

Report To: **STRATEGIC PLANNING & CAPITAL MONITORING PANEL**

Date: 13 March 2017

Executive Member Councillor Allison Gwynne, Clean & Green

Reporting Officer: Ian Saxon Assistant Executive Director, Environmental Services

Subject: **HIGHWAY CONDITION - SUSTAINABILITY OPTIONS - TRANSPORT ASSET MANAGEMENT PLAN (TAMP)**

Report Summary: This report identifies key issues with regards to ensuring our highway network can be maintained in a financially sustainable manner to in order that it can continue to deliver a reliable and resilient asset base for our residents, businesses and visitors.

The road network is the borough's single most valuable asset. However, the continuing shortfall between the funds available to maintain Tameside's highways to an appropriate standard both in terms of its condition and reliability and also being financially sustainable in the medium term require addressing if we are to deliver the wider desires of improving our transport infrastructure, strengthening the local business communities and town centres and attracting inwards investment.

The report references the Tameside Transport Asset Management Plan (TAMP) and the TAMP Policy and Strategy which identifies highway assets and condition and a strategy framework to which the Council should aspire in order to manage and maintain its highway network in a sustainable way.

The report also provides options to implement a medium term strategy to improve the condition on the Borough's highway network (footways and carriageways).

In addition, an Executive Summary at the front of the report provides a contextual overview of the issues.

Recommendations:

1. That the Tameside TAMP Policy and Strategy be adopted as a primary document to support the policy, financial and maintenance management of the Highway Network.
- 2 That the principle for additional capital investment to address the current network deterioration on our footways and carriageways is supported.
- 3 The amount to be included in the capital investment programme be considered in a future report alongside all other requests for funding.

Links to Community Strategy: Prosperous Tameside.
Attractive Tameside.
Safe Tameside.

Policy Implications:

The main Tameside TAMP Policy and Strategy provides a strategic framework that Members and officers can work within to ensure that assets that form the highway network are maintained and/or improved to ensure effective stewardship, supporting a safer, cleaner and more sustainable environment.

Financial Implications:

This report outlines the investment required to address the continuing deterioration of the highway network in Tameside.

(Authorised by the Section 151 Officer)

The four year annual budget required to return the Borough's roads and footways to a steady state is circa £5.8m. An annual investment of £4m over four years would be supported by annual capital monies of £1.8m (mainly grant funded). This would provide the asset conditions as described in Table 6 (carriageways) and 8 (footways).

However, to address the current deterioration before the network condition falls to unacceptable levels and to provide an improvement in the Borough's footway and carriageway network a model of investment has been determined that would show improvements to the assets as set in in Table 7 and 9 delivered via a total additional investment of £20m, over 4 years, which would be required to achieve these improvements to the Borough's roads and footways.

If agreed the availability of resources will be considered alongside other requests for funding at a future meeting of this panel.

It should be noted that the current level of capital funding (mainly grants) over the next four years has been assumed to remain the same. Any reductions in this level will impact on the capital investment required.

Legal Implications:**(Authorised by the Borough Solicitor)**

The Council has a statutory duty to maintain the adopted highway network under the Highways Act 1980. Failure to do so can result in it being difficult to resist legal claims made by highway users harmed as a result of the condition of the highways.

Risk Management:

The main Tameside TAMP document incorporates a section on Risk Management which covers risks associated with the non-implementation of this plan. All risks are to be managed within existing policy and guidelines.

Access to Information:

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EXECUTIVE SUMMARY

- i) The report identifies the continuing shortfall between the funds currently available to maintain the highway network to a sustainable standard. It also sets out the level of funding currently required to maintain the network on a continuing basis in its existing condition.
- ii) The report references the Tameside TAMP Policy and Strategy and the main plan identifies highway assets and condition and a strategy framework to which the Council should aspire in order to manage and maintain its highway network.
- iii) The key elements of the TAMP relate to the Council's highway network, including the management and investment of the Council's street lighting and bridges, retaining walls and other structural assets.
- iv) These assets are managed in accordance with the Codes of Practice for Well-Maintained Highways, Well-Lit Highways, Well-Managed Structures and Guidance Documents; Framework for Highway Asset Management and Highway Infrastructure Asset Valuation
- v) The current value of Tameside's highways network, submitted to HM Treasury determines the highway assets' Gross Replacement Cost (GRC) as £1.327bn.

Made up of (main elements);

Carriageways & Footways	£1,014m
Street Lighting	£ 47m
Bridges and Structures	£ 243m
Traffic Management	£ 1m
Street Furniture	£ 22m

- vi) The current condition of the carriageway and footway components of our network is determined annually using condition surveys e.g. SCANNER etc. From these, the *Depreciated Replacement Costs* (DRC) is calculated. In 2016, the DRC for carriageways and footways was reported as c£97m.
- vii) The level of depreciation and value of investment required (the DRC) to return the assets to the value of the GRC, is currently £74m for carriageways and £23m for footways.
- viii) Whilst the depreciation of these assets is £97m, service levels can be set against different components taking into consideration what can be considered acceptable for different parts of the network. £97m would return the footways and carriageways to a Condition 1 (gold standard).
- ix) The highway planned maintenance budget has been in steady decline for a number of years, and it has relied heavily on the resilience managed to be built up in previous years that has sustained it to date.
- x) That resilience is now under stress and of particular concern is the lack of investment in the footway network and the consequential increase in risk for claims. In addition, local carriageway surfaces are now of concern. The impact of continued asset deterioration and associated risks are explored in depth in this report.
- xi) To halt the decline would require a major financial injection of £20m over a four year period. This coupled with annual capital maintenance funding would enable targeted improvements to be undertaken and deliver a resilient and sustainable network.
- xii) An investment of £23.2m over four years (4 x £5.8m) would provide a steady state condition with the network condition remaining the same.

