CAPITAL INVESTMENT BUSINESS CASE

Highway Capital Investment Programme 2024/25

EXECUTIVE SUMMARY

The Executive Summary is a short summary of the Business Case and should be the last section you complete; this will enable you to extract or only the key facts from relevant sections i.e. 'project on a page'. The summary is a 'snapshot' of the business case which will need to tell the story and sell the proposal.

The highway network is the Council's largest capital asset with an estimated replacement cost of in excess £1.6 billion (2019) requiring ongoing maintenance and renewal in order to be kept in a safe and serviceable condition for the travelling public. The asset is vitally important not only for the everyday operation of the City and the lives of its inhabitants but also for ongoing economic development and productivity in all aspects of City life.

Historically, Highway Maintenance has been a largely Revenue based activity and many Highway Authorities continue to fund a significant proportion of Highway Maintenance activity through Revenue. However, the Council's Revenue budgets are under historic pressure and whilst every opportunity is taken to generate income, Capital Investment is essential to insure the resilience and safety of this critical infrastructure. The Capital bid below is for 5 years and is submitted at a level which assumes that the condition of the Highway Asset will be maintained at its current (steady) state.

Plymouth Highways follows best practice in managing maintenance of the highway asset and has modelled long-term maintenance strategies, aimed at achieving a number of outcomes. These are described in the Highways Asset Management Framework and summarised below:

- Maintaining and improving the condition of the public highway.
- Reinstating the structural integrity of roads.
- Improving highway drainage and keeping water off the highway.
- Supporting economic growth in the city by improving our transport network and reputation for quality of roads.
- Continuing the drive away from a reactive service towards a planned and efficient service.
- Improving the safety of the road network to reduce injury collisions in line with statutory requirements, Coroner's recommendations and the City's obligations, as a founder member of the Vision Zero South West Partnership.
- Planned replacement of the City's Traffic Signal infrastructure, as it depreciates, with modern and efficient equipment will help ensure the best use of road space and safety of all road users.

- Planned replacement of the City's street lighting asset, as it depreciates with modern and efficient lighting units and columns will reduce the City Council's energy bill and carbon footprint, reducing the risk of damage and injury associated with failure of columns which is always a greater risk in coastal locations.
- Planned Capital Maintenance of Bridges and other Structures.

The framework places importance on building resilience in response to Climate Change and ensuring that Biodiversity and Carbon Reduction are considered in all maintenance decisions.
Details of the Framework are available on the council's website at: -
Delivery of highway maintenance | PLYMOUTH.GOV.UK.

Continued investment also secures access to the Department for Transport Funding through the Incentive fund which is allocated on performance. Plymouth is currently in Band 3, judged to be amongst the highest performing Highway Authorities and receives £323,000 Capital Funding per annum in recognition. Band 2 authorities receive 30% of the potential total amount with Band 1 authorities receiving no Incentive Fund grant, it should be noted that this funding stream is not guaranteed, 24/25 award see this funding element embedded with the Pothole, Incentive and maintenance grants.

The absence of a Capital Investment programme undermines existing investment and will precipitate a greater and faster deterioration of the asset leading to higher future investment scenarios to recover. This in turn will increase demand on revenue for reactive maintenance and put the City Council at higher risk of litigation due to greater numbers of safety defects occurring.

Public perception of Highway Services in the UK is measured through the National Highways and Transport Network Survey authorities via 1.2 million questionnaires submitted by local residents 111 participating Authorities. This year's results show that Plymouth's residents place most importance on road safety and the condition of roads but were least satisfied with the condition of roads which was also the most popular choice for improvement to service level and additional expenditure.

Significant additional pressures identified in the areas of Traffic Signals, CCTV, Road Safety and deterioration of the non-resilient road network, along with a significant rise in contractor costs since submission of the previous bid, indicate that an increase in investment would be required to maintain the asset in its current condition and to provide the improvements in congestion management and road safety.

Inflation

Since submission of the current Capital Business Case in 2019, UKCPI prices have risen by approx. 26%. Plymouth Highway's Principal Contractor and Suppliers across the construction sector are particularly vulnerable to fluctuations in prices due to their reliance on petrochemical and other imports which have been affected by the Ukraine crisis.

24/25 Holding Budget

This Business case illustrates the level of investment required to maintain the asset in a 'Managed decline' over a 1year period, recognising current budgetary pressures. The 2025/30 budget currently being developed will address this approach and will offer a 'steady State' over a 5-year period. All DfT funding has been recognised – including the 23/24 £366k DfT funding), in addition to available rolled capital allocations within previous funding allocations.

The Current Challenge

The highway network in Plymouth was not originally designed or constructed to the standards that would be expected of highways today. As a consequence, many highway assets are less resilient and are entering the mid to end phase of their serviceable lifespan. Increasingly frequent and severe weather events continue to accelerate the deterioration of the highway asset.

SECTION 1: PROJECT DETAIL			
Project Value (indicate capital or revenue)	**£8,207,039.98Capital**	**Contingency (show as £ and % of project value)**	0%
Programme	Highways Maintenance	**Directorate**	Place
Portfolio Holder	Cllr Mark Coker, Strategic Planning and Infrastructure	**Service Director**	Philip Robinson (Street Services)
Senior Responsible Officer (client)		**Project Manager**	Philip Bellamy
Address and Post Code		**Ward**	Citywide

Current Situation: *(Provide a brief, concise paragraph outlining the current situation and explain the current business need, problem, opportunity or change of circumstances that needs to be resolved)*

The current Capital Investment Programme ends in the financial year 2023/24. Details of Historic Funding including Department for Transport allocations are given in Appendix A

Background

The highway network and other transport infrastructure assets together represent the largest capital asset the Council holds, with a current replacement cost of £1.6 billion. Used daily by the travelling public for commuting, business and leisure activities; it is crucial to the economic, social and environmental wellbeing of our local communities.

