We are currently working with our Performance & Intelligence team to compile a specific set of questions regarding public perception of highways so that we can capture local priorities and monitor improvements over time. We intend to carry out this survey predominantly using a web-based format from 2015 onwards;

4.3 Maintaining a Safe & Serviceable Highways Network:

4.3.1 As stewards of the Manchester City Council highways network, we will ensure that our asset is maintained in a safe and serviceable condition in order that it will continue to provide a strong service to our road users and stakeholders.

4.3.2 This will be achieved by:

- Operating an effective programme of safety inspections and managing defects using a risk based approach as defined in the Well Maintained Highways Code of Practice;

- Undertaking highway maintenance according to our published maintenance standards;

- Providing a comprehensive planned Winter Maintenance service on key sections of the highway to keep it free of frost, ice and snow, in line with our winter maintenance policy;

- Keeping water away from the road surface and minimising impacts of surface water by providing and maintaining adequate drainage;

- Providing and maintaining essential street and footpath lighting in accordance with national standards;

- Maintaining the bridges and other structures that form part of the highway network, and strengthening them if necessary to cater for modern traffic, or restricting their use by heavy vehicles;

4.4 Delivery of Cost Effective Asset Management:

4.4.1 Our highways service will adopt a whole life approach to highways investment and will increase the proportion of the network maintained under our asset maintenance and improvement approach. We will ensure that remedial work is undertaken where required to ensure safety of users.

4.4.2 This will be achieved by:

- Highways asset condition data being used in the targeting of maintenance on specific parts of the network for the most effective and economic benefits;

- Making greater and more frequent use of low cost preventative treatments to prolong the network life to avoid the need for expensive major renewal;

- Making highway investment decisions on a whole life basis, i.e. considering future highway maintenance costs early in a scheme design;

5. Strategy for Main Asset Groups

5.1 As part of the asset management framework, and in accordance with other national guidance, the highway asset has been divided into asset groups. Each group is then broken down into asset components and activities. The main asset groups, components and value are shown in Appendix 1.

5.2 In the application of the strategy it is important to recognise that the failure of certain routes and infrastructure would have a greater impact on Manchester's economy and communities than the failure of others.

5.3 Our first priority for funding will be the KRN to support our strategic priority of growth, and when funding is available we will next prioritise roads of local significance for growth, which we have classified as the Community Network, the criteria for this network is detailed in Appendix 2.

5.4 Understanding what condition the City Council's highway assets are in is essential in planning for the future, both in making decisions about how they are managed and in understanding the future investment required to maintain or improve their condition. Assets deteriorate at different rates and decisions have to be made about strategies for maintaining them during their life.

5.5 Accurate condition data and lifecycle modeling is essential to provide annual Whole of Government Accounting (WGA) data for our infrastructure assets, which we have a statutory obligation to provide.

5.6 In 2013 the Council commissioned a detailed condition survey of our carriageway and footway network, including kerbs and verges, as well as an asset survey to collect drainage and pedestrian crossing data.

5.7 In order to keep this data up to date, we carry out video surveys to cover half of our carriageway and footway network on a rolling programme. This will be analysed against previous data and our asset registers updated accordingly. This means that we will have a full condition survey of the network approximately every 2 years.

5.8 The video survey will also be used to collate additional asset information and update registers as required.

5.9 It is also intended to undertake other surveys periodically, including:

- Scanner on our KRN in conjunction with other districts in Greater Manchester;
- Griptester / SCRIM surveys to measure skid resistance;
- Core surveys to assess construction depths;

5.10 The strategy for each main highways asset group is detailed below, but when any maintenance works is being carried out, our aim will be, particularly for strategically important places such as district centres, to improve the maintenance of the streetscape in a cohesive way. .

5.11 Carriageways

5.11.1 Carriageways (roads) are by far the largest of the Council's assets and account for an estimated 65% of the total highways asset value. Maintaining their condition and preserving their value is vital to the success of the Council's maintenance strategy and they will be given budget priority above other elements of the highway asset.

