



RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

MUNICIPAL YEAR 2023/24

**CLIMATE CHANGE, FRONTLINE
SERVICES & PROSPERITY SCRUTINY
COMMITTEE**

1st FEBRUARY 2024

**REPORT OF THE DIRECTOR OF
HIGHWAYS, TRANSPORTATION AND
FRONTLINE SERVICES**

Agenda Item No: 7

**HIGHWAYS INVESTMENT SCHEME
UPDATE**

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1. PURPOSE OF REPORT

The purpose of this report is to provide Members of the Climate Change, Frontline Services & Prosperity Scrutiny Committee with an update on the highway infrastructure within the County Borough

2. RECOMMENDATIONS

It is recommended that Members:

- 2.1 Scrutinise the update on highways infrastructure within the County Borough with particular reference to the asset management strategy and investment strategy; and,
- 2.2 Scrutinise the expenditure required to maintain the highway infrastructure asset.

3. BACKGROUND

- 3.1 The highways infrastructure is the single biggest asset that the Council owns, valued at £3.42billion (2023 gross replacement cost – NB some elements of this figure are based on nationally agreed standard construction rates which have not been uplifted in line with the recent high increases in construction costs).
- 3.2 The highways infrastructure consists of:
- 1,296km of carriageways
 - 1,167km of footways
 - 1,580 highway structures including 197 road bridges
 - 30,038 streetlights
 - 134 traffic signals (signalised junction and pedestrian crossings)
- Plus surface water sewer systems, miscellaneous street furniture, signs, bollards, vehicle barriers, pedestrian barriers, etc
- 3.3 A Highway Asset Management Plan (HAMP) sets out a structured approach to managing the highway asset based around the following core elements:
- Hierarchy
 - Inspection
 - Defect
 - Repair
 - Programmed Repairs
 - Planned Maintenance
- 3.4 The first HAMP was published and then updated by the Council in 2012 and since that year the Council has utilised this and the evidence from the inspections to undertake a capital programme of works.
- 3.5 The UK Roads Liaison Group published guidance in 2016 – “Well Managed Highway Infrastructure: A Code of Practice” which is supported, endorsed and recommended by key organisations including Department of Transport and County Surveyors Society Wales (CSSW). The Code of Practice promotes a risk based approach.
- 3.6 In 2019 CSSW published Highway Asset Management Planning : Recommended Practices which contains the practices that CSSW recommends to local authorities to apply.
- 3.7 The CSSW document recommends that the HAMP is produced no later than every 5 years and an Annual Status Report (ASR) is produced on an annual basis with both documents helping the authority to identify works programmes and priorities.

