

Calderdale MBC

Wards Affected All

Cabinet 6th June 2022

Highways Capital Programme for 2022 / 23

Report of the Director Regeneration and Strategy

1. Purpose of Report

- 1.1 To present the 2022 / 23 Capital Programmes for Highway Maintenance and Integrated Transport.
- 1.2 Whilst addressing the basics of highway maintenance and road safety within the constraints of the available funding, this programme takes forward the Councils agenda of responding to climate change and public health issues by supporting active travel and carbon reduction wherever possible. Better connectivity is also an important tool in our ambition to reduce inequalities and build strong sustainable towns.
- 1.3 Improved and well maintained highways are an essential element of our progress towards the delivery of Vision 2024, strengthening our resilience and providing a platform for talents and enterprise to flourish.

2. Need for a decision

- 2.1 An approved capital programme is a requirement of our status as a Level 3 Highway Asset Management Authority.

3. Recommendation

It is recommended:

- 3.1 that the City Region Sustainable Transport Settlement (CRSTS) Programme for the financial year 2022 / 23, as set out in the body and Appendices to this report, be approved.
- 3.2 that the Assistant Director, Strategic infrastructure, in consultation with the Cabinet Member with responsibility for the Regeneration and Strategy Directorate be authorised to agree any minor changes in the programmes which may become necessary.

4. Background and/or details

- 4.1 Previously, Calderdale (in common with the other WY authorities) has received highway funding through a variety of Department for Transport funding sources. However, due to the fact that we are now part of a Mayoral Combined Authority (MCA), the majority of our funding is now rolled over into a single fund – CRSTS.
- 4.2 CRSTS is a five year allocation which is intended to ensure that MCA's can manage their highway programmes effectively and plan for the future with some certainty. In this initial year, Calderdale will receive the following funding:

Element	Measure	Value (£000's)
Safer Roads	Population	455
Network Management Renewals	No of Signals	161
Network Management Enhancements	No of Signals	189
Network Management and Enhancements	Network Length	6,696
Active Travel and Public Rights of Way	PROW Network Length	191.952
Total		7,692.952

- 4.3 This compares favourably with the average of the previous five years which, for Calderdale was an average of £6.1M per annum.

5. Capital Programme 2022 / 23

Carriageway Maintenance (£3.596 (inc. fees and contingencies))

- 5.1 This programme of work covers Surface Dressing and Carriageway Resurfacing / Patching. The programme is split between Classified (A,B,C) and Unclassified Roads. Well maintained carriageways and footways are the primary building block in the creation of a highway network that encourages "active travel" which will in turn accelerate the move to the more sustainable modes.
- 5.2 The programme is devised by analysing a number of different survey types in association with the classification of the road under consideration. These are as follows:

Name	Type of Survey	Frequency	Which Roads
Vaisala	AI based video capture of the network using computer algorithms to derive the condition of the road network.	Ongoing	Entire Network
Course Visual Inspection	Visual inspection of the road network.	Annual	Unclassified Network
Scanner (Surface Condition Assessment for the National Network of Roads)	Provides a consistent method of measuring the surface condition of road carriageways, using automated road condition survey machines. These surveys examine such parameters as: <ul style="list-style-type: none">• Rut depth (wear along wheel tracks)• Longitudinal profile (rise and fall of road surface when travelling along it)• Overall texture (important for drainage and skid resistance)	Annual	Classified Network

	<ul style="list-style-type: none"> • Amount and nature of cracking (type and pattern of cracking indicates amount and depth of deterioration) • Edge deterioration • Geometry (gradient / crossfall / radius of curvature – all contributing to ride quality) 		
SCRIM (Sideway-force Coefficient Routine Investigation Machine)	These surveys identify those locations where the skid resistance is below investigatory levels and relate to the risk of an accident	Triennial	Classified
Service Requests	Once the above survey results have been analysed and prioritised in accordance with overall condition, reference is then made to the number of service requests held in INSIGHT. However, due diligence is also applied as not all communities make service requests and consequently the primary factor remains the results of the condition surveys.	On-going	Entire Network