5.11.2 **Desired Outcome:** to deliver a sustainable improvement in overall condition;

- Priority Investment: a preventative strategy should be adopted as this will deliver the best value for money. A programme of preventative works will be prioritised for delivery;
- Where funding is available investment will be prioritised on the KRN, the Community Network and all other local roads in that order ;
- Maintenance works may also be programmed to coordinate with other capital projects being carried out in Manchester, which will be cost effective in terms of delivery and add additional value to the project;
- Investment in large patching will continue which is much more cost effective than pothole repairs;
- Investment in drainage maintenance and improvements will continue where appropriate;
- We will aim to achieve a decrease in quantities of minor defects (pot holes and similar) in the longer term;
- De-cluttering will be considered for all aspects of Highway Asset management;

5.11.3 Preventative approach - A preventative approach should be adopted. This means investing a greater proportion of the available budget to treat roads in the early stages of deterioration. Preventative treatments, such as microasphalt surfacing, target assets that are not currently in need of full structural renewal and will extend the assets whole life by arresting/delaying deterioration. A programme of preventative treatment will form part of this Strategy and is incorporated in Delivery Plans.

5.11.4 Reactive and Routine Repair Costs - Ongoing review of reactive repair standards will form part of this Strategy. The review will examine investigation and intervention levels and will determine how more cost effective ways of delivering an acceptable standard of repair to safety defects and other minor defects can be achieved.

5.11.5 The Strategy is designed to allow better management of customer expectations. By providing specified target standards, by improving planning of works and providing longer term programmes of work it is expected that users will have greater clarity of what can be expected. Improved communication with customers using this information should improve customer perception and satisfaction.

5.11.6 We also need to continue collecting asset condition and inventory data to ensure the information we hold is accurate and up to date. This information will be used for future works programmes, for deterioration modelling, lifecycle planning, performance monitoring and for providing information in accordance with the CIPFA Code of Practice and WGA.

5.11.7 We will continue to seek alternative and innovative treatments to restore and extend the life of the road surfaces.

5.12 Footways

5.12.1 The priority for footways is to deliver a sustainable improvement in the condition of higher use footways and address the worst condition other footways to help maintain a safe network.

5.12.2 **Desired outcome:** to improve condition of high use footways and maintain the overall condition of the footway network at no worse than current.

- Priority Investment: Where the funding is available our priority is to target the worst condition heavily used footways on strategic routes and the worst condition footways on the community network;
- Footways on other local roads will be considered for maintenance works based on condition and / or proximity to other identified highway schemes;
- A preventative Strategy will be adopted using surface treatments where appropriate;
- Where carriageway works have been identified, adjacent footways may also be included, based on condition and funding availability;
- Other than in conservation areas or other special circumstances, when maintenance works are required, our policy will be to replace flagged footways with bituminous materials. As well as being more cost effective, this will help to mitigate future maintenance liability.

5.12.3 Preventative approach - A large proportion of Manchester's footways are bituminous. A regime of preventative treatments such as microasphalt surfacing offers the opportunity to deliver improved condition at a lower cost. Where funding allows, a programme of preventative treatment will be incorporated in Delivery Plans.

5.13 Highway Structures (bridges)

5.13.1 **Desired outcome:** to maintain safe structures addressing structures where strengthening is desirable, utilising bridge condition and location as determinant factors;

- Priority investment: in statutory duties and a small number of priority structures defined as 'critical assets' which are on the KRN;
- Strengthening programme; strengthening of structures will be undertaken progressively using a prioritisation of those structures where strengthening provides the greatest benefit to users;
- Maintain the safety of the structures stock - Reduce the number of structures requiring strengthening works;

5.13.2 **Statutory Duties** -The council will continue to meet its statutory duties as the owner of highway structures via a regime of inspections and management of abnormal loads and bridge use. Funding allocations to allow repair of damage to structures requiring immediate attention (e.g. vehicle strikes in order to keep the asset safe) will be maintained.

5.13.3 Bridges and structures are inspected regularly by our inspectors and condition information is currently held on our Structures Asset Management Information System (SAMIS) database.

5.13.4 Bridge Strengthening Programme – A list of schemes has been identified where maintenance work is desirable. The remaining structures will be managed utilising a regime of inspection/monitoring. The Strategy is based upon addressing the highest priority structures within this list as below:

- Priority 1 Works: Structures which require immediate (next 1-3 years) attention to prevent them from becoming hazardous to users or that require works that will prevent high repair costs from being required. Further priority for structures on the KRN;
- Priority 2 Works: structures which require attention but can be managed by monitoring until funding is available to enable works to be undertaken (targeted completion of this programme within 10 years);

5.14 Drainage & Flood Defence

5.14.1 Manchester has produced a detailed Flood Risk Strategy, published in 2014, which sets out the key issues and a long term plan for Manchester to manage surface drainage and address flooding issues.

5.14.2 There are approximately 116,000 road gullies in Manchester. We are currently developing a cyclic maintenance programme, with the frequency of cleansing based on a priority score for each gully taking into account historical data, route hierarchy, flood risk etc.