4. UPDATE / CURRENT POSITION

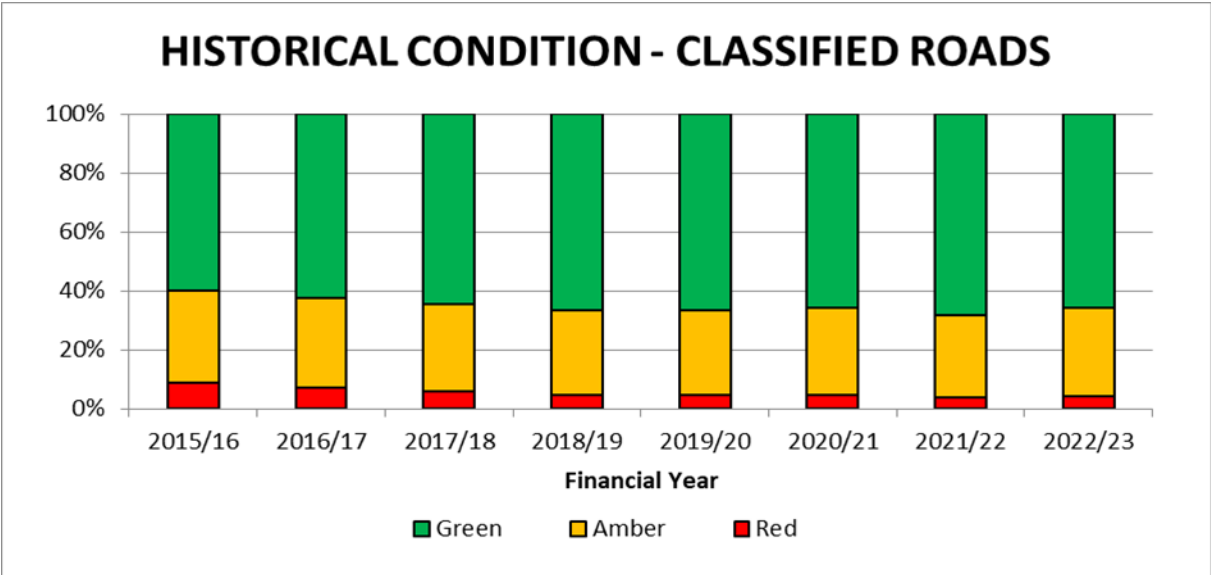
- 4.1 Due to the extensive investment in the highway infrastructure with delivery a priority, the COVID pandemic and lack of staff resources, a new HAMP and ASR is being upgraded. Currently a number of the new ASR's have been completed in draft format and are programmed to be presented to Cabinet shortly.

- 4.2 The Council has successfully obtained funding from the Welsh Government (WG) for funding in its highway infrastructure via Local Government Borrowing Initiative, Highways Refurbishment Capital Grant and Local Government Roads Maintenance Grant. All of these grants have now ceased and without continued Council investment the highway network will return to a deteriorating state. The Council in accordance with its predecessor Corporate Plan and the current Corporate Plan have recognised the importance of the highways infrastructure asset and has invested also via its RCTInvest programme.
- 4.3 The Infrastructure Asset Management Group staff resources has increased since 2015 in order to deal with the important highways infrastructure asset. A dedicated structures team is now in place which undertakes some of the the general and principal inspections of the structures without having to outsource this resource to deal with it, thus making it more efficient and less costly. The aim is to increase the scope of this inhouse work in future years. The traffic signals management has also been taken back inhouse from consultants and this has again improved efficiency and costs for the service.
- 4.4 Due to the extensive funding, the condition of the highway assets has improved. This has resulted in the following:
- **Investment in A class roads.** The amount of A class roads in a poor condition is 3.7%, this is 0.66% worse than the Wales Median of 3.04% in 21/22 (No 22/23 comparison data is available) it is the same as last year.
 - **Investment in B class roads.** The amount of B class roads in a poor condition is 5.7%, this is 1.54% worse than the Wales Median of 3.26% in 21/22 (No 22/23 comparison data is available) it is a deterioration of 0.9% from last year.
 - **Investment in C class roads.** The amount of C class roads in a poor condition is 3.7%, 8.03% better than the Wales Median of 11.73% in 21/22 (No 22/23 comparison data is available), a deterioration of 0.1% from last year.
 - **Investment in U class roads.** The amount of U class roads in condition band 4 is 6.14%, an improvement of 2.56% with 14.5% in condition band 3 an improvement of 0.3%. Due to the subjective nature of the survey some fluctuation year on year is anticipated. The combined percentage in bands 3 and 4 has fallen from 23.50% to 20.64%
- 4.5 As a result of the investment in the highways infrastructure assets the amount of third party claims has reduced considerably from 446 in 2012/13 to 78 in 2022/23 – 5 less than in 2021/22.
- 4.5 All street lighting has now been converted to LED units. All concrete columns have now been replaced within the borough and the authority continues to maintain a testing and replacement programme for street lighting columns as part of its highway infrastructure asset management strategy. The Authority has replaced all its lit bollards with unlit bollards. There are currently 2939 lit signs remaining in the Authority. This figure will reduce as lit signs are being replaced with unlit signs as a result of the 20mph proposals.

