

County Road Highway Maintenance Capital Budget and Progress on 2020/21 Schemes and Proposals for the 2021/22 Programmes and the On-street Parking Account 2021/22

Report of the Chief Officer for Highways, Infrastructure Development and Waste

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendations: that:

- (a) progress on 2020/21 capital funded highway maintenance schemes detailed in Appendices II and III to this report is noted,
- (b) the capital funded highway maintenance programmes for 2021/22 as set out in Appendices IV and V is approved,
- (c) the Highways, Infrastructure Development and Waste 2021/22 capital programme be enhanced by £11.691 million (as explained in section 3 of this report) funded by external grants,
- (d) detailed allocation of the available budget be determined by the Chief Officer for Highways, Infrastructure Development and Waste, in consultation with the Cabinet Member for Highway Management, on the basis of the Highways Infrastructure Asset Management Plan, and within the limits of the approved budget,
- (e) the programme funded from the On-street Parking Account for 2021/22 as set out in Appendix VI be approved.

1. Summary

This report deals with both capital funding and the On-street Parking Account (OSP) reviewing for the capital what was delivered in 2020/21 and the proposed programmes for 2021/22.

Restoration or replacement of highway components which are dilapidated due to traffic loading, weather impacts or aging of assets is funded through capital investment. Sound capital investment in the highway network will ensure assets are kept structurally sound over its design life enabling officers to better plan future budget expenditure and mitigate the impact of unforeseen high cost revenue funded repairs. When investment is made at the right time, long term maintenance costs will be reduced.

This report presents information on the progress of highway capital maintenance programmes and schemes delivered in 2020/21; and Section 7 of the report details the proposals for capital funding of highway maintenance schemes in 2021/22.

Part of the 2021/22 funding awarded to Devon County Council (DCC) from central government included in this report, was approved by Full Council in February 2021.

This report seeks approval from Cabinet to allocate the capital funding across the programmes and schemes proposed in 2021/22 as listed in appendices IV and V. The allocations include an anticipated brought forward of Local Transport Plan (LTP) monies from 2020/21 of £1,272,000, subject to approval of the revenue and capital outturn report, submitted to this Cabinet.

The report also seeks approval from Cabinet for the programme of work identified in accordance with the provisions of Traffic Management Act 2004, to be funded from the On-street Parking Account as listed in appendix VI.

2. Learning including Doing What Matters (DWM)

The Service is performing well and can evidence this to central Government and consequently is receiving additional funding through the Incentive Fund as a Band 3 authority.

Our aim in relation to planned works is to increase the resilience of the Devon road network by selecting the most appropriate treatments and undertaking these works effectively. Through the DWM project and pilot testing in the West of Devon, principles have been developed that will assist us in doing this, recognising there are three distinct elements that come together to deliver planned works effectively.

Machine-based condition data from surveys continues to be used to provide an objective view of the network and this data is complimented with the human touch through visual route inspections by our Neighbourhood teams. Both these elements confirm which roads and footpaths need attention and which then informs the next important process of seeking the views from the customer and community perspectives, through our parish and town councils.

In sharing our advance programme and understanding what repairs would be of most value to communities a forward programme can be developed that is representative of technical and local need. It is interesting to note how consistent these different elements and views are when identifying suitable schemes for future programmes and where there are inconsistencies the valuable knowledge and discussion with communities about which roads are locally important provides a mechanism to reshape the programmes. The pilot work has demonstrated the importance of dialogue in being transparent on why certain works are promoted above others and has enabled forward programmes to be produced for the forthcoming years for each of our six Neighbourhood teams across the county.

As these programmes emerge the next steps are to initiate further discussions by our local teams with parishes and town councils to agree the advance programmes with the intention to publish these programmes publicly on the [council website](#). Future programmes of course are subject to change fundamentally because of the reliance upon funding which is uncertain over the medium to long term and the impacts from unforeseen situations. Never-the-less the benefits of an agreed prioritised programme will provide the basis for reprogramming works should resources or circumstances dictate.

In 2019 Devon declared a Climate and Ecological Emergency and through the Devon Climate Emergency Response Group (DCERG) there is the expectation to deliver on challenging targets within Devon's new Carbon Plan.

The service is collaborating with Exeter University in establishing a methodology that will help to reduce the carbon output when designing and commissioning maintenance and construction works. Carbon emissions calculations will take a 'cradle to grave' approach – from sourcing primary materials through to their disposal at the end of a project's life.

The project will offer teams a mechanism to understand the average carbon output of a scheme, consider the most sustainable repair and utilise this knowledge when making engineering decisions. In 2021 the target is to further expand the number of activities being considered and to test the suitability of the impact assessment tool against several key activities.

3. Capital Programme

Financial Considerations and Sources of Funding for 2021/22

In 2021/22 Highway Maintenance Block (HMB) funding is £29.346 million and consists of:

- HMB funding LTP 'Needs' based formula is £23.477 million and is for maintaining and improving the network, based upon local knowledge, circumstances and priorities. This is a reduction in funding compared with 2020/21 of 31%.
- HMB funding 'Incentive' element allocation is £5.869 million and is a mechanism to enable an authority to receive additional funding over and above the 'Needs' based formula. This year saw a reduction in the band 3 level of funding of 17% compared with the funding in 2020/21 for the same banding level.

The Incentive fund and 'Needs' based formula allocations are shown in Table 1.

In addition to the HMB funding is the 2021/2 Potholes Fund allocation of £23.477 million for the fixing of potholes and the resurfacing of local roads.

At the time of setting the capital programme for 2021/22, DfT allocations had not been announced. The budget was set at £41.132 million, based upon the 2020/21 LTP settlement. In February, the DfT published local authority allocations which included the elements above and totalled £52.823 million. Recommendation (c) is therefore requesting the enhancement of the capital programme of £11.691 million.

Further funding support was provided to the 2020/21 capital budget through financial provisions and carry over funding as follows.

- In March 2020 the Department for Transport announced £650 million funding for the Potholes Fund from which Devon's allocation was £28.869 million. It was agreed at Cabinet in July 2020 that £7.7 million be allocated to 2021/22

from the Potholes Fund in order to smooth out the effect of any potential future budget reductions that may occur.

This decision proved to be the correct action as we have seen a 28% reduction in LTP and Incentive Funding in 2021/22 as shown in Table 1.