- xiii) However, for an investment of £27.2m over four years (4 x £6.8m) the Council would see improvements in the network, as described in Section 7, Tables 6 to 9, that is both deliverable and provide an improved network that is sustainable in the future
- xiv) The financial consequences for not increasing the current rate of funding is that the network continues to decline, claims increase and unit cost of works from the planned highways maintenance capital budget increases greatly as more expensive treatments are required as a result of intervening too late.

1. BACKGROUND

- 1.1 This report outlines the key elements of the main Tameside Transport Asset Management Policy and Strategy and plan document, (Tameside TAMP) that relate to the Council's highway network. (The TAMP also covers the management and investment of the Council's street lighting and bridges, retaining walls and other structural assets)
- 1.2 The highway network is one of the largest (physical and financial) and most visible asset for which the Council is responsible. It is an essential link for residential and business users in all aspects of their daily lives. It is fundamental to the economic, social and environmental wellbeing of the community. It helps to shape the character and quality of the local neighbourhoods that it serves and makes an important contribution to wider local authority priorities such as regeneration, social inclusion, safety, education and health.
- 1.3 All Local Authorities are expected to produce Transport Asset Management Plans (TAMP), which sets out what they need to achieve from their highway network, clearly quantifying the value of the asset, identifying investment needs and priorities, (based on Whole Life Costs), and establishing co-ordinated programmes of work.
- 1.4 The valuation forms part of the Statement of Recommended Practice (SORP) for Borough Treasurers. Also, it is now a requirement that the Depreciated Replacement Costs (DRC) of highway assets is included from 2016/2017.
- 1.5 Traditionally, the major funding for roads has been provided via a 'maintenance block' in the capital settlement from a Greater Manchester allocation of central government funding. This funding typically provides for the Council's refurbishment and resurfacing programmes on more major roads and is supported by revenue funding for minor and local repairs.
- 1.6 As funding to Local Authorities has decreased, monies available for highway maintenance have reduced. As an example, in the last five years, whilst capital funding has remained broadly static at c £1.6m pa, revenue funding has reduced significantly from £3.7m to £0.5m for 2017/18.
- 1.7 To off-set this, the Council has provided Capital monies to support Risk Management activities for the financial years 2014/15, 2015/16 and 2016/17 of £0.5m pa and as part of the Council Pledges a £0.5m pa has been made available for each of 2015/16 and 2016/17.
- 1.8 For 2016/17, the Department for Transport has provided additional funding to local authorities for the repair and preventions of potholes. For Tameside MBC, this allocation is £0.117m. For 2017/18, £0.164m has been made available from the Department for Transport.
- 1.9 The report explores the various funding requirements that would allow the Council to maintain the highway network at its current level and funding levels required to achieve improvements.
- 1.10 This is set against a background of road condition being considered as a high priority, by the public, businesses and Members and highlighted in a variety of sources including the Citizen's Panel, Residents Opinion Surveys, Members' Surgeries and Town Team meetings etc.

2. MAIN OBJECTIVES OF THE TAMESIDE TAMP

- 2.1 The Tameside TAMP document has been developed in line with agreed guidance and with collaborative support from other Association of Greater Manchester Authorities (AGMA).

This achieved best practice, learning from each other and consistency in approach. Tameside MBC currently Chair the group determined by GMADE (Greater Manchester Association of District Engineers).

2.2 The Tameside TAMP has been developed having specific reference to national documents:-

Codes of Practice:-

- Well-Maintained Highways
- Well-Lit Highways
- Well-Managed Structures

Guidance Documents:-

- Framework for Highway Asset Management
- Highway Infrastructure Asset Valuation

2.3 Updated versions of these codes were released in October 2016. The 36 recommendations in the new codes will need to be implemented by October 2018 at the latest.

The Tameside TAMP document includes the following:

Table 1

Sections;	Appendices;
<ul style="list-style-type: none"> • Strategic Context • Maintenance Strategy • Current Situation • Future Plans • Asset Valuation • Service Levels and Aspirations • Whole Life Costs/ Life Cycle Plans • Risk Management • Implementation Plan 	<ul style="list-style-type: none"> • Policies • Inventory and Valuation details • Service Levels • Life Cycle Plans • Risk Register

2.4 The Tameside TAMP document helps provide guidance and advice for both members and staff, and will help determine the corresponding financial implications in respect of Gross Replacement Costs (GRC) and has identified the spending necessary for required improvements over a (medium term), typically a 5-10 year period.

2.5 The ethos of the TAMP document is to provide a framework, which will help the management and maintenance of the highway network, establishing linked robust policies and procedures, which will inform and direct strategic investment needs.

2.6 In December 2009, the value of the highway asset (carriageways, footways, cycle paths and street furniture) was calculated at £620m.

- 2.7 The latest valuation was undertaken in July 2016, (Gross Replacement Cost) of the whole of the Tameside highway network assets has been calculated at £1,327,970,000.

This is made up from the following key street elements;

Table 2

ELEMENT	Gross Replacement Cost	Depreciated Replacement Cost	Depreciation
Carriageways	£814,090,000	£739,688,000	£74,402,000
Footways and Cycle Paths	£200,368,000	£176,742,000	£23,626,000
Street Furniture & Traffic Management	£22,719,000	£6,516,000	£15,203,000
TOTAL	£1,037,177,000	£922,946,000	£113,231,000

Note: The

Note; the table above shows total gross replacement cost for Highways elements only, gross replacement cost for Street Lighting (£47m) and Bridges and Structures (£243m) of £290m giving a total figure of £1,327m for gross replacement cost.