5.14.3 Drainage asset information is stored on our Symology Insight system, and condition data will be updated using handheld devices following regular cleansing operations and inspections following requests. This process should be operational in late 2015, following appropriate training.

5.14.4 There are occasions where cleaning will not resolve surface water flooding problems and gullies and drainage pipes will require replacement. Repairs will be prioritised based on the priority score or other strategic priorities.

5.14.5 Gullies on roads identified for planned maintenance works are cleaned prior to works commencing and after works are completed. Any further drainage problems identified in the initial cleaning will be incorporated into the planned maintenance works.

5.14.6 When other highway capital schemes are being implemented and existing drainage problems are found, these will be repaired as part of the scheme, subject to budget availability.

5.15 Street Lighting

5.15.1 The City Council's Street Lighting management and maintenance are delivered through an existing long term PFI contract which extends to June 2029. This PFI has enabled investment in what was a failing asset to ensure that the lighting of the city plays its part in ensuring safety for all road users and helps with the perception of safety of our neighbourhoods.

5.16 Traffic Signals

5.16.1 All traffic signal control equipment in Greater Manchester is owned by the GMCA and are managed and maintained by Urban Traffic Control (UTC) section of Transport for Greater Manchester (TfGM). We work with TfGM to ensure that this equipment is maintained and operated so as to aid flow of traffic and improve road safety.

5.17 Capital Improvement and Road Safety Schemes

5.17.1 The Strategy supports the need to focus on improving road safety and encouraging growth through delivering appropriate capital improvement schemes. Whilst the Strategy does not directly cover these activities, it is intended to facilitate a joined up approach to the delivery of improvement and maintenance schemes. There is also an on-going requirement to understand the future maintenance implications of new capital schemes.

5.17.2 Where maintenance works are programmed in strategically important areas, such as District Centres, we will aim to coordinate these with other public realm works being carried out,to ensure that the end result is a cohesive upgrade of the area.

5.17.3 The Asset Management Strategy and resultant long term delivery plans, will allow a more coordinated approach to the provision of Capital Improvement and highway maintenance schemes. This will ensure that maximum value is achieved from various capital and revenue investments through the lifecycle of new and existing assets.

5.18 Critical Assets

5.18.1 Some elements of the highway network are more vulnerable than others and some routes are more relied upon than others. A risked based approach is an essential element of asset management in establishing priorities, levels of service and coordination of activities.

5.18.2 Identified high level risks are recorded on a risk register and an assessment of threat, vulnerability and consequence carried out to give a balanced view of the risk levels associated with different activities and options. A final risk rating is produced which enables comparisons to be made between each risk.

5.18.3 Manchester's critical highway assets are those defined where failure would result in significant impact on the local, and potentially the regional economy.

5.18.4 These will be included in a 'Resilient Network', defined using a risk based approach, using factors such as traffic volumes, risk of flooding, past incident reports, bus routes, major businesses, proximity to schools etc. and liaising with neighbouring authorities, emergency services and existing emergency procedures. Appropriate contingency planning for a failure event has been determined, and relevant protocols established should failure occur, incorporating lessons learned.

5.18.5 These critical assets also tie-in with the Winter Services gritting strategy, identified community network and the wider network identified by TfGM as part of their managed strategy for the KRN in Greater Manchester.

5.19 Sudden asset failures

5.19.1 Whilst the Strategy advocates a planned and risk based approach to Asset Management, there may be exceptional circumstances in which a particular asset fails rapidly - beyond prediction. In this event, planned activities will be reprioritised

(using the principles contained within this Strategy) across all asset groups in order to facilitate the inclusion of additional schemes within the programme.

5.20 Planning Considerations

5.20.1 The Council understand the importance that growth and re-development has on the future of the local area and economy. However, there is a need to ensure that any new development / change of use promoted through the planning process fully consider the impact on the existing highway network and its future maintenance.

5.20.2 Highway maintenance works carried out by other bodies, for example utility companies and developers, will continue to be monitored by our street works team to ensure that appropriate materials and good practices are utilised, and the GMRAPS permitting system to check that work programmes coordinate with ours.

6 Data management & information systems

6.1 The City Council's Highway Asset Management Strategy and Plans are supported by robust and reliable data.

6.2 The following systems are currently in operation by the Authority to manage its Highway Data:

- Gaist Geographical Resource Platform (GRP);
  A web based mapping platform which graphically represents recorded asset information as well as linking to an advanced cost and deterioration model to support whole life analysis and WGA submissions.