The highway network, which includes carriageways, footways, drainage, street lighting, traffic signals and structures, requires regular planned maintenance and renewal in order to maintain the network in a safe and serviceable condition for the travelling public. With revenue budgets at an historic low for the Council it is essential that Capital Funding is invested to build resilience into this critical infrastructure. The introduction of an Asset Management approach to highway maintenance in Plymouth has enabled the modelling of long-term maintenance strategies, aimed at achieving a number of outcomes:

- Maintaining and improving the condition of the public highway
- Reinstating the structural integrity of roads
- Improving highway drainage and keeping water off the highway
- Supporting economic growth in the city by improving our transport network and reputation for quality of roads
- Continuing the drive away from a reactive service towards a planned and efficient service
- Improving the safety of the road network to reduce injury collisions in line with statutory requirements, Coroner's recommendations and the City's obligations as a founder member of the Vision Zero South West Partnership.
- Planned replacement of the City's Traffic Signal infrastructure, as it depreciates, with modern and efficient equipment will help ensure the best use of road space and safety of all road users.
- Planned replacement of the City's street lighting asset, as it depreciates, with modern and efficient lighting units and columns, will reduce the City Council's energy bill and carbon footprint, reducing the risk of damage and injury associated with failure of columns which is always a greater risk in coastal locations.
- Planned Capital Maintenance of Bridges and other Structures.

Historical Funding

In 2015 the DfT changed their funding model to give local authorities cost certainty of funding for a six-year period, enabling local authorities to financially plan into the future, giving confidence to service providers and supply chains. The Highway Maintenance Efficiency Programme (HMEP) produced an asset management guidance document recommending Authorities commit to a minimum five-year funding model. This approach gave local authorities the opportunity to gain efficiencies through longer term strategic planning. HMEP principles are being maintained and quality delivery reviews are measured by the Incentive Scheme principle now being delivered by DfT by way of an auditable self-assessment arrangement, policed by the Local Authorities' Section 151 Officer

Plymouth City Council has transformed its asset management approach since the launch of HMEP. This has involved upgrading all its asset management systems and investing in surveys to gather data to inform accurate depreciation modelling that will drive investment scenarios to achieve best value.

In recognition of this, Plymouth City Council have been recognised as a top performing authority, achieving Band 3 (top level) status in the DfT's incentive fund scheme, which assesses an authority's competency with regards to asset management.

In order to alleviate the pressure on revenue budgets, and recognising the fiscal challenge faced by Plymouth City Council, it is important to have commitment to capital funding in support of the required minimum statutory duties of the highway service. The need to secure this funding is critical for long-term planning of maintenance activities and providing confidence to our supply chain to deliver greater value for money services.
Capital funds are required to spend on highway maintenance from the DfT Challenge Fund, Incentive funds, previously unallocated DfT funding.
To date, our resilient network (the key routes for traffic throughout the city) has been maintained to a serviceable level.

The Current Challenge

The highway network in Plymouth was not originally designed or constructed to the standards that would be expected of highways today. As a consequence, many highway assets are less resilient and are entering the mid to end phase of their serviceable lifespan. Increasingly frequent and severe weather events have also accelerated the deterioration of the highway asset.

To continue to address this ever-growing challenge, it is now vital that the city Council remains committed to upholding its statutory obligations and the strategic aims set out in the Highways Asset Management Framework. Therefore, the continuation of capital investment to re-build resilience back into this critical asset is essential. Failure to do so will undermine investment to date and lead to greater deterioration, increased demands on revenue, higher future investment scenarios due to not intervening before end of life and higher risk of litigation due to greater numbers of safety defects occurring.

In recognition of the current financial climate, we have modelled a managed decline scenario - we have achieved this by modelling deterioration, prioritisation and identification of appropriate treatments at the right time.
This Business Case has been benchmarked against industry standards and external consultancy from Gaist and Yotta – this is an industry recognised approach for best practice.

Proposal: *(Provide a brief, concise paragraph outlining your scheme and explain how the business proposal will address the current situation above or take advantage of the business opportunity)* **and** *(What would happen if we didn't proceed with this scheme?)*

Investment Scenario

Managed decline Scenario

The level of investment required after assumed DfT Funding is taken into account would be £4,200,000 over a 1-year period

Present DfT Funding model per annum: -

DfT Maintenance Block Fund - £1.29M

DfT Pothole Fund - £1.29M

DfT Incentive Fund - £0.323M

Pothole Additional funding 23/24 - £0.366M

Pothole Additional funding 24/25 - £0.366M

S106 Money

£372,039.98 for allocation to Laira Bridge Cycle Way for the repair of the failed running decking and replacement of lighting

Why is this your preferred option: *(Provide a brief explanation why this option is preferred)* **and** *(Explain why this is a good capital investment and how this would be an advantage for the Council)* **and** *(explain how the preferred option is the right balance between the risks and benefits identified below).*

Highways Maintenance (BASE Ask)

As part of our latest Capital finance bid, we will consider each of the main Highway assets and what can be achieved with a minimum level of funding (Base Ask)

The main assets to be covered by this ask are as follows:

Carriageway Maintenance – Reactive

Figures based on average of 2018/19 to 2022/23 budgets.

Our Capital ask for reactive maintenance can be made based on historical data. Planned carriageway maintenance will have an impact on reactive maintenance levels expected, which is likely to increase if a reduced level of planned maintenance takes place. This budget aligns with the Base Ask and historical data has been used to provide an estimate of future expected levels, notwithstanding the risks associated with a reduced planned maintenance budget, for example:

- Reactive maintenance costs increasing due to increased deterioration and the need to maintain our statutory obligation to manage the road network in a safe condition.

- Increased insurance claims and potential pay-outs due to a decrease in the condition of the carriageway network.
- A decrease in public perception of the quality of the network and a likely increase in customer complaints.
- An increase in numbers of potential reported defects leading to an increased workload for the Highways Safety Inspectors.
- An increase in negative media coverage (pothole Pete?).