	DCC LTP Needs Formula Allocation (announced in Dec 2014) (£)	Self-Assessment Ranking Band 3 Highest Band (£)	Self-Assessment Ranking Band 2 Medium Band (£)	Self-Assessment Ranking Band 1 Lowest Band (£)
2015/16	42,306,229	No funding	No funding	No funding
2016/17	38,784,623	2,347,737	2,347,737*	2,112,964
2017/18	37,610,754	3,521,606*	3,169,446	2,112,964
2018/19	34,042,193	7,090,167*	4,963,117	2,127,050
2019/20	34,042,193	7,090,167*	3,545,084	709,017
2020/21	34,042,193	7,090,167*	2,127,050	
2021/22	23,477,000	5,869,000*		

Table 1 - DfT Needs Based and Incentive Formula Allocations (* awarded)

- Due to the large capital programme in 2020/21 and the impact on the programme of the Covid-19 pandemic £1.272 million of 2020/21 LTP is expected to be brought forward into 2021/22 (subject to approval of the revenue and capital outturn report submitted to this Cabinet).
- £1.597 million from the continuation works on A380 improvement works that was supported by funding from the Department for Transport Challenge Fund awarded in June 2020 is expected to be brought forward subject to approval of the revenue and capital outturn report submitted to this Cabinet)
- of £209,000 associated with ecological mitigation works for the Slapton Line works, is expected to be brought forward, subject to approval of the revenue and capital outturn report submitted to this Cabinet).
- In support of the Authority's Carbon Reduction Plan and to save revenue funding on energy, £8.7million was allocated to convert the remaining 45,000 Street Lighting assets, which are principally in residential areas, to LED over a three-year period. During the past year circa. 7,000 lights have been converted. £5.6 million funding remains, of which £4.77 million is estimated to be spent in 2021/22.

Table 2 summarises the funding sources for 2021/22 as:

LTP Needs Formula Allocation 2021/22	£23,477,000
Incentive Funding (Band 3)	£5,869,000
Potholes Fund	£23,477,000
2020/21 Potholes Fund allocation profiled to 2021/22	7,700,000
LTP/Potholes Fund b/f from 2020/21	£1,272,000
A379 Slapton Line b/f grant from 2020/21	£209,000
Challenge Fund b/f from 2020/21	£1,597,000
Highways Lighting LED plus £860k b/f from 2020/21	£4,770,000
Total	£68,371,000

Table 2 – Funding Sources

4. Road Condition and Strategy

The condition of Devon's road network has broadly remained stable for many years, a situation that is also reflected at a national level for most other local authority (LA) managed roads.

Assessment of road surface condition of classified roads throughout the United Kingdom is provided using automated survey vehicles (SCANNER) and through visual surveys which ensure a consistent method of determining and comparing road condition across the UK network. The main measure of road condition is the Road Condition Indicator (RCI), this is made up of several parameters, such as cracking and rutting which combine to give an overall measure of the state of the road and an indication of surface condition. The underlying data can then be used along with other data to inform decisions about maintenance and future programmes.

Under the Local Government Act, Local Authorities (LA) are required to provide, over a two-year cycle, data to the Department for Transport (DfT) on the conditions of their 'A', 'B' and 'C' roads. In addition, because the percentage of unclassified roads make up more than 52% of the total road network in Devon, we also measure the road condition of this important part of the network, and this survey is undertaken over a three-year cycle.

Based on the RCI data, sections of road are split into 3 categories (red, amber, green) representing the general condition of that piece of highway with red being the worst condition and green carriageways in a good state of repair.

The roads categorised in a 'red' condition indicate poor overall condition and are roads likely to require major maintenance soon, some possibly immediately. If left untreated the cost of maintaining these roads increase significantly the longer they are left. Those roads within an 'amber' condition are roads that are in a reasonable condition but have some apparent deterioration requiring further investigation to determine the optimum timing for planned maintenance. Often intervention maintenance on these roads will extend the life of the road at a considerably reduced cost than if the section of road was allowed to deteriorate to a 'red' condition category where more extensive and major works will be necessary.

Road Network

Figure 2 shows the proportion of classified and unclassified roads across the network.

Almost every journey begins and ends on local roads and is of critical importance in connecting people and driving economic growth and should be treated as an important national asset and it must be managed appropriately. Individuals, families, and communities depend on their local road network and it acts as the key arterial system that drives economic growth in our villages, towns, and cities. In Devon Unclassified roads combined with 'C' roads make up 87% of Devon's total road network.

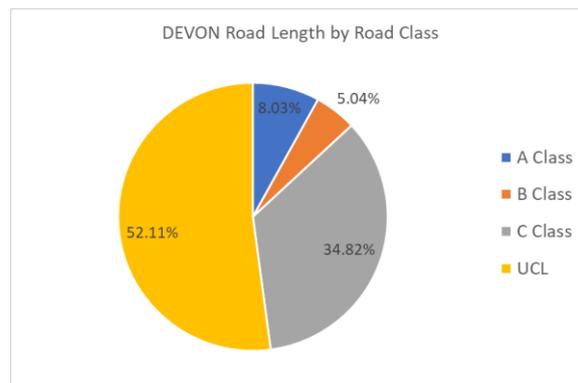


Fig 1 - Devon's Road Length by Road Class

5. Road Statistics and Analysis

Devon's has a commitment under our LTP key objectives to maintain the 'A' and 'B' class road network to a minimum condition of below 4% in the red national indicator band. This commitment absorbs a significant part of the funding streams with the remaining budget spread across Devon's significant remaining road network of 'C' and unclassified roads.

Reviewing the 2020 survey data for Devon, the percentage of roads categorised in red condition was:

- 'A' road's 3%
- 'B' road's 3%
- 'C' road's 15%
- Unclassified road's 16%

Appendix I, Figures 1 to 4 incl. provides a summary of Devon's (RCI) road condition indicator data in a graphical form over time by road classification using the national indicator bands.

Recent asset modelling estimates that to fix the most deteriorated roads requiring maintenance now would cost the authority over £167.2 million and to maintain the road network as it is, steady state, would require an annual investment of more than £50 million.