- 5.3 As well as analysing the survey results, Officers also visit and inspect all sites that are desk assessed as priority, only completing the overall prioritisation following a final assessment workshop. It should be noted that the Council's approved *Highways Infrastructure Asset Management Strategy* states that the work programmes will be prioritized using a "risk based" approach and the programmes of work detailed in this report have been determined on this basis.
- 5.4 The Council's performance indicators for the road condition of principal and unclassified roads (two headings) indicates that the Council will strive to remain within the 5% target for "urgent maintenance required to principal roads" (a target agreed by all West Yorkshire Council's in consultation with the West Yorkshire Combined Authority) whilst our target for the "unclassified road" network is 10%. However, in order to reduce the unclassified roads from their current 21% to 10% we would require much higher levels of investment. (Previous calculations have suggested that this would be of the order of an initial investment of approximately £35M with an annual investment of around £7M to retain steady state).
- 5.5 In addition to the schemes shown at Appendix 1, an additional £250k has also been included for the structural assessment and local repair of Birds Royd Lane, Brighouse. This road is a bitumastic overlay of an original setted pavement which has stripped at various locations due to the angular forces created by HGV traffic. The road has also, historically, been subjected to poor backfill by the various utilities and is likely to need complete reconstruction at various areas which are now displaying alligator cracking patterns.
- 5.6 Similarly not shown at Appendix 1, the overall programme also allows £251k provision to repair those roads within Halifax Town Centre which are on the cusp of our priority assessments but which will undergo much heavier trafficking when the planned town centre works begin. These works will ensure the roads retain their integrity when they become part of the on-going diversion routes.

Structures Programme 2022-2023 (£1.375M (inc. fees and contingencies))

- 5.7 The Council's structures asset extends to 365 highway bridges, 122 culverts and 730 km of walls. The vehicular bridges are inspected on a regular basis (general inspections taking place every two years and a more detailed principle inspection every five as per the requirements of The Design Manual for Roads and Bridges). In light of these, a programme of works is then developed. Given that the gross replacement costs of all structures are estimated to be in the order of £1.25bn and the value of this programme is only 0.11%, this represents remarkable value for money.
- 5.8 This years programme includes provision for carrying out two arch strengthening works on Hebble End Bridge and Hippens End Bridge, with work on both expected to commence in quarter three. In both instances it is estimated that the construction will take approximately six weeks.
- 5.9 Following intense negotiations with the Canal and Rivers Trust, Shaw Wood Road Canal Bridge has also been reinserted into the programme. Members may recall that this scheme was dropped from the 2020/21 programme in order to allow emergency works to take place on Rastrick Bridge following the February 2020 floods.
- 5.10 Three medium size wall projects are also intended to be delivered this year. A new gabion wall will be constructed to the east of "W. Knowles pipeworks" in order to stabilize a further land slip that is currently being monitored on the A6025, Elland Road. At Bankhouse Lane, the wall anchors will be inserted with improvements also being made to the drainage, and at Lobb Mill, it is proposed to install a structural sheet pile wall and carry out associated footpath reinstatement works. In addition to the above, budget provision of £100k has also been made, to enable high priority, small scheme capital improvement works boroughwide, as and when the need arises.
- 5.11 The programme also makes provision for strengthening to the Bowling Dyke twinned brick arch bridges. Members may recall that for part of this years winter season, gritting was temporarily relocated to the North Bridge Car Park. Bridge assessments immediately prior to this relocation revealed that one of the bridges could only safely carry 13 tonnes, whilst the other could only carry 17 tonnes. Whilst it is anticipated that further temporary works will be required to enable the new Leisure Centre to be built, these monies are intended to ensure that following the works, both bridges retain a loading capacity of approximately 30 tonnes.
- 5.12 At present, a number of possible solutions have been identified to ensure that the bridges will be able to take the weight of the temporary construction traffic. It is likely that the preferred solution will require the temporary lifting of the setts that make up the road surface above the bridges, replacing them with tarmac, whilst also narrowing down the carriageway width to allow for single lane traffic. Given the historic nature of the setting and the fact that the bridges sit on the edge of a conservation area the engineers have sought the advice of the Heritage Planning Team. They are content with the proposal on the condition that once the leisure centre is complete, the setts are replaced. This accords with the current policy which recognises that due to funding constraints setts cannot always be replaced

