

Report to:	EXECUTIVE CABINET
Date:	29 September 2021
Executive Member	Councillor Allison Gwynne – Executive Member (Neighbourhoods, Community Safety and Environment)
Reporting Officer:	Emma Varnam – Assistant Director (Operations and Neighbourhoods)
Subject:	HIGHWAY ASSETS – MAINTENANCE AND FUNDING REQUIREMENTS
Report Summary:	The report provides a service wide overview of the Council’s highway assets (carriageways/footways, bridges/retaining walls, gullies/culverts and street lighting/signs), their functions, condition and current funding. The future financial ‘need’ for these assets in terms of ensuring performance and minimising costs over time is detailed.
Recommendations:	That Option 2 (section 9.1 refers) is approved: <ul style="list-style-type: none"> • That an additional capital allocation of £1.497m (Appendix 2 Table B refers) is allocated to the Council’s Highways planned maintenance budget in 2021/22 which is additional to the grant allocation awarded by DfT. This sum to be included within the Council’s Capital programme if approved • That a review of the current Highway and infrastructure condition is carried out and reported to the Executive Cabinet at a later date for consideration in advance of the 2022/23 financial year.
Corporate Plan:	The maintenance of the highway network is a vital part of supporting the infrastructure of the borough.
Policy Implications:	This report aligns with the priorities within the Corporate Plan, ensuring a modern infrastructure and a sustainable environment that works for all generations and future generations
Financial Implications: (Authorised by the statutory Section 151 Officer & Chief Finance Officer)	<p>The Council has received Highway Maintenance grant funding from the Department For Transport (via GMCA) of £2.415m in 2021/22 (Table 4, section 6.6. refers).</p> <p>The £2.415m grant is allocated to support planned and preventative maintenance on Carriageways, Footways, Drainage, Structures and Street Lighting across the borough. Of this sum £ 1.253m is allocated to support carriageway resurfacing schemes (table 4 refers).</p> <p>Appendix 2 provides a list of carriageway resurfacing schemes in order of priority including the estimated cost. The schemes are the 26 most urgent schemes across the borough in reducing priority order; i.e. scheme 1 being the most urgent priority.</p> <p>The appendix has been categorised into two tables. Table A provides details of the schemes that will be financed via the aforementioned £1.253m allocation of Highway Maintenance grant. Table B provides details of further schemes that can be carried out subject to additional investment. The total of these schemes is</p>

£1.497m as referenced in the recommendations.

Members are reminded that based on the current forecast of £15.4m of capital receipts and existing commitments on the capital programme, the Council currently has £7.7m of funding to finance any further capital investment proposals (including some maintenance related expenditure).

The report is recommending the allocation of £1.497m capital funding to finance the cost of schemes detailed in **table B of Appendix 2**, via the aforementioned remaining balance of £7.7m to finance capital investment proposals.

Members will need to be assured that the proposed allocation of this sum is deemed to be one of the key priorities for investment for the Council when compared to the schedule of capital investment bids received. If approved, the remaining balance available for any further capital investment will be £6.2m (this balance is the subject of a separate report on the Executive Cabinet agenda). This sum will only increase as additional assets are identified for disposal or alternative sources of funding identified.

Prudential borrowing costs are approximately £0.050m per £1m of borrowing. Therefore to finance the cost of schemes listed in **table B, Appendix 2** from borrowing would result in a recurrent revenue cost pressure of £0.075m. Members should note that these costs would be additional to the existing significant revenue cost pressures across the Council over the current and medium term.

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

The Council is the local Highway Authority and as such has a statutory duty to maintain the safety and usability of the highways in its area. Section 41(1) of the Highways Act 1980 states that it is the Highway Authority's statutory duty ***to maintain the highway was an absolute duty to keep the fabric of the highway in such good repair as to render its physical condition safe for ordinary traffic to pass at all seasons of the year***

The duty does not extend to improving the roads, only maintaining them to ensure that they are safe and in appropriate condition to be used by the ordinary or expected amount of traffic that uses the highways.

The Highways Act also states that the highway authority can defend any claim brought for damages relating alleged breaches of its statutory duty by demonstrating that it has made adequate provision for the upkeep of the highways. Therefore, irrespective of what funding is ultimately agreed it is imperative that the service undertakes and documents a robust process to monitor the condition of the highways and have a clear programme of works.