For many years funding restrictions has seen a growing reliance on preventative and short-term less expensive treatments, however such treatments, although providing an excellent short to mid-life solution, cannot be used indefinitely. At some point more robust treatments are required to avoid the repetitive cycle of pothole repairs and with Devon's road network being predominantly rural and on some minor roads structurally poor a high proportion of the network is more vulnerable and susceptible to the formation and propagation of potholes.

Under previous funding modes and excluding substantial outside influences such as, increasing population, daily traffic flows, global warming, and increased severe weather events, we have generally managed to keep pace with the decline, although this is proving more challenging each year.

This trend will remain the case until substantial and continued investment to add life and resilience to the network is made available, such investment will allow Devon to carry out the required structural carriageway repair and rebuild necessary to improve overall road condition. This would ensure future works could then keep pace with normal wear and tear and deterioration.

The most recent calculation for gross replacement cost for all assets across the network is valued at £13.3 billion. Of all the assets, carriageways form by far the greatest proportion by value (83%) with a gross replacement cost of £11.1 billion. In general inflation has remained relatively stable nationally and this is reflected in the accumulated depreciation of our highway assets over recent years which currently remains at around 14%.

Over recent years increased capital provision has enabled the service to focus this funding on specific and essential parts of the major and minor road parts of the network. Minor roads making up 88% of our total road network means the additional funding has had to focus on all but the most essential roads meaning other minor roads are having to wait longer for more extensive planned works and in the interim kept functional through timely safety repair works.

The DWM's approach is enabling teams to focus on those roads that are most essential to the communities and less dependent upon data led scheme identification. Over time this will ensure resource is prioritised to those parts of the network which are the most important to the locality user. With this change in approach and focus the expectation is we will see further improvements across the whole network and more specifically on the local roads.

Although Devon's overall bridge stock remains classed as "good" and continues to be placed in the top three of LA's in the UK for bridge condition the large size of Devon's bridge asset still means there are over 800 bridges classed as either of 'fair' or 'poor' condition. With 'good' condition rating representing a low risk to public safety conversely a 'poor' condition rating indicates a significant risk to public safety and to mitigate this level of risk locations have to be managed by weight restriction signs, physical measures, monitoring or strengthening.

Recent programmes of work are showing the average condition of the retaining wall

stock is improving due to the larger proportion of the BAS budget being allocated to the maintenance of this asset type.

6. Capital Highway Maintenance Programme: 2020/21

Progress on the 2020/21 Highway Structural Maintenance Programme is shown in Appendix II of this report and the 2020/21 Bridges Assessment and Strengthening Programme can be found in Appendix III, further area specific scheme specific programmes can be provided.

Last year was an exceptional year with the additional challenges and restrictions imposed upon society by the pandemic. Adding to these challenges are the personal challenges that staff have had to endure over the past 12 months but delivery of the service has still been met through the remarkable efforts of our officers, a collaborative approach with our supply chain partners and effective and collective communication procedures that ensured, as far as restrictions permitted, the delivery of a normal maintenance service. This collaborative approach enabled an acceleration of the programme which although not delivered in full in 2020/21 still resulted in the delivery of the largest ever capital programme.

The Bridges & Structures budget for financial year 2020/2021 was the largest budget to date with several major embankment stabilisation schemes adding to the bridges and retaining wall maintenance, inspection, and assessment activities.

In 2020/21 a total of 152 bridge and structures projects were included in the annual programme for design, inspection or works. The number of landslides and embankment failures has increased in recent years and the Bridge Assessment budget has been under increasing pressures year on year to cover this unplanned engineering work. In instances where embankment failures and slippages occur affecting highway stability issues the funding for this work will be provided through the HSM budget.

Traffic signals have been upgraded at 31 locations over the past year which both improves the safety of the asset and by use of extra-low voltage and LED signal heads reduces the energy consumption.

7. Capital Highways Maintenance Programme: 2021/22

The 2021/22 total allocation is expected to be £68,371,000 (subject to the carry forward requests, being approved as part of the revenue and capital outturn report being considered by Cabinet 09/06/21) with a breakdown of the respective programme elements included in Appendix IV and V. It is proposed to allocate the funding as follows:

Highway Structural Maintenance	£58,624,000
Bridge and Structures Programme	£9,747,000
Total	£68,371,000

Table 3 – Programme Allocation

In 2021/22 our principal term contractor, has changed from Skanska to Milestone Infrastructure Ltd (MI) a subsidiary company of M Group Services. The novation of the term contract over to MI was completed in April and the expectation is there will be no noticeable change in the delivery of the services formerly provided by Skanska.

In addition to the Term Maintenance Contract (TMC), there are several other contracts in place that deliver other significant elements of the capital programme. The Framework contract focuses largely on the delivery of a proportion of the surfacing and patching works with separate contracts also let for the delivery of specialist works such as high friction surfacing and road restraint systems.

Key elements include:

Highway Structural Maintenance (HSM): Principal Roads (A class roads)

Although overall condition on principal roads has remained steady over the last 12 months the level of amber state at 30% is an indicator that deterioration is building on this part of the network and action is needed to arrest the decline. To ensure we retain principal roads at less than 4% 'red' condition this budget line has been retained at £6,760,000 for carriageway resurfacing and patching. It will ensure those roads which need immediate attention are treated whilst also optimising the treatment for planned maintenance on those 30% of roads which are beginning to show signs of deterioration.

Skid Resistance Treatment (SCRIM)

Skidding resistance surveys (SCRIM Surveys) are undertaken by local authorities and Highways England. They provide a measure of the road surface contribution to the frictional forces developed between a vehicle's tyres and the road when accelerating, braking or cornering. Skidding resistance figures do not necessarily reflect safety levels on the network but rather sites where further investigation is required.

Devon limits routine annual SCRIM surveys to the principal road network only as it is considered neither affordable nor practicable for all roads on the highway network to be surveyed for skid resistance. The remaining untested network is covered under the strategy in the Annual Wet and Dry Collision Review, other roads identified as requiring further investigation are also be included in the programme of assessment.

It is not possible to treat all parts of the principal road network that are currently below the current standard therefore the work is prioritised and limited to potentially high-risk sites with a history of collisions. This includes sites with a reported skidding resistance deficiency and a history of collisions on wet surfaces, others with a high deficiency (greater than or equal to 0.15) and collisions on dry surfaces.