Routine carriageway maintenance focusses predominantly on safety defects found on the network through regular inspections and those reported by members of the public. The Highway Safety Inspections Manual which has been updated in line with the code of practice identifies:

- Frequency for routine inspections per road hierarchy
- Investigatory levels
- Time scales for defect repairs

Safety defects are recorded by highway inspectors during the routine inspection of the network. These defects are classified for repair in line with the risk-based approach outlined in the Highway Safety Inspection Manual. These repairs are recorded electronically on Mayrise, the highways maintenance system which enables the effective communication of works orders to contractors and quality assurance of repairs, which can be evidenced. These repairs are also co-ordinated with the structural repair programme to ensure that where efficiencies can be made, they are.

Carriageway Maintenance – Velocity Patcher

Figures based on current year's budget for 2 machines for 6 months.

The Velocity Patcher machine has targeted roads by area where there are defects that may or may not meet our investigatory levels in order to prevent further deterioration. This helps to seal the areas to prevent the ingress of water and reduce the likelihood of new defects occurring. This should show a benefit in a reduction in defects progressing to defect investigatory levels. This year we have had 2 machines working predominantly in 2 wards (Devonport & Stoke) for 6 months and this is looking to achieve at least 8,000 repairs at the same cost as 1,200 traditional saw-cut and inlay repairs. We would be looking to replicate these results going forward in another section of the City. These repairs will address the perceived pothole problem in Plymouth and over time the expectation is that this will start to reduce the number of potholes that reach our intervention levels, saving time and money whilst improving the overall perception of the pothole issue. This process also helps to reduce our carbon footprint because the treatment is cold applied and offers reduced vehicle movements compared to traditional patching methods. The feedback received by the public has been generally positive.

Carriageway Maintenance – Planned

Figures based on the Base Ask of £2.5m overall spend on carriageway planned maintenance (Not including staff costs). The intended split is £1m on the Resilient network and £1.5m on the Non-Resilient network. (The actual ask is for £3m but this includes staff recharge costs, contract lump sum fees and a contingency for ad-hoc jobs that may arise.)

A number of financial and performance driven scenarios were considered and compared. We also considered performance-based targets for the resilient network, which indicated that an initial decline in condition could be allowed with a slightly higher subsequent investment to maintain at the target levels.

Future planned carriageway maintenance works are based on good asset management principles and in particular our Carriageway Lifecycle Plan 2023. Carriageways classified roads are subject to

mechanical SCANNER / SCRIM road condition surveys every year in line with DfT reporting requirements. Unclassified roads are subject to a visual condition survey every 3 years and this feeds into our asset management data, which is then utilised to create deterioration and investment models to provide expected levels of maintenance required to maintain the condition of the carriageways in line with the Asset Management Objectives. The methodologies for these surveys are a combination of machine and high-definition camera survey. The data collected from the survey are used to model lifecycle analysis in Plymouth Asset Management System, Horizons.

The programme of works is developed using the Horizons asset management software. Carriageway schemes generated are taken as a basis for the preparation of work programmes. The works programme is the output of the treatment parameters and rules described in the Lifecycle Plan, and describes in detail the work to be done, the year of implementation and the estimated cost of each scheme.

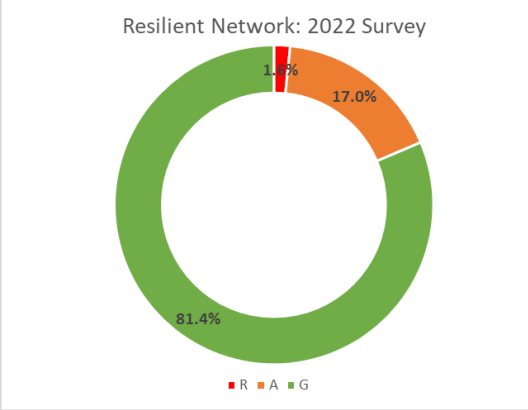
Once the system has identified the schemes for each year, the highway engineers visit each site to validate the treatment extent and treatment options. These schemes then build up the works programmes for each year which is communicated to members and the public once approved by senior stakeholders.

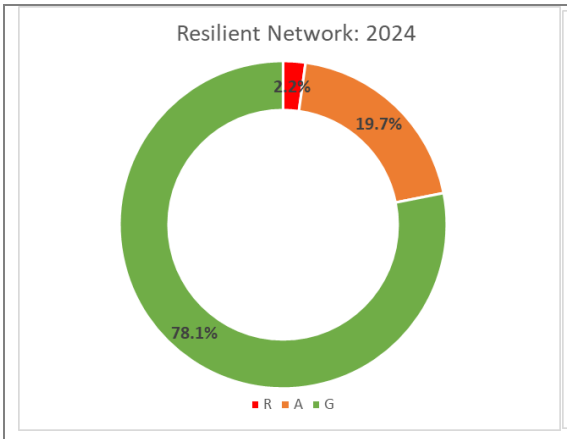
At the end of every year the works that have been undertaken on the highway network are recorded against the network to reset the condition for each of these sites within the asset management system. These historic maintenance records provide valuable insight into the performance and condition deterioration of the carriageway asset.

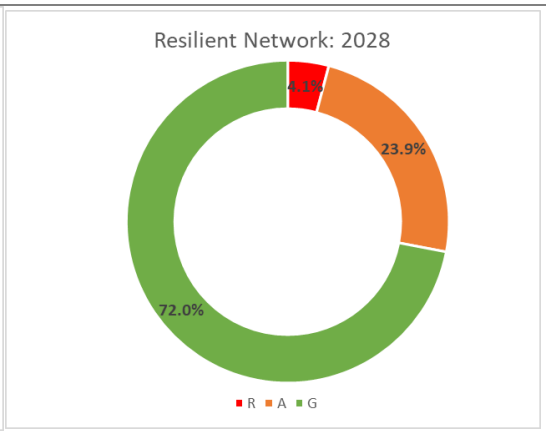
The illustrations below show the current state of both the Resilient and Non-Resilient Highway Networks in the City and the predicted change over 5 years if this suggested Base Ask investment is approved. The conditions of the carriageway are RAG rated with red indicating at failure and green as good condition. The models selected are based on financial scenarios, developed separately for the Resilient Network and the Non-Resilient Network. Both models also show an initial decline in condition grade between the 2022 surveys and the first year on the modelled results, this is due to deterioration in the interim and exacerbated by a number of the areas in the amber condition band being close to becoming red at the time of the survey.