with like for like materials. In instances where the setting is not as unique, the tarmac would remain.

Borough Wide Initiatives (£1.725M (inc. fees and contingencies))

- 5.13 A total of £1.725M has also been set aside for the above which includes a £125k for Highway Safety Improvements via street furniture decluttering, £150k for further decarbonisation via upgrades to non-illuminated signage (from illuminated signing) and £100k for strategic white lining upgrades in order to ease traffic flow. (See also Appendix 2).

Integrated Transport / Safer Roads Programme (£455k (inc. fees and contingencies) to be supplemented by monies taken from the £192k PROW and Active Travel headings and the £1.825M “Borough Wide Initiatives” headings as appropriate.

- 5.14 Calderdale’s CRSTS settlement includes £455k for “safer roads”. The final schemes will be dependent upon further analysis but will be taken from the following:
- 5.15 **Local Safety Schemes** - Programme of interventions guided by annual Sites and Lengths reports, post-collision investigations or data collection following receipt of complaints from Emergency Services, Councillors and public. The following are put forward for possible inclusion in the 2022/23 programme.
- Forest Hill Road / Marsden Gate crossroads
 - M62 Junction 25 roundabout
 - Rochdale Road, Triangle
 - Stone Chair roundabout
 - Cooper Lane / Carr House Lane roundabout
 - Parkinson Lane top
 - A58 Rochdale Road, Stones to Rochdale boundary
 - Jumps Crag, Mixenden
- 5.16 **Speed Management Programme** - Programme of interventions guided by speed limit review, implementation of speed buffers into residential areas and data collection following representations by Emergency Services, Councillors and public. The programme for 2022 / 23 interventions will be taken from the following:
- Barkisland Village junctions and gateways
 - A672 Oldham Boundary to Rishworth
 - Wakefield Road, Copley
 - Slack Rural Speed Limit Order
 - Vehicle Activated Signs
- 5.17 **20MPH Areas Additional Physical Measures** - Additional physical measures at specific points determined by data collection and repeat complaints to reinforce signed-only areas. Specific focus on entry points and main commuter routes through 20mph areas. The programme for 2022 / 23 interventions will be taken from the following:
- Bramley Lane, Hipperholme

- Oak Avenue, Todmorden
- Slade Lane, Rastrick
- Hopwood Lane
- Stainland Road, Barkisland
- Woodhouse Lane/ Daisy Road, Brighouse
- Siddal (replacement of temporary measures)

5.18 **Pedestrian Crossing Programme** - Introduction of a range of formal crossing facilities to reduce / remove severance due to traffic in local community hubs. This programme is intended to encourage active travel. During the 2022/23 financial year the following sites will be investigated further:

- Leeds Road/ Upper Sutherland Road, Hipperholme
- All Saints School, Dudwell Lane
- North Halifax Grammar, Moor Bottom Road
- Rochdale Road, Greetland
- Savile Park (various sites)
- Whitehill Academy, Occupation Lane

5.19 **Disability Discrimination Act (DDA) Routes and Improvements** - Provision of DDA compliant pedestrian routes within local communities addressing an absence of dropped kerbs, poor footway widths and cambers, crossing points. This is being led by public engagement and partnership working with local health providers:

- Court Lane
- Little Bradley

5.20 **Cycle Network Improvement** - Borough wide package of focussed improvements to address 'gaps' in current cycle infrastructure provision. This package will include trial treatment of one of the 'weirs' along the Rochdale Canal towpath (City Connect cycle route) with other sites to be confirmed.