The allocation for SCRIM deficient sites is £2,111,000.

HSM Non-Principal Roads

Key elements include:

- As we move to working in a different way with greater emphasis placed on local involvement into scheme selection large elements of budgets are being devolved out to the locality areas. 2021/22 is seen as a transition year to facilitate this new way of working and to prepare the locality areas in developing their local programmes. For this year each Locality Area is provided with a budget of £900,000 to deliver a programme of works that in the main will focus on patching and surfacing type works across the non-principal network within their respective areas, but also dealing with associated problems such as drainage.
- A central budget of £3,000,000 will remain for this year only to facilitate the delivery of any schemes remaining from the existing Non-Principal Roads Programme. This will support the strategic pledge on the condition of the 'B' roads and to help prioritise repairs to the more minor network identified through condition data, local knowledge and validated through visual assessment.
- £7,500,000 for surface dressing and micro-asphalt to roads prepared in 2020/21.
- £4,000,000 has been allocated for pre-patching works for preparatory treatment ahead of the 2022/23 Preventative Programme to enable scheme issues to be addressed through the local teams.
- £3,920,000 is allocated for Highway Improvements Hand Patching for localised issues, identified as serviceability issues from staff and the public.
- £2,200,000 has been allocated to operate four 'Dragon Patchers' located strategically around the county which provide an effective and efficient additional option for the repair of small to medium size patches on selected parts of the network.

Footways

Footway schemes include a combination of upgrading of slabbed footways, resurfacing and intervention treatments to restore condition of footway surfaces and the allocation is £1.25 million

It is proposed to target part of the footway budget to replacing and upgrading damaged slab footways in urban areas which consistently generate a significant level of customer feedback regarding defective or uneven slabs. To improve the life of footway surfaces consideration will also be given to replacing, in consultation with local members and communities, existing slabbed footways with alternative more resilient flexible surfacing material.

Slurry sealing is recognised as a cost-effective intervention treatment for efficiently restoring the performance of worn and tired footway surfaces. Within this allocation and subject to final tender submissions, £500,000 has been set-aside for the 2021/22 footway slurry sealing programme.

Drainage

A £1,500,000 programme of drainage repair and upgrading is planned and is prioritised towards drainage issues on the winter salting network and other major roads in the first instance as well as schemes to protect damage to property.

Road Restraint Systems

£1,000,000 has been allocated to continue with the upgrading and replacement of road restraint systems. All high-risk sites identified in the original strategy have been inspected and upgraded where required, along with lower category roads and sites protecting structures and at overbridge locations adjacent to other major routes. The strategy has been reviewed and now includes other sites on the network which may have safety barrier protecting structures in central reservations and along other major routes.

Road Weather Stations

An ongoing programme valued at £100,000 per annum is being undertaken to upgrade Road Weather Stations that are used to inform winter decision makers on the appropriate response necessary to deal with various winter service scenarios. Replacing these stations and upgrading their communication will provide greater resilience to managing winter service and severe weather events over the next decade.

Highway Lighting Column Upgrades and LED Replacement

8% of street lighting columns are over 40 years old, and a significant proportion of younger columns have been identified with specific failure modes that need to be checked. In response to this £1,500,000 has currently been made available annually to facilitate a continuing programme of column replacement, to mitigate the liability that this represents.

The on-going street lighting programme to upgrade all lights to LED continues into 2021/22, with a budget of £4,770,000, all remaining lanterns are planned to be upgraded over the next 18 months.

Traffic Signal Replacements

The traffic signal upgrade programme continues over the coming year with £1.4million being invested at 30 locations. Over the forthcoming year the Traffic Signal Maintenance Contract will be re-tendered in collaboration with Torbay and Plymouth Councils.

Bridges and Structures

Whilst there hasn't been a national survey for some years it can be assumed the condition of Devon's bridge stock is still ranked 3rd in the UK out of 203 Local Authorities. However, the RAC Foundation continues to report that Devon has the largest number of substandard bridges in the UK at 249 although when considered in context with the total bridge stock in Devon, this is not a cause for concern, for three reasons:

1. Devon has the largest stock of Local Authority bridges in the UK by a significant amount and the 249 substandard bridges represent only 6% of the total stock.
2. A significant proportion of the 249 bridges are in fact ancient 'clapper' bridges on Dartmoor and although we cannot prove the full load carrying capacity of these ancient bridges they continue to do so without any signs of distress. These bridges will not be strengthened nor will have weight limits imposed upon them.

There is a proposal to load test these structures to reduce the number of bridges classed as sub-standard however as the highway users are not being adversely affected and are generally unaware that a structure is sub-standard the priority for this work is low.

3. There are many bridges in Devon with weight limits that are appropriate for the location they are in, they do not cause transportation difficulties nor limit access for users consequently there are no plans to remove the weight limits on these structures.

The Bridge and Structures maintenance allocation for 2021/22 is £9.747 million. The programme for 2021/22 will continue with further strengthening projects to improve the resilience of the network. The ongoing programme of inspections and major examinations will continue to ensure the risk of failure of an asset is kept to an acceptable and manageable level. The safeguarding of the public by modifying fencing on high bridges is programmed for completion in 2021/22.

Storm Damage (resilience contingency)

In line with DfT requirements for highway authorities to make provision within their funding allocation, a resilience contingency reserve of £250,000 has been incorporated within the programme should storm damage be experienced during the year.

Cycleway and PROW Network

The pandemic and 3 phases of lockdown in 2020/21 has seen an increased volume in the number of people using both our cycle routes and PROW. This is good news in terms of public health and the wellbeing of society, but the impact of increased footfall and cycling means an increase in maintenance. Additional funding has been

invested into these budget areas to ensure these amenity and sustainable transport assets continue to be maintained to a safe and usable condition.

8. Options and Alternatives

The current approach to scheme selection uses a preventative regime based upon need and sound asset management principles that optimises the use of available funding to reduce whole life maintenance costs. An alternative to this preventative regime would be to repair roads on a 'worst first' basis by focusing maintenance on the sections of road in the poorest condition.

Experience and learning gained from working differently under the Doing What Matters (DWM) umbrella has demonstrated that a combination of both traditional approaches combined with greater influence and input from a community perspective offers a more transparent service. Through greater local involvement it offers a more robust and pragmatic focus on scheme selection by ensuring those locally identified important roads are 'fit for purpose'. 2020/21 is the transition year in preparing the Asset and Neighbourhood Teams for adopting a countywide Locality Team approach in 2022/23.