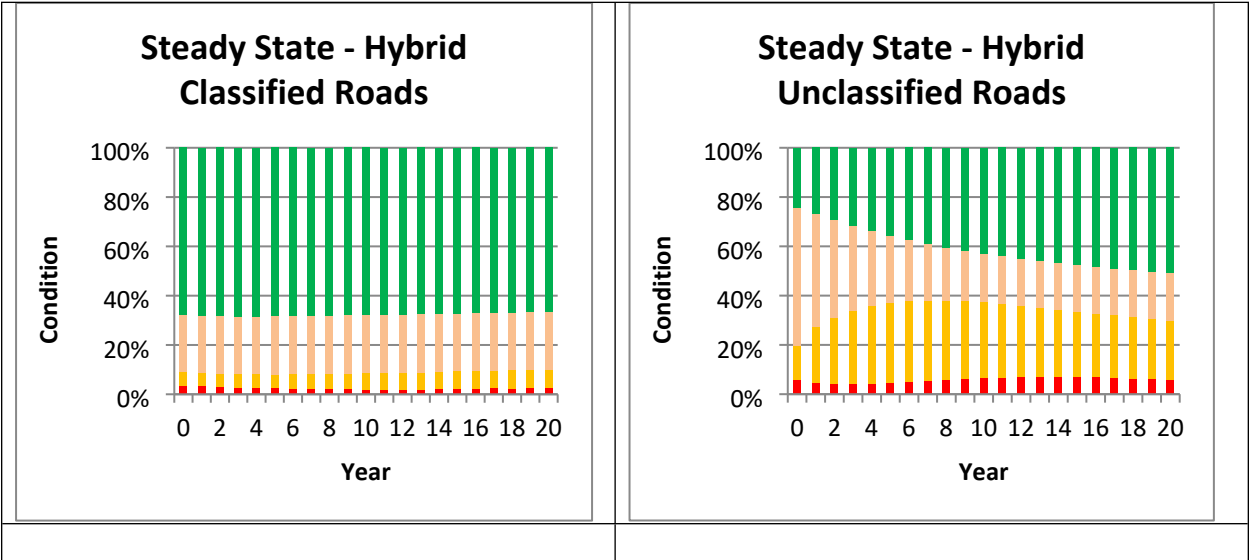
- 4.6 Unfortunately, our bridge stock is in poor condition based on the stock critical bridge indicator score of 60.63%. Our average bridge condition indicator is 73.93% having declined slightly from a figure of 74.44% (2021/22). This trend is likely to continue over the forthcoming years as the number of inspections continues to rise. It should also be noted that the condition of our bridges has improved from 57% in 2012/13. Having enhanced our bridge inspection regime we are now in a much better position to effect early interventions, which reduce the long-term financial liability on our structures. Planned inspection and maintenance of structures reduces the risk of emergency interventions. These interventions may require traffic management to be in place over a long period or require essential structures to be closed for use.
- 4.7 In 23/24 to date, 71 carriageway schemes have been completed out of 84, 29 footway replacement schemes out of 46 have been completed, and 10 out of 12 unadopted roads have been brought to adoptable standard. The remaining schemes in all categories will be completed by end of March 2024 subject to weather conditions.
- 4.8 The Traffic Management element of the Highways Investment Programme is nearing completion and includes small traffic management schemes, disabled parking, residents parking, Traffic Regulation Orders, etc.