3. CARRIAGEWAYS AND FOOTWAYS - (Detailed in APPENDIX 1)

- 3.1 Analysis of condition data indicates that our main carriageways (Principal and Classified roads) are now beginning to deteriorate (confirmed from analysis of BVPI's and National Indicators), the residential area carriageways have been deteriorating over a number of years and need immediate additional investment to halt this deterioration and to achieve desired standards.
- 3.2 Until recently, the Council had increased Highway Revenue spending over a period of years. However, this was not to a level to enable improvements to be made. In addition, recent reductions in Local Transport Plan capital budgets and reduced revenue funding, has resulted in current condition surveys indicating a further deterioration in the highway network.
- 3.3 Figures 1 and Figure 2 illustrate current (2016) road condition data.
- 3.4 Residential area footways are known to be in a similar poor state in some areas and although, (following our robust Risk Management processes), Third Party Insurance Claims are being maintained at low levels, the Council would still wish to halt their decline so as to limit the amount of investment needed in the future and to improve the appearance of the Borough and to encourage a healthy population by enabling safer and well maintained walking routes both within residential areas and throughout the network.
- 3.5 Recent resident surveys carried out in summer 2016 also strongly suggest that improvements in the network are an important issue for residents, businesses and visitors.
- 3.6 At the time of the introduction of the TAMP (2009), approximately £3.7m revenue funding per annum was spent on highway maintenance. This amount was seen as being sufficient to keep the network in a stable state when funding is consistently sustained. However, significantly, it was noted that without further additional investment, the network could see accelerating deterioration over the next 10 years as the residual life of the surfaces and

sub-surfaces of the carriageways and footways deteriorate at an increasingly rapid rate. This is the situation in which the Council increasingly finds itself.

3.7 Tameside's TAMP has determined required levels of service (a desirable condition assessment) for each carriageway and footway hierarchy. Details are being developed to determine levels of investment necessary to bring each hierarchy's condition assessment, from its current rating, to that identified in our desired levels of service (see Appendix 1). The closing of this gap; funding options, types of work, appropriate interventions and determining rates of deterioration continue to be subject to further and on-going investigation. Future investments would;

- start to address the ongoing and accelerating rate of deterioration
- helps ensure annual budgets are able to maintain the network in a stable state
- allows additional works to the unclassified road network and footways where there is the greatest public concern
- reduces the overall maintenance backlog
- significantly improves public perception and overall Council image
- underlines our commitment to an asset management based model of service delivery
- supports Best Use of Resources
- reduce the risk of increasing third party highway claims

3.8 Future investments would provide much needed improvement to a number of 'key' routes within the Borough. As part of the Greater Manchester Devolution Agreement, The Greater Manchester Combined Authority (GMCA) through Transport for Greater Manchester (TfGM) has established a 'Key Route Network' of roads seen as being critical to supporting growth in the City Region. Within the Tameside area, this constitutes approximately 65km of our network. These routes, are key corridors linking town centres, provide access to motorway junctions and are major bus and tram routes. The carriageways and footways making up the key route network will be closely monitored with regards to route performance in terms of supporting transport's role in the delivery of the growth agenda. Pending any additional regional funding being available, districts will be expected to ensure the condition and performance of this network.

Department for Transport Incentive Fund

3.9 As part of the Department for Transport's (DfT) longstanding aim of having asset management at the heart of highway investment strategies and service delivery, in December 2014, the Secretary of State for Transport announced that in England £6 billion would be made available between 2015/16 and 2020/21 for local highway maintenance capital funding. Of this, £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 improvement utilising asset management principles.

Incentive Funding and Self-assessment Process

3.10 Funding for Highway Maintenance

- 2015/16 All authorities received their share of the incentive pot (the monies allocated for the incentive element of the overall funding) for England (£578m) hence funding is, in effect, in accordance with the formulae used in previous years.
- 2016/17 The share of the incentive funding will depend on demonstrating that efficiency measures are being implemented.
- This percentage share of funding will be reduced in subsequent years if it cannot be demonstrated that efficiency measures in line with asset management principles are being implemented.

3.11 Demonstration of the Implementation of Efficiency Measures

- The method use by the DfT is via a self-assessment questionnaire.
- This self-assessment questionnaire requires full back up documentation (evidence) to justify the assessment (this is not submitted but must be available for audit by the DfT).
- The self-assessment questionnaire has to be reviewed and signed off by the Council's Section 151 Officer
- The self-assessment questionnaire was submitted to DfT in February 2017.
- Based on the answers in the self-assessment questionnaire, the Council is graded as being in Band 1, Band 2 or Band 3.

Band 1 Demonstrates a basic understanding of key areas of efficiency measures and is in the process of taking it forward.

Band 2 Demonstrates that outputs have been produced that support the implementation of key areas that will lead towards improvement.