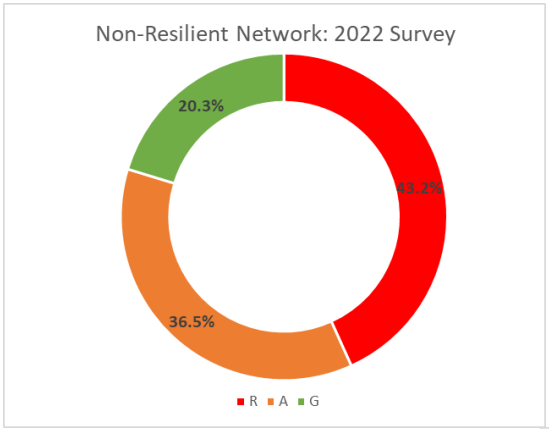
The 2022 survey shows that the Resilient Network was approximately 1.6% in the red condition band. By 2024, this is projected to be around 2.2%. In the given investment scenario, at the end of the 5-year period this is projected to be around 4.1%.

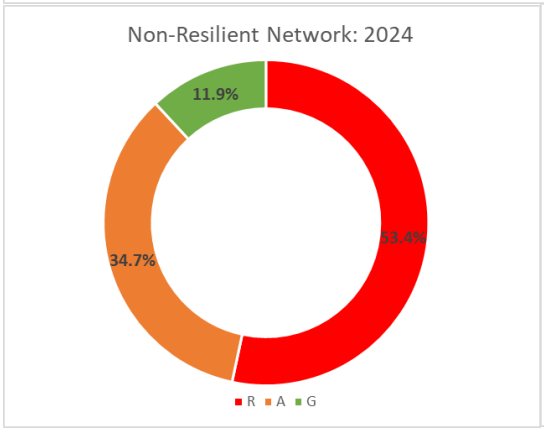
The Non-Resilient network survey from 2022 shows that it was approximately 43.27% in the red condition band. By 2024, due to 10.7% of the network being in the poorer third of amber condition, it is modelled that the proportion on the network in "Red" will reach 53.4%. By 2028, with the specified level of investment this is predicted to have declined significantly to 68.6%, with the proportion of the network showing in good condition deteriorating to 21.9%

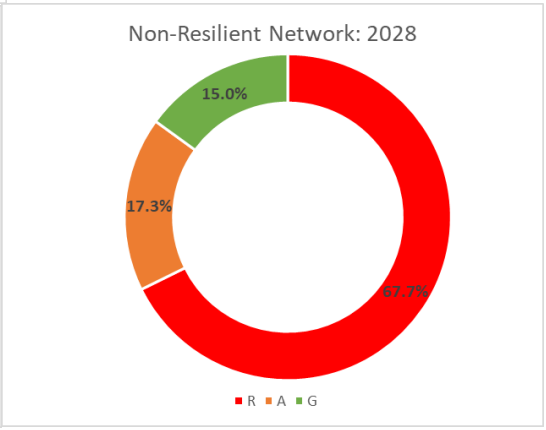












Carriageway Maintenance – Skid Resistance

Figures are based on the Causeway Scrim survey report and associated estimates, to remedy the high priority defects in the first year.

Skid resistance is managed via the process outlined in the Skid Resistance Policy and Strategy. This generates a prioritised list of sites to investigate each year, with any outcomes feeding into works programmes. Current intervention level designed to hit worst sites in first year and then intervention level will be lowered to tackle further sites.

Skid resistance is also included in works programme models and future scenario models, to take account of the data collected for the classified road network on an annual basis. Skid Resistance data forms another factor in deciding future Planned Maintenance works.

Skid Resistance is considered good practice and helps us to maintain our compliance with Sections 41 and 58 of the Highways Act 1980. By addressing areas of poor skid resistance, we seek to ensure the ongoing safety of the network. This is distinct from the planned maintenance program in that this is not based around degradation of the structural condition of the highway but around the resistance of the carriageway surface to skidding, with safety of road users in mind.

Footway Maintenance (excl. kerbs) – Reactive

Figures based on approximate average of 4 of the last 6 years, not including the lower COVID years of 2019/20 and 2020/21, with an addition for staff recharges, contract lump sum fees and a contingency for ad-hoc jobs that may arise.

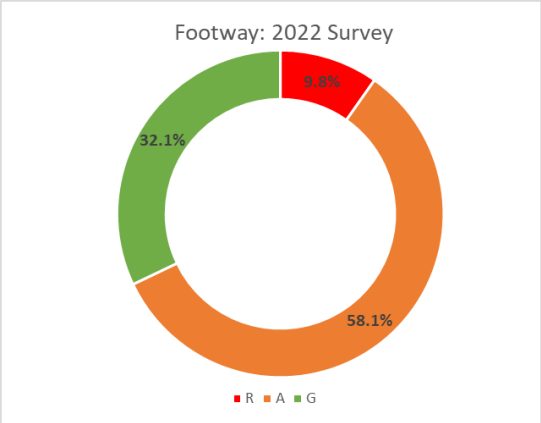
The same caveats apply to Footway reactive maintenance as apply to carriageway reactive maintenance in that a reduced spend on planned maintenance may start to reflect in an increase in reactive maintenance. This also carries the same risks of an increase in defect reports, insurance claims and adverse media coverage.