It is important however to note that any departure from our asset management approach as defined in the HIAMP could adversely affect future financial settlements from the DfT who see the use of sound asset management principles as fundamental in delivering cost effective maintenance solutions. It is therefore essential that developments within the plan continue to incorporate and amalgamate these and other principles within the assessment of its works programmes as the DfT have clearly said they will take this into account in future submissions for funding.

9. On-Street Parking Account

The expenditure of on-street parking income is restricted by the Road Traffic Regulation Act 1984. The costs of operating the on-street parking service is the first call on the income held in the On-street Parking Account. Any remaining surplus must then be used in accordance with the eligibility criteria set out in Section 55 of the Act, with surpluses used for:

- The provision or operation of public transport services
- The provision of facilities for public transport services
- Highway or road improvement projects
- Environmental improvements

The 2021/22 Highways Maintenance budget includes £1.7M for highways cyclic revenue maintenance works, which are funded from the On-street Parking account. Full details of the proposed On-street Parking Account non-operating expenditure for 2021/22, totalling £4.48M, are shown in Appendix VII.

The estimated balance of the account is now expected to reduce from £2.38M at 31 March 2021 to £1.84M by 31 March 2022. Expenditure charged to the On-Street Parking Account is regularly reviewed in order to ensure the fund is used effectively.

Traffic Management Plans

There continues to be a high demand from communities for the review and implementation of parking restrictions. Larger schemes looking at community wide changes (including measures such as residents parking) are served via the £25k Traffic Management Plans budget in the On-street Parking account.

The current level of demand means that the 2021/22 programme is filled with existing commitments, and a full programme of works has been developed by the Traffic Management Team with regular updates shared with Members.

Due to the high level of demand it is proposed that new requests are prioritised on the basis of traffic management need, sustainability, and community support for inclusion in future programmes to ensure resource and monies are used to best effect. To ensure sustainability, schemes should be substantially self-financing, including components of residents parking and / or pay & display, in line with our policy on new residents parking schemes.

Full details of the proposed On-street Parking Account non-operating expenditure for 2021/22, totalling £4,480,000, are shown in Appendix VI.

10. Consultations

The results of the 2020 National Highways and Transport (NHT) Public Satisfaction Survey reflect public perception of performance, importance and the desire for various activities to be funded. Analysis shows that the condition of the highway network and the speed and quality of repairs are important to the public.

A summary of the NHT highway maintenance benchmarking indicator results illustrating public satisfaction levels and importance in the services delivered show Devon to be above the average against other regional and peer group authorities.

The summary of the survey undertaken in the autumn of 2020 gives overall a comforting position and shows no significant change to the previous year's survey however it did highlight areas in highway condition where the public are showing a satisfaction level slightly under the national average. This confirmed the concerns raised in last year's report that the impact on the network condition because of the storms that battered the region in early 2020 could impact upon public opinion.

11. Environmental Impact Considerations (Including Climate Change)

The ability to efficiently transport people and goods around the County underpins Devon's economy and has a direct impact on the quality of our environment. When maintenance work is undertaken it is managed to ensure that the effect on the surrounding environment is kept to a minimum.

On carriageways and footways, surface treatment and reconstruction works are tightly controlled to achieve long term durability. Devon continues to use recycled materials within their hot mix materials and further trials are underway to further

improve asphalt durability through the addition of materials such as lime, rubber crumb and graphene. Whenever possible the use of recycled materials and secondary aggregates are encouraged and now with over 70% of resurfacing schemes using carbon efficient warm asphalts Devon is by example leading in its efforts in meeting its carbon neutral target by 2030.

Prior to installation these materials are subjected to rigorous testing to ensure their suitability within the construction and how its use impacts on the environment. All construction contracts also include for recycling plans to ensure that the use of natural resources is reduced where recycled alternatives exist.

As part of the Devon County Council's drive to become carbon neutral by 2030 we are continuing the journey to establish average carbon intensity for various key work activities using the Carbon Impact Assessment Tool. In 2021 following a period of testing using the tool it is intended to go live on several key activities where carbon usage is high. These figures will then be used to establish the potential for utilising different treatments or to drive through procedures and processes that will reduce our carbon usage.

It is now estimated that the authority has saved over £2m on energy over the past year since it embarked on the switch to energy efficient LED from 2014 within the street lighting asset. The remaining lanterns are planned to be upgraded to LED over the next 18 months with a continuing programme of column replacements. The contractor has also committed to, and are progressing towards, zero waste to landfill by 2022 and being carbon neutral by 2030.

Once the Street Lighting programme to upgrade all lights to LED is complete, Devon County Council will have reduced the carbon emissions generated by its streetlighting by 75%, reducing carbon emissions by more than 15,000 tonnes each year, the equivalent of taking 8,000 cars off the road.

Within the traffic signals asset, the use of extra-low voltage and LED signal heads has reduced the energy consumption by 28% since 2015.

12. Equality Considerations

Where relevant to the decision, the Equality Act 2010 Public Sector Equality Duty requires decision makers to give due regard to the need to:

- eliminate discrimination, harassment, victimisation and any other prohibited conduct.
- advance equality by encouraging participation, removing disadvantage, taking account of disabilities and meeting people's needs and
- foster good relations between people by tackling prejudice and promoting understanding.

Taking account of age, disability, race/ethnicity (includes Gypsies and Travellers), gender and gender identity, religion and belief, sexual orientation, pregnant women/new and breastfeeding mothers, marriage/civil partnership status in coming to a decision, a decision maker may also consider other relevant factors such as caring responsibilities, rural isolation or socio-economic disadvantage.

This may be achieved, for example, through completing a full Equality Impact Needs Assessment/Impact Assessment or other form of options/project management appraisal that achieves the same objective.

An impact assessment of the Council [Budget 2021 to 2022](#) was submitted to the Council's budget meeting on 18 February 2021 and has been taken into account in preparing this report.

13. Legal Considerations

The lawful consequences of the recommendations have been considered in the preparation of this report.

With the condition of parts of the network there is likely to be an increase in user dissatisfaction and complaints which could lead to an increase of challenges to the Authority under Section 56 of the Highways Act.