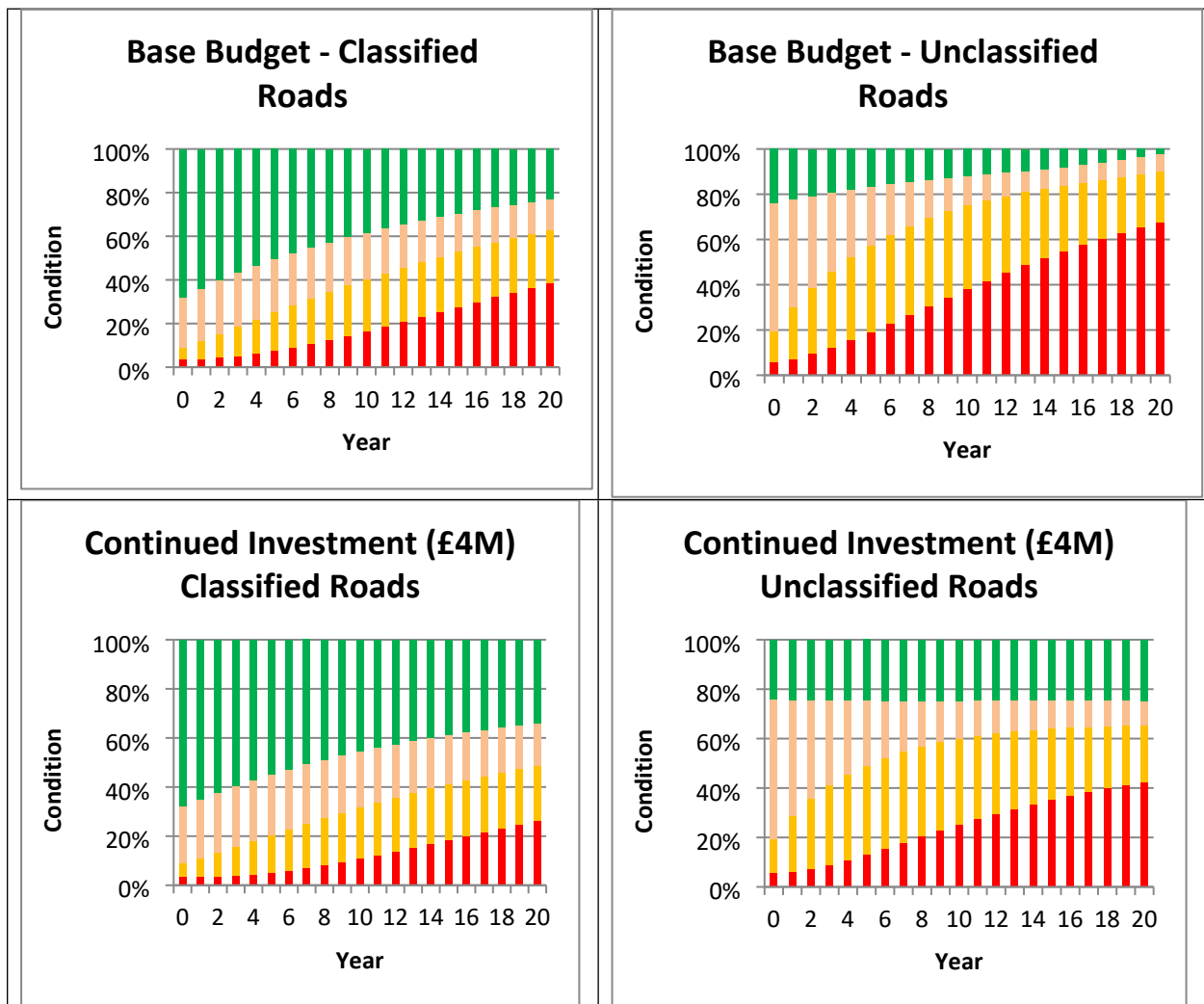
5. INVESTMENT STRATEGY

- 5.1 The Council's strategy for investment in highways in the short term is to continue additional investment to improve the asset for the next 2 years. It is then hoped that additional investment will continue in the medium term although it is considered unlikely that long term funding at this level will be available.
- 5.2 The investment within the highways element (not including structures) will be in 24/25 an anticipated £4.5m. Based on this information the decline in the condition of the highways is modelled.
- 5.3 The investment within the carriageways element in 24/25 is an anticipated £4.0. Carriageway condition projection has been modelled on a number of scenarios:
- i) Hybrid Steady State (£9.55M/year)
 - ii) Return to base budget (£550k/year)
 - iii) Continued additional investment (£4M/year)