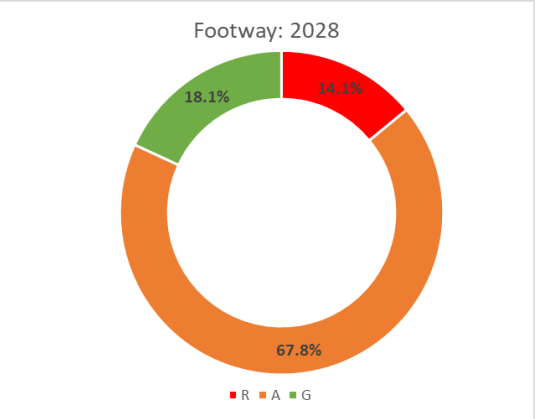
Footway Maintenance (excl. kerbs) – Planned

Figures based on Scenario 1, based on expenditure in line with recent years from the Gaist Plymouth Footway Lifecycle model.

In the Footway Lifecycle Model, 10 different scenarios have been considered ranging from maintaining current Capital budgets to investing heavily to improve the current Footway condition. Modelling is used to compare recent historical condition changes vs actual spends and to predict ongoing condition relative to certain spending budget scenarios. Spending for 2021/22 and 2022/23 has been reduced due to the recent large scale works to expand the Local Full Fibre Network (which has been accounted for in the forecasts). This Capital ask is based on continuing with comparable budgets prior to the reduction for the fibre roll-out, which was Scenario 1 of our potential 10 scenarios.

The maintenance models used predict that the condition of the City Council's Footway Network will show a significant increase in the proportion of the network in poor (red) condition from the 2022 surveyed rate of 9.8% to 14.1% of the network in 2028. The model also shows a significant decrease in the proportion of the network in good (green) condition from 32.1% in 2022 to 18.1% in 2028.





Footway Maintenance – Reactive kerb repairs

Figures based on average of 2018/19 to 2022/23 budgets.

Lining – Reactive (Safety Defect)

Figures based on average of 2018/19 to 2022/23 budgets but with an increase due to recent agreements to capitalise more lining works, where larger scale schemes have been required to replace complete junction lining and long lengths of white or yellow lines and to include for staff recharge time.

Reactive lining safety defects are where lines that meet our investigatory levels and although this is difficult to know in advance, we can reasonably assume that historical data will provide an insight into future costs.

Lining – Planned

Based on minimum budget that would allow us to complete lining schemes on major junctions as required, such as major roundabouts and the Resilient network.

This minimum ask is such that we can plan some major junction lining improvements on an annual basis but clearly a lower budget means fewer lining schemes can be undertaken, which could lead to an increase in reactive lining required.

Other Street Furniture (Bollards, unlit signs etc.) – Reactive

Figures based on average of 2018/19 to 2022/23 budgets.

Based on historical data from the last few years we can forecast future costs.

Drainage – Planned Improvement Schemes

Figures based on the potential solutions identified to address known hotspots and eliminate or reduce the risk of potential flooding issues.

Drainage – Gully and manhole replacements

Figures based on Average of 2019/20 - 2022/23.

Grit Bin replacements / new installations

Figures based on average of 2018/19 to 2022/23 budgets (With £1.5k pa addition for staff recharges).

Based on historical data from the last few years and taking into account the ongoing grit bin location review. An additional £10k has been added in year following a grit bin review with identified actions – Portfolio approved process.

Vehicle Restraint Systems – Reactive repairs/replacements

Based on historical data from the last few years of average Capital reactive VRS repairs.

Vehicle Restraint Systems – Planned replacements

Figures based on average Capital spend 2020/21 – 2022/23.

Based on historical data from the last few years and taking account of the sites already identified as being out of specification. First year should complete all "out of spec" timber backed sites, then following years will start to work on further sites around the rest of the network.

Survey costs

For "Carriageways – Planned". additions have been made to cover the costs of conducting the network video surveys every three years (next due in 2025/26 and 2028/29), and SCANNER and SCRIM surveys every year in line with DfT reporting requirements, based on most recent costs.

Staff Time

Where previous averages do not include staff time and costs, an adjustment has been made to add staff costs based on the existing percentage of budget costs used for the current financial year against the Capital Ask being made. Some adjustment has also been made for future salary increases.

Lump Sum payments

Capitalisation of the Term Maintenance Contract services attract a lump sum payment for their provision and these lump sums (based on 2023/24 payment) have been added to the relevant lines, where applicable.

Innovation

A proportion of each of the above budgets will be directed towards innovative solutions such as Warm Mix Asphalt (WMA), Retexturing of roads where skid resistance has reach trigger levels, Road surface preservation techniques & systems, Velocity pothole repairs, Methyl Methacrylate (MMA) road markings, plastic/recycled kerbs etc.

As Council budgets continue to come under pressure and scrutiny, Councils have to look into more and more innovative solutions that save time and money and also contribute towards carbon savings to help meet Net Zero targets.

Structures

Plymouth has a general duty of care to users and the community to maintain the highway structures in a condition that is fit for purpose. Current HMPE asset holding is as follows:

- 45 Bridges
- 50 Culverts
- 3 Tunnels
- 24 Footbridges
- 48 Subways

Each asset type demands complex engineering solutions to enable accessibility, programme timely remedial works and assure continual service is achieved.

Structures demand a high level of intervention to ensure continuous serviceability and compliance. Failure to invest will result in the continuing decline of condition, resulting in possible safety critical defects, unsatisfactory discharge of statutory obligations and an increase of remedial costs.

Laira Cycle Bridge – Repairs to failed running deck and replacement of vandalised lighting installation – surveys carried out and full repair brief developed.

Street Lighting

The Highway Lighting asset has a high visual impact on our street scene. As part of our Risk Based approach, based upon our Highway Infrastructure Asset Management Plan 'HIAMP' we maintain these assets in a safe and serviceable condition whilst maximising their serviceable life and reduce the incidences of failure.