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

Future Budgets - DfT

3.12 Total Funding (Needs Formula and Incentive Element) 2015/16–2020/21 = £6 billion (whole of England)

3.13 The £6 billion is top sliced for the Incentive Fund - £578m

3.14 The table below outlines the % of the possible incentive funding available is received based on the assessment band

Table 3

Assessment Band	% of Incentive Fund Budget Paid					
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
1	100	90	60	30	10	0
2	100	100	90	70	50	30
3	100	100	100	100	100	100

Incentive Funding – Tameside

3.15 The table below shows the actual funding which would be received in Tameside based on the assessment band

Table 4

Year	Total Needs Formula	Incentive Funding Element			Alloc PA	Alloc PA
		Band 3	Band 2	Band 1	Min (Needs + Band 1)	Max (Needs + Band 3)
2015/16	2,322,000	-	-	-	2,322,000	2,322,000
2016/17	2,129,000	129,000	129,000	116,000	2,245,000	2,258,000
2017/18	2,064,000	193,000	174,000	116,000	2,180,000	2,257,000
2018/19	1,868,000	389,000	272,000	117,000	1,985,000	2,257,000
2019/20	1,868,000	389,000	195,000	39,000	1,907,000	2,257,000
2020/21	1,868,000	389,000	117,000	-	1,868,000	2,257,000

3.16 Banding is based on a self-assessment questionnaire

3.17 There are a total of 22 questions, split into four sections:

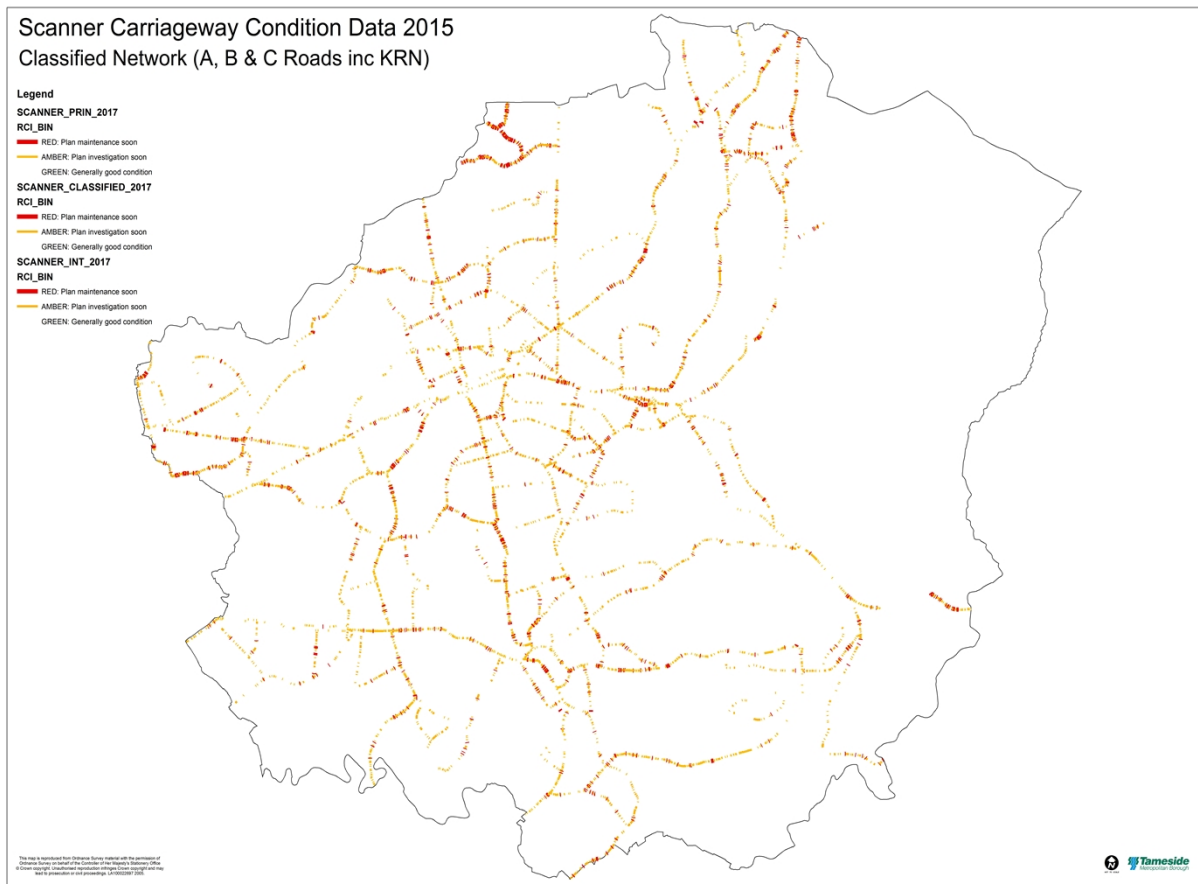
Asset Management
Resilience
Customer, Benchmarking & Efficiency
Operational Efficiency

- Over the last four years, the Highways Maintenance Efficiency Programme (HMEP) has produced a number of reports/recommendations. The self-assessment questions are designed to identify if these recommendations are being implemented.
- The questions cover both asset management and operational efficiency