This report is seeking an additional allocation of £1.497m from the capital budget, which would reduce the remaining available capital budget to £5.7million from which all of the other Council's capital projects are seeking funding. As such is it understood that Members are being presented with all of the projects that are seeking funding from the capital budget to be considered in the round.

This will enable Members to make an informed risk based decision in relation to which projects will be funded and which will be deferred. Members may therefore prefer to consider this request in

the context of all the other capital requests rather than take £1.497million from the capital budget without testing this request against the other requests in terms of impact on the delivery of statutory duties and value for money.

Risk Management:

Failure to provide sufficient standards of maintenance will negatively affect the standards of the Highway Assets and could compromise our statutory duty as Highways Authority. See Section 7 for a more detailed impact on the consequences of underinvestment.

Background Information:

The background papers relating to this report can be inspected by contacting Lee Holland, Head of Engineering Services:



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1. INTRODUCTION

- 1.1. As Highway Authority, Tameside Council has a duty to act as steward and custodian of our highway infrastructure assets. We ensure they are fit for purpose and maintained with regards to whole life costs in a sustainable way whilst taking into account associated risks and constraints.
- 1.2. The highway network is the single most valuable asset that the Council owns. Without it, none of the Council's priorities, values and visions can be realised. It is used daily by nearly all of our residents and businesses. It is fundamental to the economic, social and environmental wellbeing of our residents. It helps to shape the character and quality of the local communities that it serves and makes possible the authority's priorities such as regeneration, social inclusion, community safety, education and health.
- 1.3. As with all physical assets, the condition of the highway network deteriorates over time. The materials that constitute its makeup all degrade: asphalt becomes brittle, steel rusts, concrete reacts with the atmosphere. This deterioration by natural processes is augmented by both our use of them and changes in environmental conditions such as increased rainfall, higher carbon dioxide levels and severe winters.
- 1.4. Generally, the greater the deterioration of the highway, the quicker the rate of deterioration increases until failure sets in and no further deterioration is possible. Highways funding from the Department for Transport (DfT) is such that the Council has been allocated £2.415m (section 6 refers) for 2021/22 for planned and preventative maintenance on Carriageways, Footways, Drainage, Structures and Street Lighting.
- 1.5. Analysis undertaken by Council Engineers has determined that such a level of funding suggests that the network cannot be maintained in a steady state condition (i.e. no improvement or no decline) and, inevitably, will lead to an ever-accumulating highway maintenance backlog that increases year-on-year together with an accelerating rate of deterioration.

2. REPORT FORMAT

- 2.1. This report has been structured to give a service wide overview of our highway assets and current funding. It also sets out future financial 'need' in terms of ensuring performance and minimising costs over time.
- 2.2. The report will concentrate on the four main asset groups, these are;
 - Carriageways & Footways
 - Structures (Bridges, Retaining Walls etc.)
 - Drainage (highway gullies & drains, culverts / inlet structures etc.)
 - Street Lighting
- 2.3. Not included in this report are other vital services that keep our highway network safe and accessible such as; winter gritting, road safety / traffic calming measures, control of highway openings (GMRAPS) etc. Each of these functional areas are subject to their own budget pressures and expectations, however they do not have specific asset maintenance issues.

3. OUR HIGHWAY NETWORK

- 3.1. The network consists of 758 km of roads and associated footways, 268 km of public rights of way and bridle paths, 468 structures (including 159 bridges & 31km of retaining walls), over 26,000 street lights and the network is drained by over 48,000 road gullies.

- 3.2. In line with HM Treasury guidance, the replacement value of the network has been calculated as c.£1.41bn – this is detailed below;

Table 1: HM Treasury Whole of Government Accounts (WGA) Return August 2019

Highway Asset;	WGA Valuation (Gross Replacement Cost) £'000
Carriageways (including drainage grids etc.)	864,760
Footways & Cycle Tracks	212,839
Structures (Bridges & Retaining Walls)	262,074
Street Lighting (inc illuminated signs, bollards etc.)	48,664
Traffic Management / Signs	1,339
Street Furniture	22,484
Total	1,412,160

4. HIGHWAY MAINTENANCE

- 4.1. All physical assets have finite life spans. Accordingly the adoption of asset management principles enables the Council, as the Highway Authority, to provide consistent service standards which meet user expectations at minimum long term risk and costs.
- 4.2. Whilst all assets deteriorate over time, highway assets are uniquely subject to specific challenges that increase the rate of natural deterioration; weather, traffic impacts, damage of opening by utility companies (water, electricity etc.). They are also subject to the daily scrutiny of our residents, businesses and visitors.
- 4.3. As the Highways Authority we manage the network by undertaking maintenance activities that can be broadly classified as:

Planned Maintenance:

- Specific interventions following asset management life-cycle principles to replace or renew component parts of the network.
- For example: Carriageway resurfacing, replacing lamp columns, renewing retaining walls etc.