Active Travel and Public Rights of Way (£191,952 (inc. fees and contingencies)).

5.21 This year, as part of their initiative to promote Active Travel / tackle the obesity crisis, Her Majesty's Government (HMG) have included capital monies specifically for the Public Right of Way (PROW) Network. It can be seen from the table below that Calderdale enjoys the longest network in West Yorkshire:

District	PROW Length (Km)
Calderdale	1400
Kirklees	1100
Bradford	1000
Leeds	800
Wakefield	560

5.22 Although this heading is badged "Active Travel and Public Rights of Way" the HMG expectation is that it will be targeted at those routes that will support active travel. In consequence of this, it is recommended that these monies be spent on those links, in accordance with the priorities of the Local Access Forum and the Countryside & Rights of Way Service (CROWS). Members should note, however,

that ultimately our ability to spend that money effectively will be governed by our ability to successfully attract suitable candidates to the posts of PROW Engineer and PROW Officer, both of which are currently vacant and both of which have been the subject of recent recruitment campaigns.

Traffic Signals: Network Management Renewals (161k (inc. fees and contingencies)) and Network Management Enhancements (£189k (inc. fees and contingencies))

5.23 The five West Yorkshire Districts continue to work closely to develop a coherent and integrated system of traffic signals and urban traffic control across the region. The CRSTS settlement includes two linked elements. Funding for Network Management Renewals aims to renew ageing signals assets and bring down the average age of Calderdale's signalised crossings and junctions while at the same time replacing halogen lamps with LED to deliver better reliability and reduced energy consumption and carbon emissions.

5.24 Network Management Enhancements will deliver the latest traffic management systems, such as MOVA, which will reduce delay with specific emphasis on pedestrian and cycle detection and priority for bus movements. Replacement of existing wireless equipment with new digital technology will enable improved remote management and monitoring of signal sites including enhanced fault detection.

5.25 **On Street Assets** - Refurbishment of signalised crossings and junctions. Conversion from halogen to LED delivering increased reliability and reduced energy consumption. Introduction of improved pedestrian / cycle detection and preparedness for bus priority. Sites to be confirmed based upon asset condition. Initial programme may include:

Crossings

- Market Street / Russell Street, Halifax
- A646 / Burnley Road / Ewood Drive, Mytholmroyd
- Bradford Road / Clifton Mills, Bailiff Bridge
- A58 / Godley Lane, Shibden

Junctions

- A58 / A6036 Leeds Road / Bradford Road, Stump Cross
- A58 / A672 Rochdale Road / Oldham Road, Ripponden

5.26 **Sustainable Transport** - Retrofit of bus priority to recently installed signal sites. Installation of smart traffic management (MOVA) to additional crossing and junction sites as they are refurbished. Delivering improved bus journey time reliability and improved detection for pedestrians and cyclists. Recently installed sites include:

- Huddersfield Road / Dryclough Lane
- Huddersfield Road / Dudwell Lane
- Skircoat Road / Shaw Hill / Shay Syke

5.27 **Innovation** - Additional variable message signs at critical points on the network. Automatic generation of real time traffic information using traffic monitoring software.

- 5.28 **Decarbonisation** - Review of smart traffic management (MOVA) implementation to ensure that efficiency of the network is maintained and maximised. Implementation of further detection to assist changes in fixed time plans at older sites and provide more consistent journey times.
- 5.29 **Technology and Communications** - Replacement of existing wireless equipment with more reliable, higher capacity communications to improve remote management of traffic signals and fault detection. Installation of digital CCTV at critical sites to improve traffic monitoring and management.

