Item 5

17th June 2022

Glasgow City Council

Report by George Gillespie, Neighbourhoods Regeneration and Sustainability

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Options for Roads Investment Strategy within Ward 5

Purpose of Report:

To provide committee with:

1. The purpose of this report is to present the 2022/23 Citywide Road Assets Investment Strategy and Programmes.
2. The list of road asset improvement schemes identified for the Ward 5 as part of Roads usual Capital/Revenue spend in Appendix 1.

Recommendations:

It is recommended that the Area Partnerships take note of the content of this report and provide feedback with suggested carriageway and footway resurfacing schemes.

Ward No(s):	Citywide:
Local member(s) advised: Yes ☐ No ☐	consulted: Yes ☐ No ☐

1. Introduction

1.1 This report presents the 2022/23 Roads Assets Investment Strategy and details the impact and key benefits that this strategy will deliver.

1.2 Investing in Glasgow's road network is crucial as it supports economic development and brings important social benefits. It supports the environment, builds resilience, helps to protect Glasgow's most vulnerable citizens and contributes to the City's vibrancy and sustainability.

1.3 The strategy is developed by using data from customer reports, surveys and condition data to determine the road assets selected for repair and what will be achievable with the level of funding available.

1.4 The investment will support key themes set out in the Council's Strategic Plan, Active Travel Strategies and Traffic and Road Safety Plans. It will support these strategies by maintaining and improving transport infrastructure throughout the City leading to a safer and securer transport network for all those travelling within the City. Improved road network condition will assist in the delivery of effective transportation services.

1.5 This Investment will also assist in promoting Glasgow as a Cycling City by delivering a road network suitable for all modes of active travel. It will bring health and well-being benefits to our residents and will contribute to Glasgow's aim of being one of the most sustainable Cities in Europe.

1.6 This investment will deliver improved road network condition in areas where it will have positive impact for our vulnerable users and improve the lives for all Glasgow's citizens.

1.7 The strategy aims to provide the most cost-effective solutions by delivering the most appropriate and effective treatments to our road assets. This will include a mix of differing carriageway resurfacing options such as thin surfacing (preventive) and resurfacing (corrective) treatments. These are used to address varying degrees of deterioration in our roads. Early intervention (thin surface treatments) delays the requirement for full re-construction or resurfacing and offers whole life value and a more environmentally friendly solution.

1.8 The strategy will also provide the most cost-effective measures to improve our footway condition, improve condition and reliability of street lighting and traffic signals with the introduction of new columns and LED technology, provide in detail the Council's risk-based approach to gully cleaning in our city and investment into our signs, road markings and street furniture.

2. Public Consultation and Engagement

2.1. Public consultation and engagement form the key element of the investment strategy, ensuring a significant proportion of the investment is informed by local communities and a variety of stakeholders including: -

- Elected Members
- Community Councils

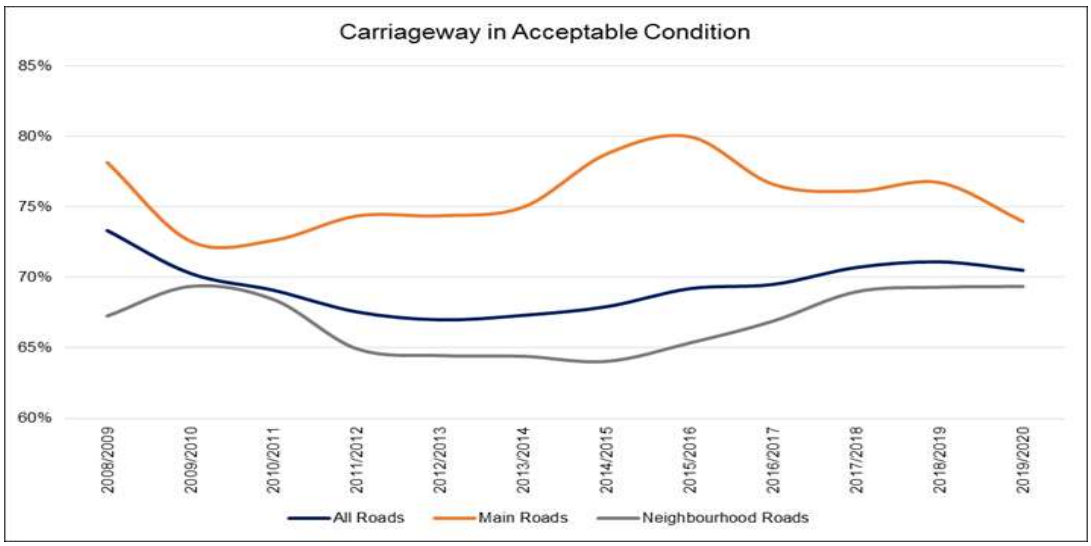
- Resident Associations
- Housing Associations
- Public Transport Operators
- Police Scotland
- Scottish Fire and Rescue.