Preventative Maintenance:

- Mid-life interventions that extend the life of components thereby delaying the need for full renewal.
- For example: Carriageway microasphalt works, bridge element painting etc.

Reactive / Risk Management Maintenance:

- Works undertaken as a result of inspections or from reports received that could leave the Council open to claims for damage and compensation with regards to defects that exceed our stated intervention criteria.
- For example: Filling potholes, replacing failed lighting lanterns etc.

Routine & Cyclic Maintenance:

- Regular, on-going inspections or minor works that ensure day to day serviceability
- For example: Gully cleansing, electrical testing of lighting columns, structural inspection of highway structures, etc.

- 4.4 For a more detailed explanation of the type of intervention for each of the four main asset groups, please see **Appendix 1**. Also, as the Highways Authority, we are responsible for the payment of costs and charges associated with the management of the network;

Charges:

- Fees to organisations or service costs
- Such as - Transport for Greater Manchester levy, electricity charges for street lighting etc

- 4.5 In accordance with HM Treasury’s (HMT) *Whole of Government Accounts* principles, the Council is required to revalue our highway assets each year. At the last valuation (August 2019), Tameside’s highways assets have a gross replacement value of £1.41bn as detailed in Table 1.

- 4.6 HMT also requires local highway authorities to calculate the depreciation of their highway assets annually. Table 2 shows the accumulated depreciation for highway assets in each of the last five submissions. In effect, this is the amount of money required to bring the network back to an “as new” condition.

Table 2: Accumulated Depreciation of TMBC Highway Assets as per HMT requirement

Highway Asset Group;	Accumulated Depreciation (£,000)				
	2014/15	2015/16	2016/17	2017/18	2018/19
Highways (Carriageway, Footway, Cycle lanes etc)	98,028	105,011	111,993	120,933	122,456
Structures (Bridges & Retaining Walls)	80,569	99,921	102,721	107,327	115,634
Street Lighting (inc illuminated signs, bollards etc.)	40,530	40,926	44,060	46,922	46,428
Traffic Management / Signs	754	772	900	1,053	1,213
Street Furniture	12,557	15,203	17,549	19,593	14,130
Total	232,438	261,833	277,223	295,828	299,861

- 4.7 As can be seen, over the last five submissions the accumulated depreciation has increased by £67.4m over this period. During this period, the average annual Capital spend on maintaining our assets was £5.02m. A submission was not made in 2019/20 as it was not mandatory. Work is currently taking place to complete the 2020/21 data for submission to HMT later in the summer.

- 4.8 The Council also spends significant amounts each year with respect to on-going routine costs and charges such as small repairs to defects that could cause trips and claims, street lighting repairs and gully cleansing.

5. MANAGEMENT OF OUR HIGHWAY ASSETS

- 5.1 Historically, the highway network has been managed as a number of discrete functions within the Design & Delivery and Highways & Transport units of the Operations & Neighbourhoods directorate.

- 5.2 Accordingly for members and officers, there has been a lack of clarity as to roles, responsibilities and forward planning strategies.

- 5.3 As a result of changes to the management structure and in response to funding challenges, there is now an opportunity to review how we manage our highway assets and establish medium term financial certainty.

6. FUNDING

6.1. Generally, highway maintenance expenditure has been funded by capital and revenue resources made available each year. Also, when available, specific capital investments have been secured (e.g. Tameside TAMP, LED Lighting Replacement etc.).

Capital:

6.2. Capital funding is, in the main, used for Planned and Preventative Maintenance Works.

6.3. Each year the Department for Transport (DfT) allocates funding to local Highway Authorities based on the length of their highway network and traffic volumes and the authorities Incentive Fund ranking. The Council is an Incentive Fund 'Band 3' authority (the top band) and receives the maximum Incentive Fund allocation.