- Symology Insight for Highways;
  A highways inspection, defect recording and works ordering system using mobile software and hand held devices to carry out inspections, record defects and raise works orders.

- Esri ArcGIS;
  Geospatial databases are used to record project information, and store GIS data in a central location for easy access and management.

- Greater Manchester Road Activities Permit Scheme (GMRAPS) – Permitting scheme used across Greater Manchester. The aim of GMRAPS is to improve the strategic and operational management of the highway network through the better planning and scheduling of activities to minimise disruption and delay to road users. Decisions regarding permits, how the scheme operates and enforcement are taken by the ten Greater Manchester Authorities, either collectively or individually as appropriate. The system ensures that all planned works across the district are coordinated to minimize disruption.

- SAMIS (Structures Asset Management Information System);
  Bridges and structures assets are currently registered on the SAMIS structures asset management information system used across Greater Manchester. GM will shortly be updating to a new Bridge Management System, which will be used by all 10 local authorities.

- Customer Relationship Manager (CRM) and CP&C software to record queries, requests, complaints and customer feedback in relation to the highway network. Also able to monitor and report performance against service level agreements.

  These systems will be maintained and upgraded to benefit from continual improvements in ICT and developments in asset management.

6.3 Asset data will be maintained by utilising:

- Reports through safety inspections and routine and reactive maintenance functions.
- Continued procurement of carriageway and footway treatment surveys of the road and footway network. A rolling programme of video surveys of the full network is being carried out, which will be used to update the GRP mapping platform.
- Principal and General inspections of highway bridges & structures.
- Resurveying, as appropriate, of specific asset groups and by following procedures for change control as a result of scheme implementation or maintenance.
- Updates following completed planned maintenance, reactive maintenance and infrastructure improvement schemes.

7 Good Practice

7.1 Manchester City Council is committed to developing and implementing best practice from lessons learned at National, Regional and local levels. Officers regularly contribute to and attend seminars, conferences and training sessions held by:

- HMEP;
- The Chartered Institute of Public Finance and Accountancy (CIPFA);
- Highways Asset Management Financial Information Group (HAMFIG);
- Highways England;
- UK Roads Board;
- ADEPT Asset Management Working Group;

7.2 Furthermore, Manchester is committed to the sharing of knowledge and experiences in implementing asset management with other Highway Authorities across Greater Manchester as well as further afield.

7.3 To this end, the Council is part of the GM Highways Group comprising the 10 districts of Greater Manchester, as well as the Local Highways Investment Group currently including officers from Blackpool Council, Lancashire County Council, Stockport Borough Council, Plymouth City Council, Southend On Sea Borough Council, Warrington Borough Council and Halton Borough Council.

7.4 These groups meet regularly to share good practice, discuss new initiatives and benchmark performance.

8. Performance Reporting

8.1 To ensure that the correct asset management decisions are being made to achieve the objectives set out in this strategy, there needs to be a measure of both the outcomes that are important to the public as well as the engineering objectives that are trying to be achieved. It is important that public outcome measures reflect the experience of those using the highway. Measuring these outcomes ensures that appropriate services are being delivered for businesses and communities in Manchester.

8.2 Furthermore, tracking asset management outputs will ensure there is a focus on achieving better value for money over the long term. Monitoring effective measures of performance can aid and improve decision making at both a strategic and operational level and provide the link between corporate vision, asset management strategy, levels of service and maintenance operations.

8.3 Asset Management Outputs:

8.3.1 Measurement and trend analysis of highway asset condition will be an indicator of performance. The measurements will be specific to each asset group. In many cases it is possible to benchmark performance with other local highway authorities.

8.4 Public Outcomes:

8.4.1 In order to monitor the impact of the Highway Asset Management Plan on the public, a range of measures are being used and will be developed as asset management is further embedded within the highways service.

8.4.2 Examples of these include:

- Public satisfaction on a range of relevant highway issues through stakeholder surveys. e.g. condition of highways, road safety, speed of repair to highway defects;
- Numbers and locations of road casualties;
- Number and cost of claims associated with highway matters;
- Public enquiries and call centre demand;

8.5 As a member of the GM Highways Group, performance results will be benchmarked with other local authorities within Greater Manchester where possible.

8.6 The performance targets will be reviewed annually during the final quarter of the financial year and adjusted for the following year if necessary.

8.7 As part of the performance management framework, processes will be developed to capture lessons learned with a view to continual improvement in service delivery and good practice.