5.4 Condition projections for highways need to be made over an extended time period. The tables below project the condition of the classified and unclassified carrieway networks for 20 years based on the scenarios shown above. There are many possible steady state options ranging from a totally preventative approach (£4.0M) which allows all roads already in the red band (worst condition) to remain untreated and prevents roads in the green and amber bands from deteriorating into the red, to a worst first strategy (£21M). The projection modelled below is based on a hybrid strategy (£9.5M) in which some of the worst condition roads are repaired each year and some preventative treatment is undertaken.





- 5.5 If Council capital funding levels return to the base budget. The network will deteriorate considerably with more than 11 times the current amount of the network being in the RED condition by year 20. This equates to approximately an additional 700km of the road network being in the red condition band.
- 5.6 If Council capital funding levels are set at £4.0M/year for the carriageway schemes and a hybrid treatment strategy continued, the network road trend of improving condition will reverse and the network will return to deterioration but significantly more slowly than at base budget levels. An extra 120km of the network would be in the red and amber bands by year 20.
- 5.7 £44M has been invested in the last 10 years on the repair of the Council's structural assets including road bridges, footbridges, culverts, retaining walls and parks structures.

- 5.8 The Infrastructure Asset Management team are also responsible for the parks and countryside structural assets. £3.8M has been invested in repairs to these structures in the last 4 years.
- 5.9 In addition to the above council investment, £50.5M will have been spent by March 2025 repairing the damage to the highway network following Storm Dennis in 2019 all funded via Welsh Government (excluding tips).

6. EQUALITY AND DIVERSITY IMPLICATIONS

- 6.1 There are no negative or adverse equality or diversity implications associated with this report. However, it should be noted that lack of investment within the highway infrastructure could lead to potential problems for people with mobility issues.

7. WELSH LANGUAGE IMPLICATIONS

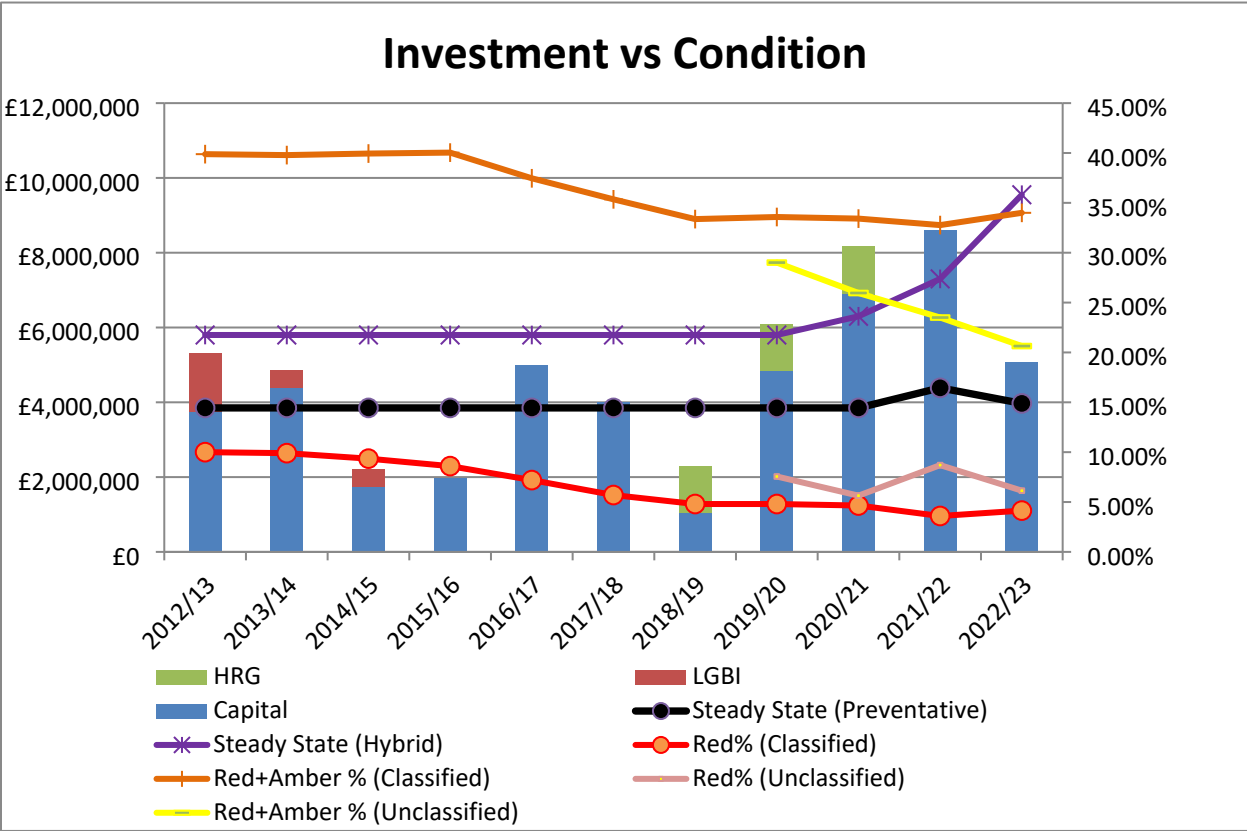
There are no negative or adverse Welsh Language implications with this report.