2.2. Recent investment strategies helped to improve the level of customer satisfaction, which is measured by an annual household survey. Although road condition with Glasgow roads has fallen slightly in the last 12 months, Glasgow City Council still remains one of the best performing Council's in Scotland in terms of road condition and continue to remain in the top quartile for performance in this area.

2.3. Data from a number of sources is also used in addition to the information received via public consultation to assist in determining the roads and footways that should be considered for maintenance treatment. Sources include safety inspections, the Road Condition Index, public liability claims, bus & taxi surveys, inspections and condition assessments.

3. Carriageway Programme

3.1. For the first time since 2013 the condition of our carriageways has slightly deteriorated. This is also aligned to other road authorities in Scotland and the UK generally. The latest condition data indicates that 70.5% of our carriageways are in acceptable condition. Despite the deterioration, which has affected all Local Authorities in Scotland, this shows that Glasgow is still one of the best performing road authorities in the Country when comparing to the latest available Scottish average of 64.2% of carriageways in acceptable condition.



However, the network remains vulnerable to structural deterioration with approximately 88km of our main roads categorised as being in poor condition. Customer engagement shows that residents also remain concerned with the condition of neighbourhood roads; this is substantiated by condition surveys that show 63km of neighbourhood roads are in need of attention. £25.1m (Capital and Revenue) funding will be invested to maintain Glasgow's carriageways over the next 3 years with the key aims of this investment to be:

- Controlling the ongoing pothole issue, reducing the number of potholes reported to the Council from our customers
- Permanently repairing the highly trafficked main roads that impact a large number of our residents.
- Improving neighbourhood roads
- Delivering a programme of first time permanent patching repairs as part of the Council's new road safety inspection and repair policy.

3.2. The resurfacing schemes identified as part of the investment strategy will aim to reduce the impact and continuing pressure on our carriageways, due to extreme weather events, utility activity and increased traffic use. The strategy will assist the Council priorities to bring roads to a good standard of repair and to permanently repair and resurface defects first time.

4. Footway Programme

4.1. Our most recent footway condition data indicates that 81.2% of our footways are in either a good or fair condition. 2.9% (approximately 92km) of our footways exhibit major or structural deterioration and 15.9% (approximately 498km) exhibit minor deterioration such as cracking and oxidisation.

4.2. Over the last few years there has been significant investment targeted to deliver significant improvements to the highly pedestrianised major footways throughout Glasgow, improving the overall condition and enhancing the aesthetics of these areas. These works improved the walking environment with the installation of dropped kerbs and repairs to tactile paving, resulting in fewer third-party claims. However, our customers remain concerned about the condition of their local footways in need of attention. This year's investment will be focused on improving neighbourhood footways.

4.3. This will have a significant impact on Glasgow's most vulnerable users, providing safer walking surfaces which will encourage more active travel within local neighbourhoods. Through enhancing the walking environment in local footways we will assist in improving the health and wellbeing of Glasgow's citizens.

5. Street Lighting Improvement Programme

5.1. In recent years, there has been a number of lighting column failures which are being addressed by a significant investment in our column replacement programme. The commencement of this programme, aligning with our Risk Management Strategy, has seen this risk reduce significantly.

5.2. Over 3,500 columns have been replaced as part of this programme to date with work ongoing to replace up to another 1,000 columns programmed. This latest tranche includes the fitting of LED lanterns.

5.3. Just under 24,000 LED lantern upgrades have now been installed throughout Glasgow. As part of this, the City Centre Intelligent Street Lighting Project (ISL) where the replacement of 3,100 lanterns with LED lanterns is nearing completion.

5.4. With recent investment in our lighting stock, where LED's have replaced approximately one third of our lighting stock, and our maintenance policy of replacing any damaged old sodium lanterns (orange-coloured lamps) with LED lights, we have started to make inroads to reduce our energy consumption and

deliver savings against the Council's reduction in CO2 emissions targets. The further progression of installing LED lights has also enabled the Council to introduce lights which depreciate at a much slower rate than other alternatives, reduced long term maintenance costs and improved lighting levels.

5.5. £20.4m (Capital and Revenue) funding over the next 3 years will be invested to maintain and improve Glasgow's street lighting assets with the key aims of this investment to be:

- Controlling the ongoing deterioration issue and removing columns and lanterns which are nearing the end of their design life.
- Reducing the number of defects reported to the Council from our customers such as individual and full road length streetlights not operating.
- As part of our reactive maintenance procedure, we will replace the old Low Pressure Sodium lanterns which are not operational with new LED lights.

6. Traffic Signal Programme

6.1. The Traffic Management System (TMS) asset is comprised of poles, cables, traffic signal lanterns and controllers infrastructure at junctions and pedestrian crossings. TRAFFCOM is the Council's traffic control centre that manages the 890 signal-controlled junctions and crossings within the City.