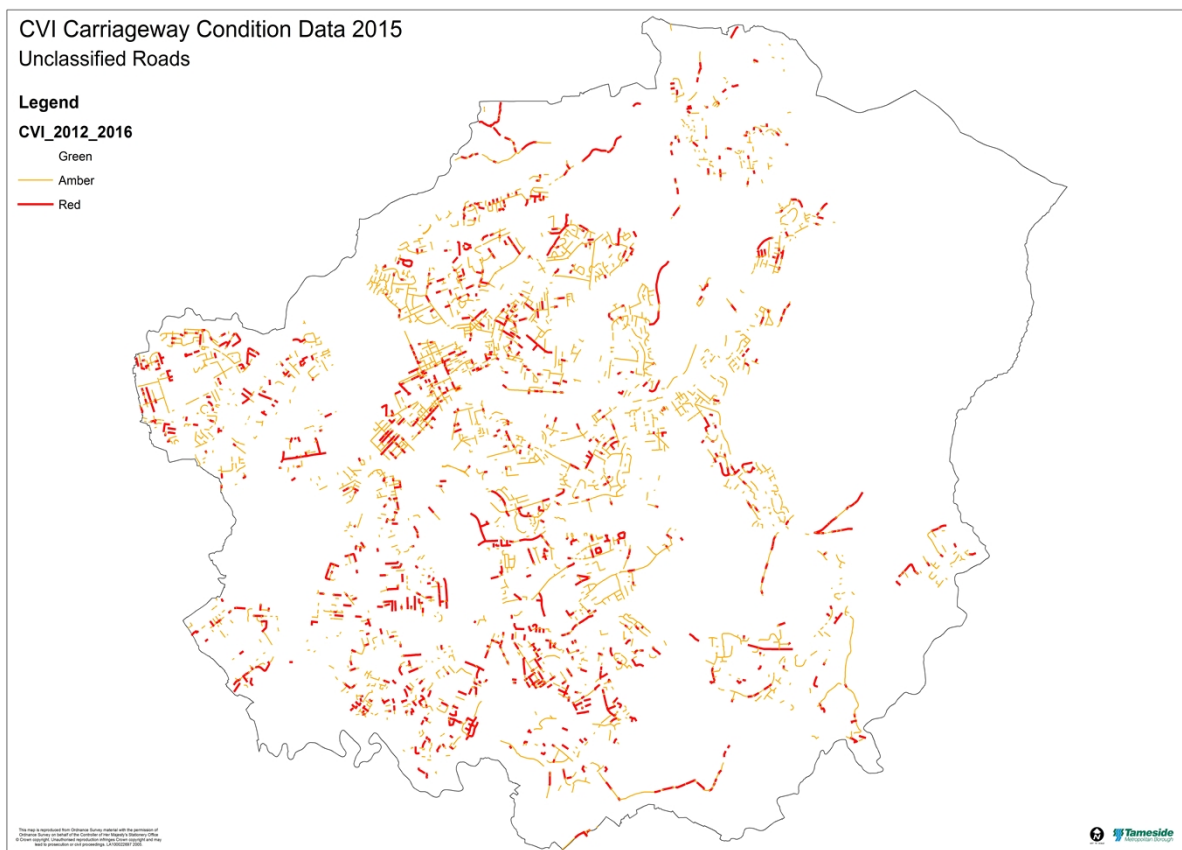
The Current Situation

- 3.18 Tameside's self-assessment questionnaire places us in Band 2. This was reviewed by an external source and confirmed our assessment. On that basis our assessment was signed off by our Section 151 officer. TfGM engaged (at their cost) an external consultant, Jacob's, to review all submissions by GM Highway Authorities, to provide a consistent approach and assure that self-assessments were both consistent and accurate.
- 3.19 As part of the Greater Manchester Devolution Agreement, all districts have been funding to Band 3 status, whatever their actual ranking. However the DfT still expects authorities to continue to make progress and report their 'true' banding on an annual basis showing continual improvement.
- 3.20 A gap analysis and delivery plan has been established to reach Band 3 within the next 18 months. This is being progressed locally by the Engineering Service and supports the regional initiative being coordinated by the GM Highways Infrastructure Group.
- 3.21 Therefore any such additional funding (subject to detailed condition assessments), would help target works on some of the following roads within the Borough – both KRN and Tameside's priorities. Plan 1 below, illustrates these routes and highlights current roads with a 'red' rating, Plan 2 shows those roads with an 'amber' rating.

Plan 1 KRN and Classified Road Network



Plan 2 Unclassified Road Network



- 3.22 Our progress in improving these routes will be monitored by extending the current coverage of SCANNER surveys to all streets with the only exception being local access roads (Category 4b). This is a far wider use of SCANNER surveys than any other English authority. Currently, SCANNER surveys are mandatory only on classified (A, B and C) roads. Tameside is committed to expanding these surveys to other well used roads that are key routes locally within the Borough. To support our asset management based approach and to better understand and monitor changes in surface condition, we will expand these surveys to enable us to more proactively manage these routes.
- 3.23 Further investment on local schemes will also be an important consideration using any additional funding that might be provided. This will be considered on a needs based condition, strategic importance, usage levels assessment. Such roads will also be derived from a collective of resident, member and officer recommendations/observations. These potential improvement works will be aggregated together with the objective condition data and deterioration levels, assessed from a range of data and will be considered by the Executive Member Clean and Green, for inclusion in a works programme with a two / three years implementation plan.
- 3.24 Physical works delivered during this period will also provide continuity of work for the in-house contractor teams during the current period of down-turn in external housing and business developments, whilst also offering potential additional work for local specialist contractors.

4. CAR PARKS/PUBLIC RIGHTS OF WAY/OTHER HIGHWAY ASSETS

- 4.1 The main Tameside TAMP document addresses these issues in more detail, and although not having a major financial impact on the overall maintenance requirements for the Borough, they are important aspects in how residents and business users of the network are able to carry out their daily lives and contribute to the local economy.
- 4.2 The environmental and commercial aspect of these facilities is essential to the well being of the community and to the overall contribution of the Borough on its residents and visitors. They help promote a Healthy Population, the appearance of the Borough and how people perceive safety within their environment.
- 4.3 These assets are incorporated within the Tameside TAMP and detailed plans for their service levels, life cycle plans etc. Continue to be developed. We have ensured the development of the Tameside TAMP has strong links to other key areas such as The Rights of Way Improvement Plan, Cycle Path improvements and other street furniture assets.
- 4.4 At present there are no immediate major funding requirements for the upkeep of existing assets. Although changed use and development plans in areas of the Borough may determine specific additional investment needs to help stimulate local economic and commercial activities.