8.8 New national and regional initiatives and innovations will be reviewed and incorporated into the performance management process where relevant so that any improvements can be captured and reported.

9 Strategy Review

9.1 The Strategy will be reviewed regularly to allow informed decisions to be made in order to accommodate any changes in funding and priorities within the longer term forecasts.

9.2 The Strategy is not based on a specific assumed funding level, and therefore, significant changes to the strategy will not need to be made if major changes in available budget occur.

9.3 The self assessment questionnaire used for the Local Highway Maintenance Capital Incentive Fund Scheme has been designed to enable authorities to assess their progress on the journey to the implementation of good practice, which will enable effective and efficient use of available funding.

9.4 This has assisted us in producing a list of improvement actions shown in Appendix 2.. Completion of these actions will provide the capability to make better financial decisions, manage our highway assets more effectively and move us towards a ‘Band 3’ authority.

9.5 Progress in delivering the Strategy will be reported on annually at an Annual Strategy and Performance Review.

Glossary & abbreviations

Glossary of Terms

Adopted Highway	Public roads and footways maintained by the Council (the Highway Authority) in accordance with the Highways Act 1980
Asset	In the context of this document an asset is an integral feature of the highway infrastructure, such as carriageways, structures and lighting.
Asset Life-Cycle Planning	This involves calculating how much spend is required on our highway assets to maintain their condition over their lifetime, based on different maintenance strategies.
Asset Management	A strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure in order to meet the needs of current and future customers.
Asset Value	The calculated current monetary value of an asset or group of assets. It should be correctly referred to as the 'net asset value', but it is normally shortened to 'asset value'
Deterioration	The physical wear and tear on the asset; damage due to time, weather, etc that can be observed and measured through condition surveys.
Griptester	Trailer based continuous surface friction measuring device used to determine the skidding properties of roads and footways
Highway Network	Collective term for adopted public roads, footpaths and their associated assets
Inventory	Information that is gathered and used to describe each asset type
Levels of Service	The standard applied to the maintenance of highway assets
LTP	Local Transport Plan - Government capital funding for highway and infrastructure maintenance
Network	The highway network inclusive of all its elements, such as roads, segregated footpaths and cycle routes, structures and lighting
Preventative Maintenance	Application of relatively inexpensive maintenance treatments at the most appropriate time to protect and extend the life of assets
Reactive Maintenance	This refers to routine maintenance work that is carried out in response to problems arising on the highway that could endanger the safety of users. This could include activities such as repair of potholes, broken drain covers and response to flooding events
SCANNER	A high-speed surface condition survey undertaken from a van, normally on the principal road network
SCRIM	Sideway Force Coefficient Routine Investigation Machine - used to determine the skidding properties of roads
WGA	Whole of Government Accounts - HM Treasury scheme to create a national single set of public accounting protocols

Other Abbreviations:

CIPFA	Chartered Institute of Public Finance and Accountancy
HMEP	Highways Maintenance Efficiency Programme
HAMFIG	Highways Asset Management Financial Information Group
GM	Greater Manchester
GMCA	Greater Manchester Combined Authority
TfGM	Transport for Greater Manchester
KRN	Key Route Network
CPP	Capital Programmes & Property Department
GRP	Geographical Resource Platform
GMRAPS	Greater Manchester Road Activities Permit Scheme
CRM	Customer Relationship Manager
GIS	Geographic Information System
NHT	National Highways and Transportation
SAMIS	Structures Asset Management Information System

Appendix 1 – Manchester's Highway Assets

1. Manchester's highway assets have been divided into key asset groups and components and their approximate size and value are shown in the following table:

Asset Group	Main Components	Approx. Quantity
Carriageways (roads)	'M' and 'A' roads; 'B' and 'C' roads; Local 'U' roads; Road Markings;	1,334 Km
Footways & Cycle Tracks	Footways; Cycleways; Pedestrianised areas; Still some data to collect on separated footways and cycle tracks	2,668 Km
Bridges & Structures	Bridges; Culverts; Embankments; Subways; Retaining Walls; Gantries;	365 bridges & structures
Drainage & Flood Defence	Gullies and linear drainage channels(road and footpath); Highway drains (including pipework); Value included in carriageway figures;	116,000 gullies
Street lighting, illuminated bollards and signs	Maintained under the existing PFI contract with AMEY;	55,000 columns, approx. 7,000 illuminated signs/bollards;
Street Furniture	Insufficient data about the size of this asset.	-

2. HM Treasury and the Chartered Institute for Public Finance and Accountancy (CIPFA) incorporate our infrastructure asset valuations into our Local Authority Corporate Accounts (WGA valuations).