6.2. Most traffic signals contain incandescent 'wait' lamps that incur higher energy costs, are less environmentally friendly and are becoming increasingly difficult to source. Manufacturers of these products have advised that in 2023 they will no longer be making these lamps

6.3. As Glasgow has a large number of sites that are in excess of 15 years old (approximately 514) and nearly 60% of our assets are incandescent lamps, it may not be cost effective to upgrade wait lamps when the equipment is beyond its lifespan and traffic signal poles are corroded. The introduction of LED traffic signals would further reduce the Council's energy use, reduce CO2 emissions, reduce maintenance costs and significantly improve traffic signal operations with a significant reduction of incidents of traffic signals not working due to failure of components.

6.4. £11.44m (Capital and Revenue) funding over the next 3 years will be invested to maintain and improve Glasgow's traffic signal assets with the key aims of this investment to refurbish existing traffic signal sites with improved provisions for those pedestrians who are visually impaired or have difficulty in accessing routes around the city and improved technology such as LED lighting.

7. Drainage Programme

7.1. Our road drainage systems comprise of approximately 74,000 gullies, 2,500km of road drains, manholes, pumps, kerb drains and a variety of Sustainable Urban Drainage Systems (SUDS). These assets form an integral part of the public road and failure to maintain them will compromise the integrity of the entire road structure and cause significant disruption to the network during storm events.

7.2. The Council is making significant investment in reducing flood risk and increasing drainage capacity. A number of City Deal programmes have a reduction in flood risk and increased drainage capacity as an objective including the City Centre Avenues

and the Canal & North Gateway Smart Canal. In order to ensure the significant Capital investment continues to function, as designed, for future years, it is vital that appropriate maintenance is funded and delivered for new assets alongside maintaining existing assets. Failure to do so will reduce performance and increase costs associated with reacting to incidents, both for the Council and communities.

7.3. We have recently completed a cyclic drainage review which has recommended a risk-based approach to drainage maintenance and will include drainage inventory data being collected which will be used to inform future investment needs.

7.4. It is anticipated that the introduction of our new risk-based approach to gully cleaning, which was introduced during the summer of 2021, will assist us in identifying which gullies need cleaning and which do not require attention which will then enable us to provide additional resources to address issues with road drains and kerb drainage as well as provide more accurate information with regards to drainage assets on our network.

7.5. The revised gully programme will be delivered over a two-year rolling period on the following frequencies:

- Flood location gullies – every gully in a location previously identified as susceptible to flooding will be cleaned 3 times a year
- Arterial and city centre routes – every gully assessed as needing cleaning due to the amount of debris in the gully pot will be cleaned once per year
- RPZ and neighbourhood routes – every gully assessed as needing cleaning due to the amount of debris in the gully pot will be cleaned once every 2 years
- Leaf fall locations – swept weekly during autumn period

8. Traffic Signs, Lines & Street Furniture Programme

8.1. Glasgow City Council is responsible for the maintenance of over 24,000 traffic signs, 20,000 bollards, 110km of pedestrian barrier, 15.3km of vehicle safety barrier and approximately 5700km of road markings that improve the safety and usability of the road network. Additional street furniture such as seating, grit bins and bus shelters is also included within this asset group.

8.2. The most recent condition surveys indicate that the majority of the street furniture asset is in a safe and serviceable condition with 98% of pedestrian barriers, 98% of bollards, 96% of traffic signs and 99% of vehicle safety barriers in good condition.

8.3. Road markings are a vital asset that improve road safety and facilitates enforcement. Assessments have shown that 80% of road markings in the City are in good condition. Overall, it is assessed that the condition of these assets is good.

8.4. Assessment of these assets is undertaken alongside other assets such as carriageway and footway condition. There is currently no planned programme to undertake works with these assets although reactive works will continue to be implemented following any recommendations following safety inspections or requests from public or other stakeholders.

9. Risks

9.1. The main risk to the delivery of our Roads Investment Strategy is periods of prolonged severe weather. To ensure that our road network is prepared for the impact of a severe winter the majority of major resurfacing works are targeted to be carried out in the months of summer and autumn.

10 Recommendations

10.1 It is recommended that the Area Partnerships take note of the content of this report.

10.2 The carriageways and footways to be resurfaced in the current financial year, within Ward 5 is attached within Appendix A.

Carriageways Ward 5					
Road Name	**Limits**	**Treatment**	**Area**	**Estimate**	**funding**
Ibrox Terrace	Full Length	60mm Inlay	1100	£ 33,000.00	Capital Budget 2022/23
Broomloan Road	Edmiston Drive to PRW	60mm Inlay	3100	£ 93,000.00	Capital Budget 2022/23
			Total	**£ 126,000.00**	