5. ASSET DETERIORATION & REQUIRED PREVENTATIVE MAINTENANCE

- 5.1 The condition of the highway asset, its deterioration and preventative maintenance are subject to a wide range of interacting elements. These include;
- Purpose for which the road was built
 - Construction materials
 - Current usage

- Weather conditions
- Public utility works
- Local conditions (parking and wheel rutting, turning points etc)
- Vehicular speed and weights

5.2 Each Local Authority in the country is facing a massive challenge to protect its highway asset against further deterioration.

5.3 Maintenance treatments include;

- Pothole repairs
- Patch repairs
- Micro-surfacing
- Surface treatments / microasphalt
- Resurfacing
- Reconstruction

5.4 Asset Management Plans utilise a mixture of these treatments to address the different maintenance requirements in order to ensure that the maximum benefit is achieved for the investment. This results in a variety of funding requirements

5.5 Across Greater Manchester, funding for highway asset management has taken a variety of options:

5.6 Bolton has used its internal reserves. No revenue funding has been provided for resurfacing since 2009/10 but one-off additional capital funds have been released annually since then.

12/13 was £1m carriageway

11/12 was £3m carriageway

10/11 was £2m carriageway

5.7 In previous years monies were largely directed to resurfacing works on the Classified road network but the award for the next two years is focussed on busy unclassified roads and approx. 30% of the programme by value is preventative.

5.8 Salford has been successful in promoting a 'Network Recovery' programme. Politicians have acknowledged the underfunding of highway maintenance over many years and have been positive in their support of a repair and refurbishment programme.

5.9 Using a model defined through the use of UKPMS data Salford has achieved a stand-still position and is now taking steps to gradually improve infrastructure condition. The programme is reviewed annually and although it was envisaged as a four year project several factors have meant that the process has had to be extended. Additionally it has been explained that the nature of the works carried out means that maintenance is now cyclic in nature and it is expected that a £2m to £2.5m per year allocation will be required to sustain the network at the end of the Network Recovery programme.

5.10 Over recent years, both Manchester City Council and Stockport MBC have allocated significant funding with regards to improving their respective highway networks.

6. RISK MANAGEMENT

6.1 There are risks to the Council in either supporting an investment strategy or in continuing to fund the maintenance of the highway network at current or further reduced levels

- 6.2 The Council currently operates one of the best Third Party Highway Claims regimes in the country, with a robust inspection and repair regime based on identified criteria.
- 6.3 The Council has continued to recognise the work of this team and provide the necessary resources, both for staff and repair budgets.
- 6.4 However, the continual deterioration of the network will inevitably result in an increase in claims and the likelihood of increased payments to claimants.
- 6.5 As described in Section 2.2 above, updated versions of Codes of Practice for Highway Maintenance were released in October 2016. The 36 recommendations in the new codes will need to be implemented by October 2018 at the latest.
- 6.6 The revised code is very much risk-based, with inspection frequencies and associated repair response times, not purely based just on the road categorisation. Also taken into account are other risk factors, including levels of investment and repair, which at current levels increase the likelihood of failure of the infrastructure more rapidly.
- 6.7 This has the effect that on a risk basis we should inspect more frequently (requiring additional resources) generating an increased volume of repairs in addition to increased level of deterioration (both with associated increase in cost of works), since once we are aware of required repairs we are required to undertake timely repairs or else be liable for any third party claims.
- 6.8 Wider risks to the Council surround the economic development of the Borough. A poor network infrastructure neither supports existing economic activity nor encourages new investment.
- 6.9 Whilst an investment strategy in the Council's highway network would provide support to protect and maintain the Council's assets and for the economy of the Borough, it would also reduce the risk of liability of claims against the Council. However, the Council would need either to draw on its capital reserves or commit to funding any borrowing whilst at the same time maintaining current levels of revenue support.
- 6.10 To keep our roads and footways in just existing steady state requires circa £5-6m p.a., as set out in **Table 5** below.

Table 5

Annual - Steady State (Carriageways and Footways)				
Cways 2, 3a, 3b However, network in a dynamic state				
cway life span say	20 years			
Deterioration yr	5.00 %	from a total of,	1,316,025.31 m2	
Total needed per year	5.00 % =		65,801 m2 PA	
At say	£28	m2 =	£1,842,435 per year	
	Average - all treatments			
TOTAL CWAY SS ANNUAL = £			1,842,435.43	
Cways 4a, 4b However, network in a dynamic state				
cway life span say	30 years			
Deterioration yr	3.33 %	from a total of,	3,444,150.00 m2	
Total needed per year	3.33 % =		114,805 m2 PA	
At say	£15	m2 =	£1,722,075 per year Inc. Microasphalt	
	Average - all treatments			
TOTAL CWAY SS ANNUAL = £			1,722,075.00	
			TOTAL CWAY SS ANNUAL = £	3,564,510
Fway 1a,1 & 2 However, network in a dynamic state				
fway life span say	25 years			
Deterioration yr	4.00 %	from a total of,	271,200.00 m2	
Total needed per year	4.00 % =		10,848 m2 PA	
At say	£45	m2 =	£488,160 per year	
	Average - all treatments			
TOTAL FWAY SS ANNUAL = £			488,160.00	
Fway 3 & 4 However, network in a dynamic state				
fway life span say	40 years			
Deterioration yr	£2.50 %	from a total of,	1,956,580.00 m2	
Total needed per year	2.50 % =		48,915 m2 PA	
At say	£32	m2 =	£1,565,264 per year Inc. Microasphalt	
	Average - all treatments			
TOTAL FWAY SS ANNUAL = £			1,565,264.00	
			TOTAL FWAY SS ANNUAL = £	2,053,424
ANNUAL STEADY STATE BUDGET NEEDED=			£5,617,934	
Cap Budgets 20016/17		1,753,000		