Review of the Traffic Regulations and General Directions 2016 have allowed authorities to adapt the lit environment to achieve passive safe installations, reduction in street clutter and rationalisation of our lit environment.

City Centre and shopping areas demand appropriate lighting and control solutions, as do safety specific locations such as pedestrian crossings, high footfall, poor air quality and traffic calming zones. Reinforcement and Engineering solutions need to be delivered to ensure our statutory duties are discharged and continued capital investment is required to achieve to achieve our statutory duties. The programmed delivery made possible by approval of this capital bid assures such levels of compliance.

Traffic Signals

Much of the City's Traffic Signal asset is at end of life and there is currently no replacement programme in place. Although full advantage is taken of Capital Programmes such as the Transforming Cities Fund there are still many sites across the City where columns and signal controllers need replacement in the near future. Maintaining and improving this asset ensures that traffic is able to move efficiently across the network and ensure that claims against the council in the event of post failure are kept to a minimum.

In addition, there is a requirement to replace all signal heads with LED units by 2026, when the supply of replacement Halogen lamps will stop – the junction controllers will also require replacement / reworking to enable LED heads to be driven.

CCTV

A continued investment to upgrade the City's CCTV network from analogue to digital is necessary to enable the efficient management of the network and also delivers partnership benefits with the Police and other emergency services.

Living Streets

There is a Capital allocation made to each Ward in the City enabling Ward Councillors to agree funding for small improvements. Examples of the type of schemes funded could be parking schemes, dropped crossings and pedestrian refuges. For more expensive schemes, the allocation

can be rolled into future years, with adjoining wards also collaborating on larger schemes, along with top up funding from other budgets.

Collision Reduction

In the recently published GB Road Safety Performance Index, Plymouth City was found to be the third worse performer in the UK in terms of improvement in collision reduction over the period 2011 to 2019.

Between 2019 and 2022 there were 13 Fatal, 288 Serious and 1327 Slight injury casualties reported on Plymouth's roads by the Police, costing the community an estimated £155m over the 3-year period. A realistic allocation, to enable sites with persistently high casualty rates to be addressed, is needed.

Plymouth City Council is a founding member of the Vision Zero South West Partnership and supports its key aim of reducing the number of Killed and Seriously Injured Casualties on roads in the Southwest by 50% from a baseline of the 2016 to 2018 average by 2030. Currently our latest 3-year average is slightly higher than the baseline.

Safer Journeys to School

The Road Safety Team is working with Schools across the City to introduce 'Safe Zones', 'School Streets' and 'Safer Routes to School'. These use a mixture of liaison with schools and parents, engagement with pupils and physical intervention. This may be to close roads temporarily in the case of school streets, undertake enforcement action which may be physical attendance of a CEO or use of an enforcement camera or simply provide a footway link or crossing point.

Speed Management

Complaints over inappropriate speed on the City's roads are one of the most frequently received by Plymouth Highways and by Ward Councillors who pass them on to be dealt with. The Road Safety Team work closely with the Police and the Vision Zero SW Partnership to address these complaints where possible as the link with speed and severity of injury collision is well established. Requests are frequently for lower speed limits, particularly 20mph Zones, which are often only effective if supported either by traffic calming or camera enforcement.

Inclusive Mobility

The Disability Discrimination Act 1995, as amended, introduced a large number of changes to the way in which the highway environment should be made safer and accessible to all users.

In Plymouth there are many thousands of examples where the City Council might be regarded to be in breach of the Act. A co-ordinated programme of works to address these issues will both

mitigate any liability and improve the lives of those who currently find in difficult to access transport, shops and other community facilities.

Planned Direction Sign Replacement

In house design and implementation of in the region of £500,000 worth of signing improvements on the resilient network over the last 4 years was achieved using funding allocated for the Mayflower 400 project. Further improvements have been designed and implemented as part of the Forder Valley Link Road and Interchange schemes. Whilst these projects have delivered significant improvements across the network, surveys undertaken have indicated scope for significant additional improvements to the signing stock on other routes throughout the city with many signs approaching 50 years old with post supports that are corroded.

Summary

Overall, this business case outlines the necessity for the Council to invest in its local infrastructure and ensure that the Council's objective of being a welcoming city is realised by:

- Providing a safer and sustainable highway network.
- Managing the volume of Safety defects across all highway assets.
- Managing the volume of third-party claims.
- Reducing the rate of failure for critical assets and improve its resilience.
- Improve public perception and satisfaction with the highway network.
- Reduce the burden on the revenue budget.
- Get better value for money.
- Better collaboration with supply chain.
- Supporting Climate Change Agenda.

The major element of Revenue funding for Plymouth Highways is provided by the Parking Service. Parking Revenue over time has been on a decreasing trend as demand for both on street and off street parking has decreased with the increase in internet sales and decline in the City Centre as a shopping destination. This trend has increased through and beyond the Pandemic. Revenue budgets are therefore static with little scope to adjust for the effects of inflation.

Option Analysis: (*Provide an analysis of* ***'other'*** *options which were considered and discounted, the options considered must be a 'do Nothing' and 'do minimum' and 'viable alternative' options. A SWOT – Strength, Benefit, Opportunity, Threat analysis could be attached as an appendix).*	
Do Nothing Option	**No Capital investment**
List Benefits:	Reduction in Corporate Borrowing in the short term
List Risk / Issues:	Dramatic, unmitigated deterioration of network condition Dramatically increased volume of defects Dramatically increased volume of claims