6. Financial Implications

- 6.1 The programme of work and available funding to deliver the CRSTS capital schemes is summarised below:

Funding	£000's
Safer Roads	455
Network Management Renewals	161
Network Management Enhancements	189
Network Management and Enhancements	6,696
Active Travel and Public Rights of Way	192
Total	7,693
Programmes	
Carriageway Maintenance	3,596
Borough Wide Initiatives	1,725
Structures Maintenance	1,375
Safer Roads	455
Active Travel and Public Rights of Way	192
UTC + UTM C	350
Total	7,693

- 6.2 The overall capital programme, as detailed in the body and Appendices of this report will be reviewed throughout the year in order to ensure that the overall budget is not exceeded.

Integrated Capital Service Delivery

- 6.3 In delivering programmes of work, council officers will be proactive in ensuring that an integrative approach is taken. For example, lining will not be renewed in advance of carriageway surfacing being renewed. Opportunities to address infrastructural details, like dropped/pedestrian crossings, will also be identified. Ultimately, this integrative approach will improve the council's transport infrastructure assets.

7.0 Legal Implications

- 7.1 There are no legal implications. Any schemes, projects or third party funding arrangements requiring legal advice or a legal agreement to be in place will be instructed to the Council's legal services team.

8.0 Human Resources and Organisation Development Implications

- 8.1 There are no direct HR implications arising from this report.

9.0 Consultation

- 9.1. Consultation is carried out with the general public, stakeholders and Members as appropriate. This is particularly relevant with the integrated transport schemes, as this programme impacts on the public realm as opposed to the maintenance of the asset. Details of specific works will be shared with residents and Ward Members.

10.0 Environment, Health and Economic Implications

- 10.1 The Highways Maintenance and the Integrated Transport programmes have broad implications relating to economic growth, environmental, safety and community issues and will make a significant contribution towards the council's corporate strategic priorities especially those that can be influenced by active travel modes.

11.0 Equality and Diversity

- 11.1 All issues surrounding equality and diversity are considered as part of the development of schemes within the capital programme. Where appropriate, and as developed, schemes with the above programme will also be subject to a full equality impact assessment.

12.0 Summary and Recommendations

- 12.1 The total capital allocation of £7,692,952 for capital expenditure the CRSTS will be required to deliver the projects detailed in the Financial Implications section of this report.

It is recommended that:

- 12.2 the CRSTS Programme for the financial year 2021 / 22, as set out in the body and Appendices to this report, be approved.
- 12.3 the Assistant Director, Strategic infrastructure, in consultation with the Cabinet Member with responsibility for the Regeneration and Strategy Directorate be authorised to agree any minor changes in the programmes which may become necessary.

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The documents used in the preparation of this report are:

- 1.
- 2.
- 3.

The documents are available for inspection at:

Appendix 1

Carriageway Maintenance Programme (£3.095M + £501k).

Surface Dressing (£1.157M).

Surface Dressing/Road, Area	BR	Ward	Length (m)	Cost (£000's)	Cost £/rm
Cold Edge Road, Wainstalls		Illingworth/Mixenden & Luddendenfoot	1,730	£42	24.27
Wakefield Road, Hipperholme	Y	Hipperholme and Lightcliffe	2,400	167	69.58
Scammonden Road, Barkisland	Y	Ryburn	5,630	138	24.51
Halifax Road, Todmorden	Y	Calder & Todmorden	4,350	181	41.61
Brighouse and Denholm Gate, Shelf	Y	Northowram and Shelf	740	22	29.72
Leeds Road, Hipperholme	Y	Hipperholme and Lightcliffe	1,440	68	47.22
Whitwell Estate, Elland	Y	Elland	1,400	118	84.28
Grasmere Estate, Elland	Y	Elland	650	44	67.69
Rooley and Newlands, Sowerby	Y	Ryburn	1,730	138	79.77
Dean Lane to Birks Lane, Mill Bank	Y	Ryburn	3,800	197	51.84
Seed Hill Terrace, Mixenden		Illingworth & Mixenden	530	43	81.33
Surface Dressing Total 2022/23			24,400	1,157	

Unclassified and Classified Resurfacing (£1.938M).