6.11 For 2016/17 and 2017/18 we have a capital highway maintenance budget of c £1.8m.

6.12 The highway maintenance budget has been in steady decline for a number of years, and it has only been the resilience we had managed to build up in previous years that has sustained it to date. That resilience is now under stress and of particular concern is the lack of investment in our footway network and the consequent increase in risk for claims, also our local carriageways surfaces.

- 6.13 To halt the decline would require a major financial investment of the order of £20m over a four year period. This level of investment, coupled with the capital highways maintenance budget of £1.8m, will not only improve our carriageways and footways, but will help return the network to a condition that can be maintained in a sustainable manner going forwards.
- 6.14 Whilst this level of investment is only slightly above the funding required to maintain the network in a 'steady-state', by targeting works using the condition data held in the Asset Register, development of innovative treatments e.g. microasphalt surfacing materials, in depth local knowledge of network performance and demands, will mean we are able to achieve greater outcomes for this investment.
- 6.15 This level of investment enables us to fully deliver our targeted approach based on the 'right treatment, at the right time, in the right place'; our – *what, where, when* approach.
- 6.16 The financial consequences for not increasing the current rate of funding is that the network continues to decline, claims increase and unit cost of works from the maintenance capital budget increases greatly as more expensive treatments are required as a result of intervening too late.
- 6.17 Accordingly, there is a greater financial risk to the Council going forwards, the condition of our carriageways and footways continue to decline, resulting in the gap between need and funding growing wider.

7. NETWORK IMPROVEMENTS

- 7.1 The proposed level of investment will bring about the following improvements in the condition of both the carriageway and footway networks.
- 7.2 **Table 6** (carriageway) and **Table 8** (footway) show the current and steady state condition of the network if a capital investment of £5.8m pa is provided.
- 7.3 **Table 7** (carriageway) and **Table 9** (footway) show the improved condition of the network if a capital investment of £6.8m pa is provided.

Table 6

% Condition of Roads (Carriageways)	Green (1-3 rating)	Amber (4-6 rating)	Red (7-9 rating)
Strategic Roads (Cat 2)	64%	30%	6%
Main Distributor Roads (Cat 3a) and Secondary Distributor Roads (Cat 3b)	69%	25%	6%
Link Roads (Cat 4a) and Local Access Roads (Cat 4b)	53%	36%	11%

Table 7

% Condition of Roads (Carriageways)	Green (1-3 rating)	Amber (4-6 rating)	Red (7-9 rating)
Strategic Roads (Cat 2)	75%	20%	5%
Main Distributor Roads (Cat 3a) and Secondary Distributor Roads (Cat 3b)	73%	22%	5%

Link Roads (Cat 4a) and Local Access Roads (Cat 4b)	68%	25%	7%
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Table 8

% Condition of Footways	Green (1-3 rating)	Amber (4-6 rating)	Red (7-9 rating)
All Categories	39%	51%	10%

Table 9

% Condition of Footways	Green (1-3 rating)	Amber (4-6 rating)	Red (7-9 rating)
All Categories	63%	30%	7%

8. EQUALITIES

- 8.1 Whilst the highway network is used by all groups of society, people with disabilities may face greater difficulties in using the network safely if the highway is in a poor condition.

9. RECOMMENDATIONS

- 9.1 As set out at the front of this report.

APPENDIX 1

Carriageway and Footways

Current Highway Network Condition

The highway network is sub-divided into hierarchies (categories) in order that appropriate and relevant maintenance standards can be undertaken having regards to a roads purpose and use. The National Code of Practice determines these as:-

Table 10

Hierarchy / Category	Definition	Example	%age of network
Strategic Roads (Cat 2)	Major through routes for traffic	Mottram Road, Dowson Road, Manchester Road	10%
Main Distributor (Cat 3a)	Routes between Strategic Roads and linking urban centres to the strategic network	Lees Road, Newmarket Road, Audenshaw Road	6%
Secondary Distributor (Cat 3b)	Urban bus routes carrying local traffic	Hattersley Road East, Cheetham Hill Road, Two Trees Lane	4%
Link roads (Cat 4a)	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions. In urban areas they are residential or industrial interconnecting roads	Mottram Old Road, Kings Road, Windsor Road	8%
Local Access roads (Cat 4b)	Roads serving limited numbers of properties carrying only access traffic. In urban areas they are often residential loop roads or <i>cul de sac</i>	All other roads	72%

The condition of the highway network is determined from a number of sources which are regularly updated in line with recommended frequencies. These include:-

- External consultancy survey works
- Machine derived data
- Internal structural engineering assessment
- Internal Risk Management assessment
- Members, Town Teams, Officers reports, etc
- Public reports and requests for service

All available data is combined to give an overall condition assessment, which is rationalised and simplified using a scale rating of 1-9 (excellent to poor) to give an overall Red / Amber / Green assessment. This is supplemented with additional information gathered from our own Highway Management Systems (Symology) which provides an historical knowledge bank of repairs and spend levels. Also taken into consideration are Road Traffic Collisions, traffic calming features, skid resistance characteristics, and any other revenue maintenance or capital spend associated within a particular section of the road.