	Enhanced risk to public safety Inability to meet statutory obligation Full reliance on revenue and insufficient external funding Revenue pressure due to loss of time recharges
Cost:	Undefined due to potential liability increase and recovery cost on asset.
Why did you discount this option	Dramatic increase in Revenue costs across the department and in other departments (Insurance) and enhanced risk to public safety.
Do Minimum Option	**DfT Funding Only**
List Benefits:	Reduction in Corporate Borrowing in the short term
List Risk / Issues:	Deterioration of network condition Increased volume of defects Increased volume of claims Increased risk to public safety Inability to meet statutory obligation Full reliance on revenue and insufficient external funding Revenue pressure due to loss of time recharges
Cost:	Undefined due to potential liability increase and recovery cost on asset. Includes £0 Corporate Borrowing and £3,635,000 DfT Funding.
Why did you discount this option	Dramatic increase in Revenue costs across the department and in other departments (Insurance) and enhanced risk to public safety.
Viable Alternative Option	Full Required Capital Budget to meet all safety and short/long term asset condition obligations
List Benefits:	Production of Steady State for Highway Asset. Reduction of liability risk and recovery cost on asset.
List Risk / Issues:	Evaluated investment required per year over a 5 year period is £21,037,499.00 Corporate Borrowing and £3,635,000.00 DfT Funding.
Cost:	£105,187,499.53 over a 5 year period (£21,037,499 per year)
Why did you discount this option	Deferred to 2025 - 2030 due to concerns over ability of Corporate to support fiscal ask in 2024/25

Strategic Case:	
Which Corporate Plan priorities does this project deliver?	an efficient transport network
	focus on prevention and early intervention
	a welcoming city
	An Efficient Transport Network: By investing capital funding into the highway network, we are adding value to the network and improving its condition overall. In doing this we will be providing a safer, more robust and resilient highway network to support efficient travel across the city. Focus on Prevention and Early Intervention:

	The asset management approach that has been used to build this business case utilises the components of prevention and early intervention to apply best value for money treatments to the models. Providing quality public services. Fewer potholes, cleaner, greener streets and transport. This project also supports the following policies in the Joint local Plan: SO12 - Delivering infrastructure and investment by allowing for a longer-term data led programme of infrastructure investment. SPT9 - Strategic principles for transport planning and strategy by supporting the existing transport network to support the move to genuine alternative ways to travel.

Milestones and Date:		
Contract Award Date	Start On Site Date	Completion Date
1/4/2024	1/4/2024	31/3/2025

SECTION 2: PROJECT RISK, OUTCOMES AND BENEFITS

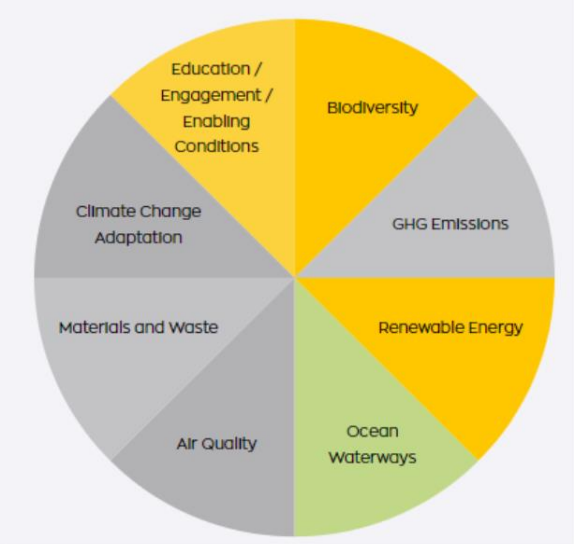
Risk Register: *The Risk Register/Risk Log is a master document created during the early stages of a project. It includes information about each identified risk, level of risk, who owns it and what measures are in place to mitigate the risks (cut and paste more boxes if required).*

Potential Risks Identified				***Likelihood***	***Impact***	***Overall Rating***
Risk	Delivery of maintenance affected by resource availability			Low	High	Medium
Mitigation	ECI and procurement arrangement robust			Low	Low	Low
Calculated risk value in £ (Extent of financial risk)		£	***Risk Owner***	PCC		
Risk	DfT funding reduced in year			Medium	High	High
Mitigation	Flexibility to works programming and contingencies placed			Low	Low	Low
Calculated risk value in £ (Extent of financial risk)		£366k	***Risk Owner***	PCC		
Risk	Inflation impact			Medium	High	High
Mitigation	Pre-stock of essential items and monitor impact			Medium	Medium	Medium
Calculated risk value in £ (Extent of financial risk)		£1M	***Risk Owner***	PCC		
Risk				Select value	Select value	Select value
Mitigation				Select value	Select value	Select value

Calculated risk value in £ (Extent of financial risk)	*£*	***Risk Owner***	

Outcomes and Benefits	
List the outcomes and benefits expected from this project. *(An **outcome** is the result of the change derived from using the project's deliverables. This section should describe the anticipated outcome)* *(A **benefit** is the measurable improvement resulting from an outcome that is perceived as an advantage. Benefits are the expected value to be delivered by the project, measurable whenever possible)*	
Financial outcomes and benefits:	**Non-financial outcomes and benefits:**
Managed risk from insurance cases due to targeted approach on critical assets. Reduced impact on long term financial requirement due to timely investment. Mitigation of costly critical asset failure and associated economic disruption.	Enhanced public safety. Public Perception – Fewer defects Improved critical transport infrastructure. Greater resilience in highways assets Supporting sustainable transport Supporting Environmental aims such as assisting with the climate emergency

SECTION 3: CONSULTATION			
Does this business case need to go to CMT	Yes	**Date business case approved by CMT** *(if required)*	

Climate Impact Assessment	
Upload Climate Impact Wheel	

Summary of the anticipated impact of the proposal on the climate (including any proposed mitigations and impacts beyond 2030)	This project will support the transition and uptake of more sustainable forms of transport such as public transport, walking and cycling by maximising lit environment. Also, resultant Carbon Emission reduction is mapped. Opportunity to reengineer existing asset layout to reduce energy consumption and CO2 emissions. Biodiversity and Carbon Reduction engineered in surface a treatment types, selection and installation of assets. Traffic Signal UTC arrangements to reduce Carbon emissions. PML engagement to review Light Pollution impact.