14. Risk Management Considerations

The proposals contained in this report have been assessed and all reasonable actions are taken to safeguard the Council's position. Inability to undertake enough planned and general preventative maintenance work will result in an increased depreciation to the highways asset. This will lead to increased deterioration and defects and consequently, increased repair costs with potential for claims, which will put pressure on revenue and staffing budgets.

Where risks have been identified which could disrupt the capital programme by causing higher than anticipated costs or delays, such as those associated with cost, inflation, Covid-19 or inclement weather, the implications have been accounted for in preparing this report. This includes developing long term programmes and the provision for reasonable contingencies in the estimates for capital highway and bridge maintenance schemes.

15. Public Health Impact

The cumulative reduction in budgets could have an impact on public health with reduced maintenance effecting sustainable travel alternatives, and potentially more injuries resulting from crashes, trips and falls, however the recommended approach limits this risk, by targeting investment.

16. Reasons for Recommendations and Conclusion

It is important to report to Cabinet on the performance of the highway network.

The DfT capital settlement for 2021/22 provides funding for capital maintenance of highway assets and this report sets out proposed programmes to optimise their availability and safe use for the travelling public. Approval of schemes and programmes of highway maintenance will enable the delivery of the 2021/22 plan to commence.

The report alerts Members to the fact that Government provides insufficient capital funding to meet all network maintenance needs. However, the proposed programme is designed to make best use of the available financial resources using the Cabinet endorsed Asset Management approach.

Meg Booth

Chief Officer for Highways, Infrastructure Development and Waste

Electoral Divisions: All

Cabinet Member for Highway Management: Councillor Stuart Hughes

Local Government Act 1972: List of Background Papers

Contact for enquiries: Paul Davis

Room No. County Hall, Exeter. EX2 4QD

Tel No: (01392) 383000

Background Paper	Date	File Reference
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Nil

County Road Highway Maintenance Capital Budget 202021 Schemes and 202122 Programmes and On-street Parking Account 202122 - Final