From the condition information gathered, the following overall assessment of the Borough's road network can be determined based on 2015 data. This condition data;

Highways Survey Summer 2016
'Highway Services' tracker questions

Below is a summary of the responses to the 'Highway Services' questions - summer 2016

- Respondents were asked whether they agree or disagree that the following services have improved over the last three years. The results are detailed in the table below:

Table 11 – Condition / Improvement of Roads and Pavements

Over the last three years, how do consider the conditions have changed?	Improved	Got Worse	Stayed the Same	Don't Know
a) The condition of main roads and pavements	4%	72%	22%	2%
b) The condition of local roads and pavements	3%	79%	18%	1%

- Respondents were then asked if they consider the following services are better or worse in Tameside when compared with neighbouring areas. The results are detailed in the table below:

Table 12 – Condition of Main Roads and Pavements- Comparison to Neighbours

Do you consider the following services in Tameside to be better or worse than in other neighbouring areas?	Better	Worse	About the Same	Don't Know
a) The condition of main roads and pavements	10%	44%	29%	18%
b) The condition of local roads and pavements	8%	48%	28%	16%

As part of the Tameside TAMP approach, we have taken the public's views into consideration. We have also looked at engineering requirements, local and strategic objectives, overall affordability and future network demands. These factors have all been included in setting our Service Levels.

The **Table 13** below shows our target Service Levels. The target condition being on the 1 – 9 scale, for each carriageway and footway hierarchy.

For example, an investment of c£63m would return the carriageway network to Condition 1 status.

The table shows the expenditure required to achieve an appropriate and sustainable target condition. Accordingly, for our carriageways, Service Level 3 is considered appropriate for

Hierarchy 2 and 3a, and Condition 5 for Hierarchies 3b and 4a&4b, the investment needed being c£43m.

The footway network would require an investment of c £29m achieve Condition 1 status. However to achieve Condition 3 for Hierarchy 1a, 1 and 2 and Condition 5 for Hierarchy 3&4, the investment needed is c £16m.

Table 13 – Investment Requirement for Improvements as above

INVESTMENT MODEL - HIGHWAY PAVEMENTS (Carriageways and Footways)

Sep-16

Cway Target Cond.	£ to achieve target condition										
	1	2	3	4	5	6	7	8	9		
2	12,032,935		10,095,134		6,847,182		2,533,410			0	
3a	6,617,916		5,749,308		4,356,821		2,107,836			0	
3b	3,099,504		2,813,437		2,155,720		1,110,106			0	
4a, 4b	40,968,164		29,426,818		25,486,710		20,561,576			0	
Total	62,718,519		48,084,697		38,846,433		26,312,928			0	Cway = 43,486,872
Fway Target Cond.	£ to achieve target condition										
	1	2	3	4	5	6	7	8	9		
1a, 1, 2	4,496,496		4,308,012		964,116		642,744			0	
3 & 4	24,623,559		23,263,736		11,328,598		4,637,095			0	
Total	29,120,055		27,571,748		12,292,714		5,279,839			0	Fway = 15,636,610
Carriageway and Footway Total =											59,123,483

Current Budget / Funding

Table 14

Revenue & Capital Budgets	Service	Allocation 2008/09	Allocation 2013/14	Allocation 2016/17	Estimated Allocation 2017/18
Highway Risk Management	Engineering Service	£750,000	£588,690	£0	£500,000
Emergency Repairs	Engineering Service	£50,000	£39,990	£0	£0
Urgent/Minor works	District Assemblies	£250,000	£180,000	£0	£0
Highway Improvements	District Assemblies	£100,000	£0	£0	£0
Structural Maintenance	District Assemblies	£1,160,000	£0	£0	£0
Revenue	Sub-Total	£2,310,000	£808,680	£0	£500,000
Structural Maintenance (Capital)	Engineering Service	£1,035,000	£896,410	£1,581,000	£1,500,000
Incentive Fund	Engineering Service	£0		£129,000	£174,000
SEMMMS (to 2011/12)	Engineering Service	£295,000	£0	£0	£0
Other	Engineering Service	£50,000	£0	£0	£0
Other Capital Schemes	Engineering Service	£1,621,000	£1,363,750	£0	£0
Other (Slippage 15/16)	Engineering Service	£0	£0	£18,000	£0
DfT Pothole Fund	Engineering Service	£0	£0	£117,000	£164,000
Risk Management Capital Investment	Engineering Service			£500,000	£0
Leader's Pothole Pledge	Engineering Service			£500,000	£0
Capital	Sub-Total	£3,001,000	£2,260,160	£2,845,000	£1,838,000
Available Funding	TOTAL	£5,311,000	£3,068,840	£2,845,000	£2,338,000

The current available funding (2016/17) of highway surfaces; (carriageway/footways maintenance) is made up from a number of budgets and highlights reduction in funding from 2008/9 – see above.

It was determined from the data developed within the main Tameside TAMP document, (and in particular looking at highway deterioration rates) that the funding identified in the table above for 2008/9 - £3.7m, approximated (at that time) to keeping the network at a 'steady state', i.e. no or little improvements can be made to the network without a further injection of money and/or the re-focusing of existing funding in a way to ensure we secure the maximum benefits achievable.

This 'steady state' investment has now risen to £5 to £6m for the financial year 2017 onwards. (Table 5).