Have you engaged with Procurement Service?	Yes
Procurement route options considered for goods, services or works	Existing TMC Arrangement via South West Highways
Procurements Recommended route.	TMC
Who is your Procurement Lead?	
Is this business case a purchase of a commercial property?	No
If yes then provide evidence to show that it is not 'primarily for yield'	

Which Members have you engaged with and how have they been consulted *(including the Leader, Portfolio Holders and Ward Members)*	Portfolio Holder – Cllr Mark Coker

Confirm you have taken necessary Legal advice, is this proposal State Aid compliant, if yes please explain why.	
Who is your Legal advisor you have consulted with?	

Equalities Impact Assessment completed *(This is a working document which should inform the project throughout its development. The final version will need to be submitted with your Executive Decision)*	Yes/No

SECTION 4: FINANCIAL ASSESSMENT

FINANCIAL ASSESSMENT: *In this section the robustness of the proposals should be set out in financial terms. The Project Manager will need to work closely with the capital and revenue finance teams to ensure that these sections demonstrate the affordability of the proposals to the Council as a whole. Exact amounts only throughout the paper - not to be rounded.*

Breakdown of project costs	Prev. Yr.	24/24	26/27	27/28	28/29	29/30	Total

including fees surveys and contingency	**£**	**£**	**£**	**£**	**£**	**£**	**£**
Street Furniture		£415,000					£415,000
Carriageways		£4,160,000					£4,160,000
Footways		£1,700,000					£1,700,000
Drainage		£240,000					£240,000
Local Safety & Minor Schemes		£520,000					£520,000
Living Streets		£200,000					£200,000
Street Lighting Bulb Replacement		£160,000					£160,000
Traffic Signals		£140,000					£140,000
Structures		£300,000					£300,000
Structures S106 – Laira Cycle Bridge		£372,039.98					£372,039.98
Total capital spend		**£8,207,039.98**					**£8,207,039.98**

Provide details of proposed funding: *Funding to match with Project Value*							
Breakdown of proposed funding	**Prev. Yr. £**	**24/25 £**	**26/27 £**	**27/28 £**	**28/29 £**	**29/30 £**	**Total £**
Corporate Borrowing		£4,200,000					£4,200,000
DfT Funding		£3,635,000					£3,635,000
S106 Money		£372,039.98					£372,039.98
Total funding		**£8,207,039.98**					**£8,207,039.98**

S106 or CIL *(Provide Planning App or site numbers)*	
Which alternative external funding sources been explored	DfT & allocation of relative 106 funding supports Delivery – see above for detailed consideration
Are there any bidding constraints and/or any restrictions or conditions attached to your funding	No
Tax and VAT implications	

Tax and VAT reviewed by	
Will this project deliver capital receipts? *(If so please provide details)*	

REVENUE COSTS AND IMPLICATIONS	
Cost of Developing the Capital Project *(To be incurred at risk to Service area)*	
Total Cost of developing the project	£0
Revenue cost code for the development costs	
Revenue costs incurred for developing the project are to be included in the capital total, some of the expenditure could be capitalised if it meets the criteria	N/A
Budget Managers Name	

Ongoing Revenue Implications for Service Area	**Prev. Yr.**	**23/24 £**	**24/25 £**	**25/26 £**	**26/27 £**	**27/28 £**	**Future Yrs.**
Service area revenue cost							
Other *(eg: maintenance, utilities, etc)*							
Loan repayment *(terms agreed with Treasury Management)*							
Total Revenue Cost (A)							
Service area revenue benefits/savings							
Annual revenue income *(eg: rents, etc)*							
Total Revenue Income (B)							
Service area net (benefit) cost (B-A)							

Has the revenue cost been budgeted for or would this make a revenue pressure							
Which cost centre would the revenue pressure be shown	N/A			**Has this been reviewed by the budget manager**		Y	
Name of budget manager	Philip Bellamy						
Loan value	£	**Interest Rate**	%	**Term Years**		**Annual Repayment**	£
Revenue code for annual repayments	N/A						

Service area or corporate borrowing	N/A
Revenue implications reviewed by	

Version Control: *(The version control table must be updated and signed off each time a change is made to the document to provide an audit trail for the revision and update of draft and final versions)*				
Author of Business Case	**Date**	**Document Version**	**Reviewed By**	**Date**
Phil Bellamy	25/11/23	V1	Racheal Seekings	02/12/23
Phil Bellamy	05/12/23	V2		
Phil Bellamy	12/03/24	V3	Lynn Walter	13/03/24
Phil Bellamy	14/03/24	V4	Lynn Walter	14/03/24

SECTION 5: RECOMMENDATION AND ENDORSEMENT

Recommended Decision

It is recommended that the Leader of the Council:

1. Allocates within Capital Programme £8,207,039.98 to fund requirements of the Highway Term Maintenance Contract (Minute 22 of Cabinet 13 September 2016 refers);

2. Approve this business case which outlines delivery for 2024/25.

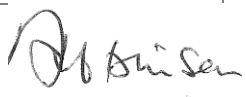
3. Issues Task Orders for this work under Highway Term Maintenance Contract with South West Highways.

Funded by:

I. £372,039.98 of S106 money for the reinforcement of Laira Cycle Footbridge running decking and the installation of lighting across the main bridge span.

II. £1,290,000 DfT Maintenance Block Fund;
£1,290,000 Dft Pot Hole Fund;
£323,000 DfT incentive Fund;
£366,000 DfT Additional Pot Hole Fund 23/24;
£366,000 DfT Additional Pot Hole Fund 24/25.

III. £4,200,000 Corporate Supported borrowing.

Councillor Tudor Evans OBE, Leader of the Council	***Service Director: Philip Robinson- Service Director for Street Services***
Either email dated:	**Either email dated:**
Or signed: 	 **Signed:**
Date:20/03/24	**Date: 20/03/24**