6.4. The 2021/22 DfT allocations have recently been published and the Council values are;

Table 3:

Maintenance Allocation	£1,289,000
Incentive Fund Allocation	£322,000
Pothole & Challenge Fund	£1,289,000
Integrated Transport Block	£1,015,000
Total	£3,915,000

6.5. The funding available for planned and preventative maintenance is £3.915m. Of this, £1.500m is allocated to the Highway's revenue budget to fund pothole repairs. This leaves a remaining balance of £2.415m available for planned and preventative maintenance.

6.6. The DfT allocation funds a range of functions across different asset types using a set formula – this is set out below;

Table 4:

Highway Asset Type	DfT Asset Allocation (%)	Asset Allocation (£'000)
Highways (Carriageways, Footways, Drainage)	75.2	1,816 (of this sum 1,253 is allocated to carriageways)
Structures (Bridges, Retaining walls etc.)	18.1	437
Street Lighting inc signs & bollards	6.7	162
Total	100.0	2,415

6.7. The DfT highways maintenance and incentive fund elements have never been intended to fully fund the needs of each Highway Authority in terms of maintaining their highway network. Each Highway Authority is expected to allocate appropriate local funding to ensure that the highway network is maintained sustainably.

6.8. Accordingly, over recent years, Tameside MBC has made available additional capital funding, for example a £20m investment in our carriageways and footways was approved in 2017 (Tameside TAMP). To the end of March 2020, £13m has been allocated but the remaining £7m was subject to further review.

Revenue:

6.9. Annual revenue funding is provided by the Council to deliver a range of functions such as; Reactive / Risk Management maintenance and Routine / Cyclic Maintenance etc.

The main revenue funded activities include:

Table 5

Function	Description	2021/22 Budget £'000
Risk Management	Pothole, flagging, kerb repairs etc.	433
Highway Drainage	Gully Cleansing	417
Culverts	Gratings repairs and clearing	30
Signs, road markings	Non-illuminated road signs, white lines etc.	63
Land Drainage	Culvert Maint and Collapses	50
Gully Cleansing	Routine & Reactive (gully machines)	249
Highway Drainage	Repairs, cavities etc.	168
Street nameplates, fences, wall	Signs, highway fences etc	15
Public Rights of Way	Stiles, fences, surfaces etc	10
Bridges & Structures	Structural Surveys	39
Street Lighting Maintenance	Repairs & Testing	417
Street Lighting Energy	Payment for electricity & tariffs	1,310

7. CONSEQUENCES OF UNDER INVESTMENT

- 7.1. The Council has a statutory duty under the Highways Act 1980 to maintain the highway in a fit state to accommodate the 'ordinary traffic which passes or may be expected to pass' along them.
- 7.2. Ultimately, the Council along with its residents, businesses and visitors will all suffer the following consequences of a decline in condition;-
- Increased vehicle operating costs
 - Slower journey times
 - Higher incidence of accidents
 - Reduction in ride quality and footway condition
 - Increased frequency of flooding incidents
 - More bridges with weight restrictions
 - Potential road closures
 - Potential increases in insurance claims
- 7.3. Table 6 below shows the number of claims the Council has received, due to defects, over the last seven years and the relevant costs. Although it is difficult to draw a direct correlation with the number of claims made and the cost to the Council, as each claim varies in their severity and damages. It can be seen first as a result of the recent TAMP investment in undertaking improvement to the highway the number of claims reduced.

Table 6

Accident Date by financial year	No. of claims received	No. claims settled/admitted	No. claims defended/denied	Total paid out/reserve costs (damages and legal costs) £	% claims repudiated
2020/2021	39	9	30	44,505	76.9
2019/2020	68	25	43	196,270	63.2
2018/2019	91	39	52	181,740	57.1
2017/2018	114	34	80	69,948	70.2
2016/2017	119	35	84	149,678	70.6
2015/2016	121	43	78	239,946	64.5
2014/2015	140	24	116	231,894	82.9

- 7.4. The Annual Local Authority Road Maintenance (ALARM) survey published in March 2021 by the Asphalt Industry Alliance indicates that the ideal ratio between spending on planned maintenance versus reactive maintenance is 84:16. Currently, in England, this ratio averages 79:21.