Appendix I to HIW/21/28

Road Condition Indicator (RCI) by Year

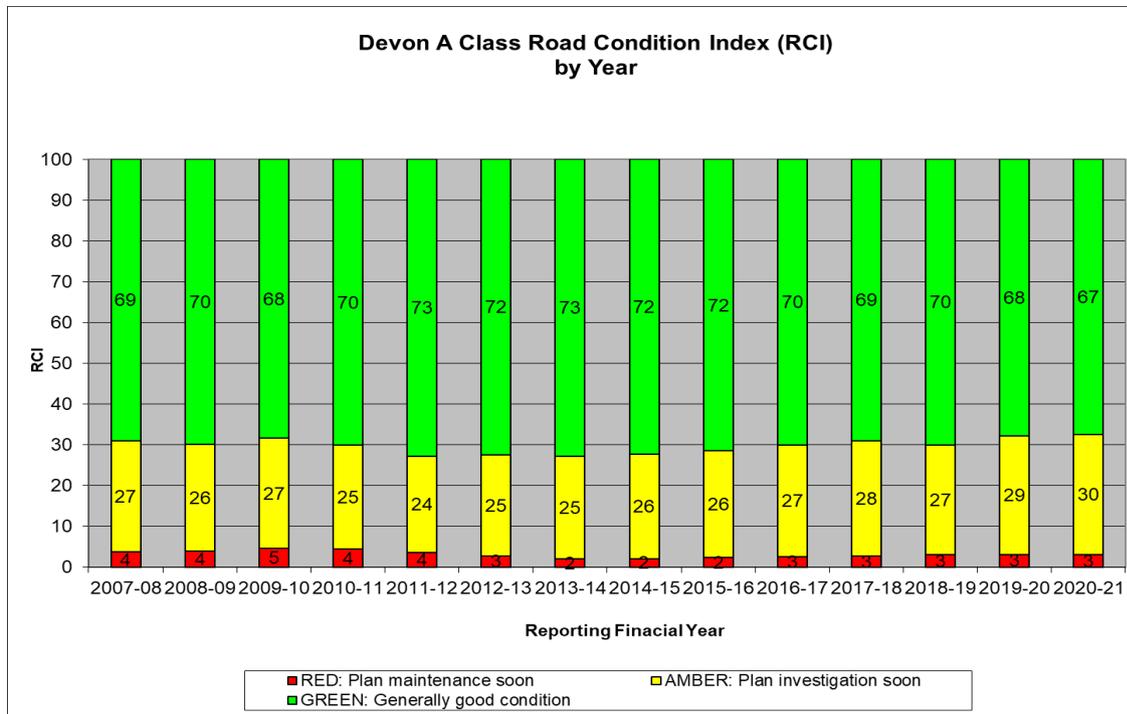


Figure 1

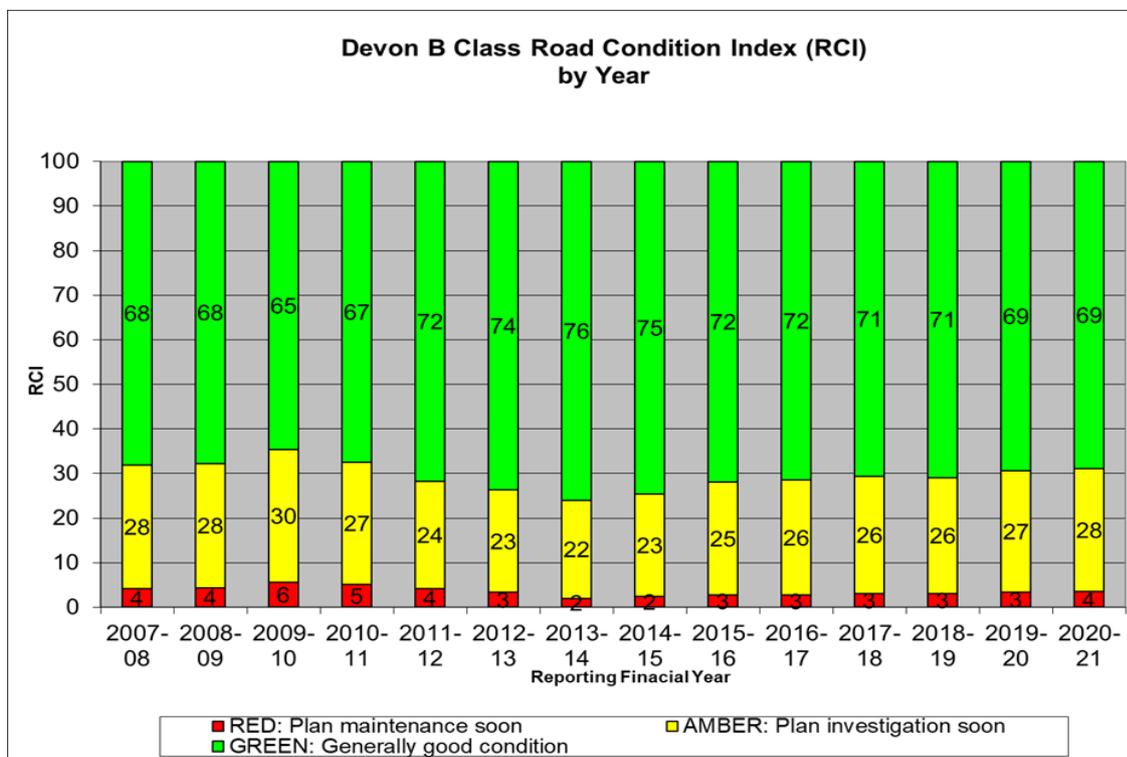


Figure 2

Appendix I to HIW/21/28 continued

Road Condition Indicator (RCI) by Year (continued)