8. CONSULTATION

- 8.1 There are no consultation implications aligned to this report.

9. FINANCIAL IMPLICATION(S)

- 9.1 Between 2012/13 – 2014/15 the Council has secured £11.304m from WG via its Local Government Borrowing Initiative to invest in highway infrastructure assets.
- 9.2 Between 2017/18 – 2021/22 the Council has secured £6.912m from WG via its Highways Refurbishment Capital Grant.
- 9.3 The Council secured £756,621 from WG in 2020/21 via its Local Government Roads Maintenance Revenue Grant.
- 9.4 Between October 2015 to March 2024 the Council has invested £65.624m in its highway infrastructure assets ie carriageways, structures, park structures, etc.
- 9.5 In March 2023, Council approved a further significant investment of £14.235million over the next 3 years (23-26)



9.6 The above graph summarises capital investment in carriageways since 2011/12 and the change in condition brought about by that investment.

9.7 The estimated steady state renewals investment requirement for carriageways is £4M per annum. This is a theoretical cheapest option where it is accepted that the worst roads (red band) will remain in poor condition and all funds are spent on preventative treatments to prevent them from deteriorating into the red band. In practice, however, in reality a hybrid strategy is used which repairs some of the worst roads and carries out some preventative maintenance. It is estimated that utilising the hybrid strategy an annual budget of £9.55M would be required to maintain a steady state. These figures are for carriageways only and do not include footways, drainage, structures, etc.

9.8 The Council has received £7.338m in 23/24 from the Welsh Government via its various funding sources, ie Active Travel Fund, Unadopted Roads, Safe Routes in the Community, Bus Infrastructure Fund and 20mph speed limit. This together with a £0.146m match funding has allowed £7.484m to be invested via Welsh Government into the highway infrastructure.

9.9 The Council has also been successful in obtaining £11.417m in 21/22 to be utilised over 3 years for the A4119 Coed Ely dualling from the UK Govt Dept of Levelling Up. This together with funding from within the Council and Welsh Govt has allowed this vital strategic £22.3m project to commence on site, with completion currently scheduled for Summer 2024.

10. LEGAL IMPLICATIONS OR LEGISLATION CONSIDERED

- 10.1 Under Section 41(1) of the Highways Act 1980, the Council as Highway Authority has a duty to maintain the highway, to keep the fabric of the highway in such good repair as to render its physical condition safe for ordinary traffic to pass at all seasons of the year.