2.1 In terms of infrastructure asset types, we are required to determine:

- Gross Replacement Cost (GRC) - the value of the highway network based on the cost of rebuilding it from new at today's costs, and
- Depreciated Replacement Cost (DRC) – the value of the highway network at today's costs, taking into account depreciation. The DRC is therefore the net current value of the asset.

2.2 Based on the latest 2014 valuations, Manchester's highway network has an indicative gross replacement value of over £2.7billion (not including the land value) making it Manchester's most valuable asset. For comparison purposes, the property asset amounts to approximately £1.3billion for Council dwellings, land and buildings.

3. A key function of the asset management process is to understand the spending needs of each asset group, component and activity against performance, aims and objectives.

Appendix 2 - Community Network

1. Introduction

1.1 At a Greater Manchester level a Key Route Network has been developed which includes all major routes in Manchester and covers 7% of our road network, funding will be prioritised to maintain the KRN, however if funding allows investment can be undertaken in the remain network. Recognising the existing restrictions on budgets we have developed criteria for prioritizing the remaining 93% of our network based on our growth aspirations.

1.2 Prioritising the ever diminishing funds particularly for maintenance is a continuing challenge. There is a risk that those who are most articulate get the greatest amount of funds. This is a key risk to us as a city as what we need is to spend our limited funds where there is most impact on our objectives and also where we can achieve the highest rate of return for our investment. There are two objectives that most closely align to the condition and state of our roads:

- Growth and access – connecting people effectively to jobs and education either directly or through transport hubs is key to the future success of the city and is a key objective of the Community Network ;
- Liveability - so that those already economically active and those who gain employment want to stay in the city; and

1.3 The proposed Community Network has been developed to ensure that local people are connected directly, or indirectly through transport hubs, to locations where there are concentrations of jobs and education facilities. The network was also based on the following criteria:

2. Criteria

2.1 It is proposed that the following criteria are used to develop this community network:

- Core Areas – roads within:
  - District Centre areas;
  - Strategic Employment site areas;
- Education – roads within:
  - 100m of schools or colleges;
- Health – roads within:
  - 200m of Hospitals;
  - 100m of Health Centres;
- Travel:
  - Bus Routes;
  - Cycle Routes (on road);

2.2 The community network developed using this criterion comprises a total road length of approximately 360 km. This makes up about 35% of the total local road network (excluding the city centre which is our main priority and is currently receiving huge investment).

2.3 This criteria will be used to prioritise programmed maintenance funds and will inform

other highway spend as appropriate.

Appendix 3 - Action plan

1. The self assessment questionnaire used for the Local Highways Maintenance Capital Incentive Fund Scheme has been designed to enable authorities to assess their progress on the journey to the implementation of good practice, which will enable effective and efficient use of available funding.

2. This has assisted us in producing a list of improvement actions below:

Number	Action	Benefit	Timescale
1	Communication strategy to be formalised, including post scheme reviews and customer satisfaction surveys	To improve stakeholder satisfaction and develop levels of service incorporating stakeholders needs and lessons learned	Short
2	Update and refine Performance Management Framework, setting key local performance indicators (LPIs)	Supports the implementation of the strategy and can be used to measure it's performance and facilitate continuous improvement. Can demonstrate value for money	Short
3	Integrate the Highways Asset Management data registers to support operational systems and financial management	Increased asset intelligence. More efficient and effective data handling. Provides reliable information for decision making and maximising efficiencies	Short/Medium
4	Identify data gaps and prioritise what asset information we still need to collect	To fully understand our highway asset condition and value	Medium
5	Identify and develop appropriate competencies – work towards PAS55 / ISO 55000 accreditation	A competent and motivated staff team will support the delivery of asset management	Medium
6	Development of a robust risk management process associated with highway assets to be implemented and identification of a 'resilient network'	To understand the assets critical to the functioning of the network and develop levels of service based on risk	Medium
7	Develop a process to measure and capture efficiencies being delivered in highway maintenance, incorporating LEAN reviews	Efficiency savings demonstrate effective use of available funding to stakeholders and can demonstrate continuous improvements	Medium
8	Continue to collaborate and benchmark the service with others	To maximise resources, share good practice and deliver better outcomes.	Ongoing
9	Annual reviews	Prepare progress reports for Executive and report proposals for long-term programme development	Ongoing