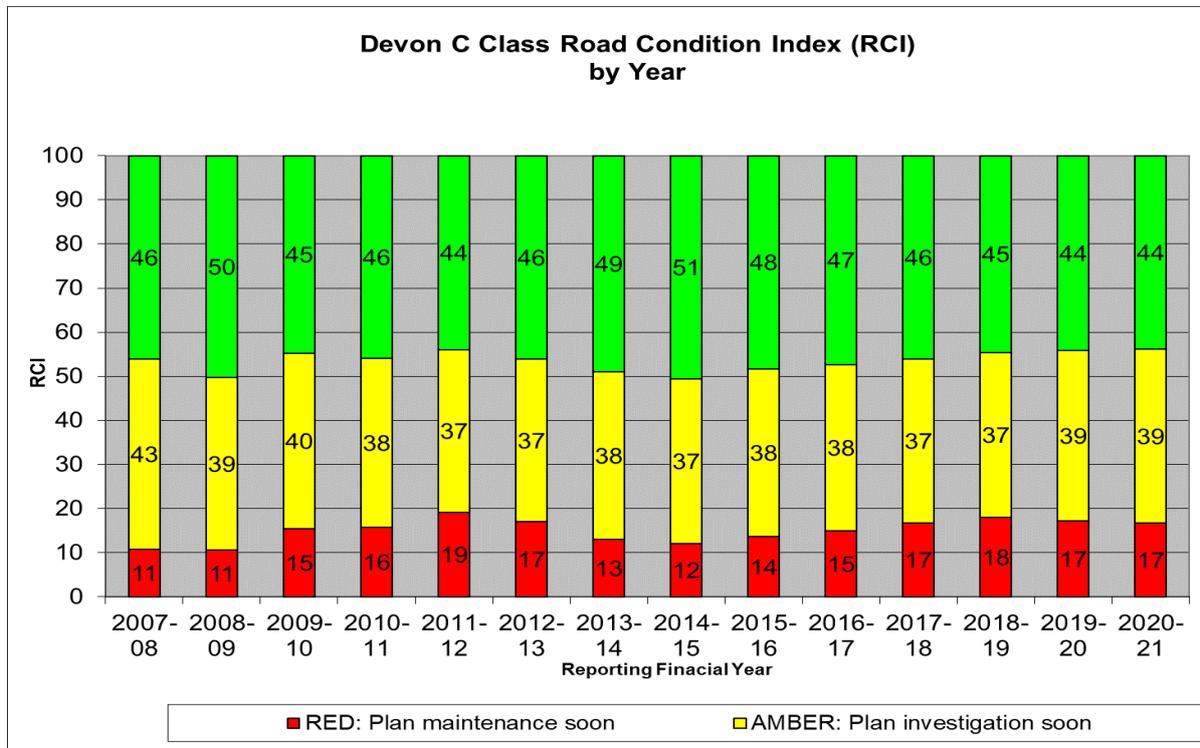


Figure 3

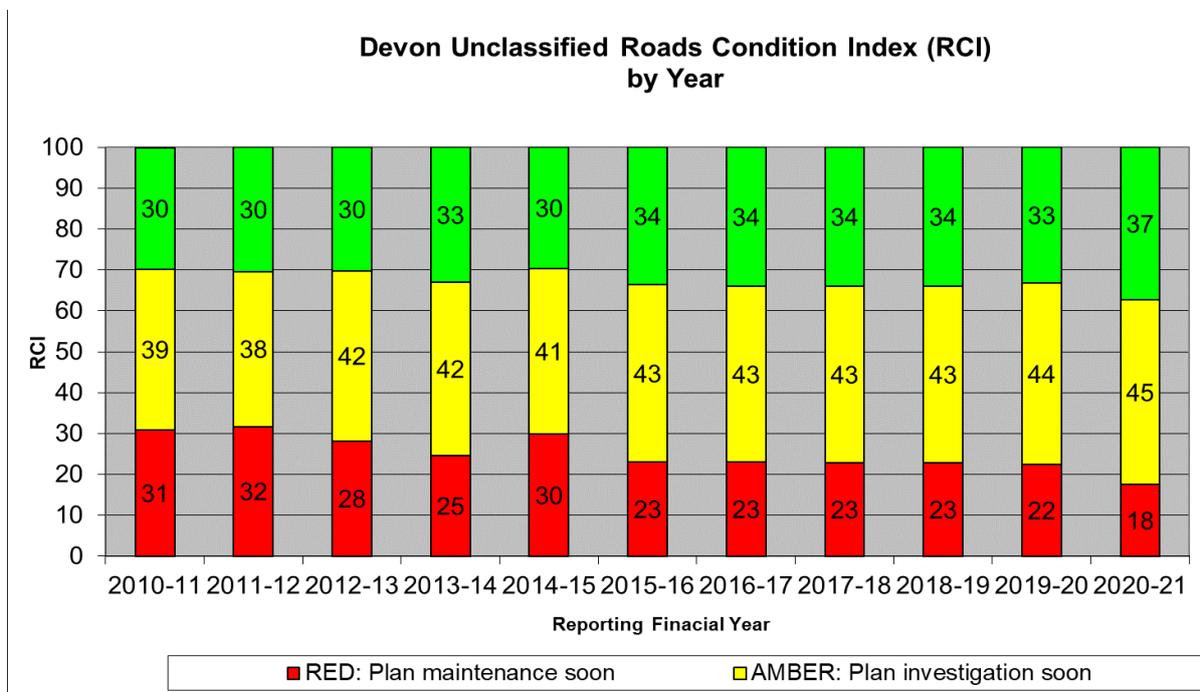


Figure 4

Appendix II to HIW/21/28

Highway Structural Maintenance Programme 2020/21

Function	Actual £000's
<u>Principal Roads</u>	
A Roads	8,554
A380 Teign Viaduct to Ashcombe Cross	3,403
A379 Slapton Line	4
SCRIM Remedial Works	1,179
Preventative Programme	20
<u>Non-Principal Roads</u>	
DWM Trial Areas	786
Non-Principal Road Recovery Programme	11,263
Pre-Patching for 21/22 Preventative Programme	8,180
Pre-Patching 2022/23 Preventative Programme	1,856
Pre Surface Dressing Cleaning	580
Pre Surface Dressing Design	491
Highway Improvements Triage Patching	4,794
Pothole Action Fund 2020/21	2,644
Dragon Patcher	1,525
Joint Sealing	241
Wet/Dry Collision Sites	143
High Skid Resistance Surfacing Programme	1,036
Carriageway Condition Surveys	293
Material Testing	292
Scheme Delivery Group	816
Footways	1,437
Cycleway, PROW & Unsurfaced Roads	1,422
Road Restraint Systems Upgrade Strategy	771
Drainage	1,605
Cattle Grid Structural Repairs	107
Extreme Weather Resilience Contingency	408
Road Weather Station Renewal Programme	125
Highway Lighting Column Upgrades	1,072
Highway Lighting LED replacement	1,749
Traffic Signal Replacements	1,235
Highway Vehicles	40
NOCC Improvements CCTV Upgrade	313
Depots	329
Minor Traffic Management Improvements	348
HSM Programme Total	59,061
Allocation	62,612
C/F All Funding Sources	3,551

Appendix III to HIW/21/28

Bridge Assessment and Strengthening Programme 2020/21

Function	Actual £000's
Bridge Strengthening	611
Forward Design	471
Retaining Wall Strengthening	2,784
Major Refurbishment	106
Minor Refurbishment	1,397
Joints and Bearings	60
Sub-Standard Parapets	56
Bridge Safeguarding	893
Bridge Assessments	339
Principal Inspections	728
Scour Assessments / Protection	185
Post Tensioned Special Inspections	167
Low Head Room Signage	210
Management of Sub-standard Structures	18
Highway Stabilisation Works	1,310
Rockface Management	464
Total BAS Programme	9,799
BAS Allocation 2020/21	11,046
LTP c/f to 2021/22	1,247

Appendix IV to HIW/21/28

Highway Structural Maintenance Programme 2021/22

Function	Budget £000's
<u>Principal Roads</u>	
A Roads	6,760
A380 Teign Viaduct to Ashcombe Cross	1,597
A379 Slapton Line	209
SCRIM Remedial Works	2,111
<u>Non-Principal Roads</u>	
NPRRP	3,000
Preventative Programme 2021/22	7,500
Pre-Patching for Preventative Programme 2022/23	4,000
<u>All Roads</u>	
DWM Hatherleigh & Chagford ED	550
DWM Torrington Rural ED	450
DWM Broadclyst ED	350
DWM NHT Schemes Programme (£900K each per 6 Locality Areas)	5,400
DWM NHT Drainage Forward Design and Investigation	400
HFS	400
Road Restraint Systems	1,000
Wet/Dry Collision Sites	100
Carriageway Condition Surveys	350
Depots	627
Resilience Contingency	250
Scheme Delivery Group	750
Joint Sealing	200
Scheme Design Surface Dressing	500
Investigation and Testing (Materials Laboratory)	250
Footways	1,250
Drainage	1,500
Cattle Grid Structural Repairs	80
Dragon Patcher	2,200
Highway Improvements Hand Patching	3,920
Cycleway, PROW & Unsurfaced Roads	1,750
Road Weather Station Renewal Programme	100
NOCC Improvements CCTV Upgrade	100
Highways Lighting Column Upgrades	1,500
Highways Lighting LED	4,770
Traffic Signal Replacements	1,400
Fixed Contract Overhead Charge	2,850
Minor Traffic Management Improvements	450
HSM Programme Total 2021/22	58,624

Appendix V to HIW/21/28

Bridge and Structures (BAS) Capital Maintenance Programme 2021/22

Function	Estimate £000's
Bridge Strengthening	1,948
Retaining Wall Strengthening	3,071
Major Refurbishment	1,208
Minor Refurbishment EDG	1,365
Minor Refurbishment NHT	50
Joints and Bearings	350
Sub-Standard Parapets	334
Bridge Safeguarding	31
Bridge Assessments	252
Principal Inspections Bridges	301
Principal Inspections Retaining Walls	115
Scour Assessments / Protection	170
Post Tensioned Special Inspections	337
Low Head Room Signage	162
Management of Sub-standard Structures	17
Rockface Management	36
Total BAS Programme 2021/22	9,747

Appendix VI to HIW/21/28

On-street Parking Account (OSP) 2021/22

<u>Function Narrative</u>	2021/22 Budget Allocation £000's
Transport Co-ordination Service: Bus, Rail, and Community Transport Support	2,115
Civil Parking Enforcement road signs & road markings	225
Traffic Management Plans	25
Cyclical Maintenance for the purposes of Environmental Improvement	1,700
Traffic and Parking IT Systems	30
Safety Camera Partnership	10
Real Time passenger information	25
Variable Message Signs	10
Road Safety Improvements - Reactive	50
Park & Ride business rates / minor site maintenance	71
Country Parks	219
Total Other Expenditure	4,480