Unclassified Resurfacing	Ward	Length (m)	Cost (£000's)	Cost £/rm
Broadwood Ave, Pellon	Warley	86	325	<p>Av cost = 128</p> <p>These are all cul de sacs in very poor condition. Thus they have a disproportionate effect on the revenue budget.</p> <p>It can also be seen that as the TM costs are minimal they represent good value for money.</p>
Willow Street, Kings Cross	Warley	59		
Central Park, Halifax	Skircoat	430		
Wellgarth, Halifax	Skircoat	269		
Keighley Close, Illingworth	Illingworth/Mixenden	143		
Heathmoor Close, Illingworth	Illingworth/Mixenden	125		
Heathmoor Mount, Illingworth	Illingworth/Mixenden	127		
Back Claremount Terrace, Boothtown	Town	37		
Westcroft Ave, Shelf	Northowram/Shelf	94		
Shibden Grange Drive, Halifax	Northowram/Shelf	140		
Thomas Street, Holywell Green	Greetland/Stainland	42		
Barrington Close, Southowram	Town	44		
Castle Hill, Rastrick	Rastrick	36		
Crossley Street, Brighouse	Rastrick	44		
Ryecroft Lane, Brighouse	Rastrick	116		
Woodford Ave, Siddal	Town	43		
Coniston Close, Elland	Elland	52		
Bowman Terrace, Halifax	Park	192		
Crossley Gardens, Halifax	Park	98		
Templars Close, Greetland	Greetland/Stainland	207		
Spring Hall Close, Shelf	Northowram/Shelf	152		
Hill View Gardens, Northowram	Northowram/Shelf	250	63	252
Staups Lane, Halifax	Northowram/Shelf	350	76	217
Victoria Avenue, Elland	Elland	70	18	257
Unclassified Resurfacing Total		3,206	482	

Classified Resurfacing	BR	Ward	Length (m)	Cost (£000's)	Cost £/rm
Wakefield Road, Copley	Y	Town	850	230	271
Wakefield Road, Brighouse	Y	Brighouse	1,100	422	384
Birkby Lane, Bailiff Bridge		Hipperholme/Lightcliffe	300	108	360
Skircoat Moor Road, Halifax	Y	Skircoat & Sowerby Bridge	450	130	289
Clifton Road, Brighouse	Y	Brighouse	350	134	383
Burnley Road, Todmorden	Y	Todmorden	450	130	289
Skircoat Green Road, Halifax	Y	Skircoat	200	65	325
New Road, Mankinholes	Y	Calder	500	108	216
Marsden Gate/Forrest Hill	Y	Greetland/Stainland	200	60	300
Classified Resurfacing Total			4,400	1,456	

Appendix 2

Borough Wide Initiatives (£1.725M)

	(£000's)
Highway safety and active travel improvements (decluttering).	125
Decarbonisation programme.	150
In Year Patching for 23/24 Surface Dressing Programme.	1,000
Strategic white line reconfiguration programme.	100
Asset Surveys to educate future programmes, including PROW condition survey, network hierarchy assessment, electrical testing and highway structural inspections.	200
Minor traffic improvement schemes.	150
Total	1,725

Appendix 3

Structures Programme (1.375M)

Works	Description	Est. Cost (£000's)
Hebble End Bridge Arch Strengthening	Goldhawk Repair	150
Hippens End Bridge Arch Strengthening	Goldhawk Repair	150
Elland Road Elland Slip A6025	New Gabion Wall	150
Bankhouse Lane Wall	Repair Wall/Rock anchor	100
Bridge Height Signs	Renew Height Signs	150
Lobb Mill Wall	Wall & footpath reinstatement	200
Bowling Dyke	Strengthening	100
Shaw Wood Road Canal Bridge Widening	Service Diversion in 2022	50
Walls General	Boroughwide minor capital works	100
Advance Design	Following Inspection	75
JBA Advice & Miscellaneous	Includes service delivery to wider Council	150
Total		1,375