11. LINKS TO THE COUNCIL'S CORPORATE PLAN / OTHER CORPORATE PRIORITIES/SIP

- 11.1 The highway strategy and investment is in accord with the Council's Corporate Plan ie PLACES – where people are proud to work, live and play – keeping the County Borough moving, including improvements to roads and pavements and public transport, whilst also improving air quality. This will be delivered by continuing to improve the condition of our roads and pavements and investing in our bridges, retaining walls and sustainable flood drainage systems.
- 11.2 This strategy is in accord with the Well being of Future Generations Act 2015 in particular the national well being goal of A More Prosperous Wales by keeping people and traffic moving on well maintained roads and pavements and progressing schemes that will benefit communities now and in the future.
- 11.3 As part of its commitment to reduction in the carbon footprint and achieving net carbon zero the Council has implemented a number of initiatives. The Service Area is responsible for the promotion, implementation and maintenance of Active Travel routes which promotes the use of alternative sustainable transport rather than the motor car. The emphasis is on the provision of dedicated off road alternatives for the public to walk or cycle to destinations including schools, transport facilities, shops, etc. The Council is currently undertaking the Rhondda Fach Community Route which will provide access to settlements including Maerdy, Ferndale, etc. together with other projects including upgrading sections of the Taff Trail, Cynon Trail and links to the Church Village Bypass.
- 11.4 The service area has been implementing bus boarders, throughout the borough which will make the use of public transport more accessible to people of varying mobility thus encouraging the use of public transport rather than personal motor vehicle which will reduce the carbon footprint.
- 11.5 All RCT street lighting is now LED which uses less energy and whilst saving on electricity charges also reduces the carbon footprint. The Service area has also implemented a power reduction on 3,000 of the newer LED lanterns which will again reduce carbon footprint.
- 11.6 The Council has been working closely with the Cardiff Capital Region to successfully secure funding and have installed public-use electric vehicle (EV) charging points at 31 car park sites (Phase 1), which are in located in visible, accessible and reliable locations such as public car parks and leisure centres

across Rhondda Cynon Taf. The Council have also delivered a further 26 sites (Phase 2). A further 9 sites are being developed for delivery later this calendar year. Thus making facilities for the public to switch to electric cars reducing the carbon footprint.

- 11.7 The service area is using a warm mix asphalt instead of hot mix asphalt which is produced at 40 degrees Centigrade less, thus resulting in 15% less carbon omitted during the process (National Highways – English operators).
- 11.8 The traffic signals and crossings assets within the Council are also set to be modernised over a phased period of 2 years having commenced this year. This will remove halogen lamps, upgrade equipment, use of 3G, etc which will provide savings of over 11.7t of carbon.

12. CONCLUSION

- 12.1 Without sustained levels of investment at, or above the projected steady state figure, the carriageway network will be subject to ongoing deterioration. This would result in increased sums being expended on inefficient small scale reactive repairs and third party claims payouts, less efficient networks with longer journey times and increased levels of pollution.
- 12.2 As can be seen from the graphs earlier, without sustained levels of both Council and HRG investment, the network condition would return to a deteriorating state.
- 12.3 While it is not yet known whether the Council will be able to sustain any funding above the base budget level beyond its current 3 year investment programme, it is hoped that in the medium term additional funding will be made available. It is however, very unlikely, even with a continuation of HRG, that steady state funding will be available in the long term.
- 12.4 If Council funding returns to base budgets, without additional council funding the network would deteriorate at an ever increasing rate with an additional 245km of the network being in the RED and AMBER condition bands after 20 years compared to the condition achieved through base council funding combined with a continuation of the Council's Highway Investment Scheme funding.
- 12.5 Investment is also needed to continue in highway structures and park structures to maintain the longevity of the asset and also ensure that the assets are inspected and maintained at an appropriate time to minimise expenditure and reduce the risk of emergency interventions.
- 12.6 Frontline Services continues to deliver the projects within the Highways Investment Programme in the current challenging conditions.