Palette of treatment options

- 7.5. Planned highway maintenance is not just about resurfacing or replacing a bridge deck. There are many different treatments available to the highway engineer depending on the particular condition of the asset in question. However, the breadth of the palette of available treatments is dependent on available finances. Generally, when talking about road surfaces for example, it is easier to communicate its condition by the use of bands known as purple, red, amber, yellow and green (PRAYG) with the purple band being the worst and green the best. Good asset management is not just about dealing wholly with assets languishing in the purple band. Whilst purple roads are in need of urgent attention (and will probably require resurfacing works as a minimum) roads in the amber band can receive much cheaper forms of treatment such as micro asphalt and this philosophy can even be extended further to roads still within the green band but close to amber.
- 7.6. The purpose of this approach is to be able to maintain the condition of the road in a high state of repair, thereby preventing it from falling into a lower state of repair which would then require more costly works to improve its condition. A useful analogy is to consider treating a scratch in the paintwork of a new car with a touch-up pen costing only a few pounds rather than letting it deteriorate to such a point where rust develops resulting in it having to be taken to a body shop for a much more costly repair.
- 7.7. Consequently, a comprehensive highway maintenance strategy would allow for the roads not in the purple/red bands to receive some form of intervention to offset deterioration. To what extent this is possible is directly related to the amount of available funding. For the current available funding within the budget, including recurrent revenue and DfT grant funding, it will not be possible to deliver a strategy and only the most urgent road works will be able to be repaired and maintained.

Developing a prioritisation matrix

- 7.8. The condition data collected for the highway assets is not sufficient alone to develop a methodology to facilitate the ranking of candidates in priority order. Factors other than condition need to be taken into account such as route importance, number of vehicles carried, previous insurance claims history, reactive maintenance history, population density, engineering judgement and political imperatives. As part of developing its Highway Asset Maintenance Plan, Engineers have been examining the options for implementing just such a prioritisation matrix. It is proposed that this matrix be developed fully in order to rank the candidate roads and assets.

8. PROPOSAL

- 8.1. Over the past 4 years Tameside MBC has made available additional capital funding, for the maintenance of our Highways. A £20m investment in our carriageways and footways was approved in 2017 (Tameside TAMP). To the end of March 2020, £13m has been allocated but the remaining £7m was subject to further review.
- 8.2. The current financial position of the Council and existing commitments on the Capital programme, means that the Council currently has only £7.693m of forecast funding available to support all essential capital works (including some maintenance costs).
- 8.3. In **Appendix 2** there are 2 tables that list schemes in order of priority and what can be achieved subject to available funding. The schemes listed are the 26 most urgent schemes for resurfacing, in reducing priority order (i.e. item 1 being the most urgent priority).

- 8.4. The priority of these schemes has been assigned based on: conditional data, engineering assessments, risk management input, complaints from residents, councillors and MPs, the relationship between the scheme and of other ongoing schemes, if the location ties into any cycling schemes, and the locality of the area to schools, shops and other high use areas. Another element that is considered is the rate of deterioration and the increasing cost to fix if left untreated.
- 8.5. In order to ensure value for money (VfM) is maximised and HAMP principles followed, consideration must be given as to which candidate roads would give the Authority the greatest return on its investment and what methods should be used to treat them. The Executive Cabinet is to choose the level of funding they wish to allocate to this statutory responsibility.

9 OPTIONS

9.1 There are two options to consider:

1. That no increase is made to the Highways planned maintenance budget, and the current DfT grant is utilised to a value of **£1.253m** (table 4 refers) which would include the roads highlighted in **Appendix 2 Table A**.
2. That an additional capital allocation of **£1.497m** is made to the Council's Highways planned maintenance budget. This funding is allocated on the basis of a programme of identified works drawn up in accordance with the principles and methodology explained in this report.. The roads identified to be maintained using this funding are identified in **Appendix 2 Table B**.

9.2 Option 2 is recommended for approval.

10 CONCLUSION

- 10.1 The Highway network is a crucially important asset with a high value and associated high maintenance requirement.
- 10.2 The consequences of underinvestment in this asset will be that the borough, its residents and businesses, suffer both economically and socially. By reducing the funding available for highways maintenance the general public will notice a deterioration in the road quality with consequential effects highlighted in paragraph 7.2. This report proposes that a review of current Highway infrastructure condition and funding is made and brought back to Executive Cabinet for consideration in a year's time.

11 RECOMMENDATIONS

11.1 As stated on the report cover.