

Report for: Cabinet Meeting - 9th March 2021

Title: Street Lighting Investment Plan (SLIP) 2021/22

Report authorised by Stephen McDonnell, Director of Environment and Neighbourhoods

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Ward(s) affected: All

**Report for Key/
Non-Key Decision:** Key Decision

1 Describe the issue under consideration

- 1.1 The Council recognises the contribution that a well-managed and effective street lighting network makes to the delivery of the Council's strategic objectives. It enables the safe use of the highway for motorists, pedestrians, cyclists, including motorcyclists, reducing accidents outside of daylight hours. It also supports strong and safe communities, reducing crime and fear of crime. It represents a key part of the public realm, providing a strong visual identity and supports economic growth objectives.
- 1.2 Street lighting is also a significant consumer of energy and contributes to carbon emissions and light pollution. The efficient management of the network is therefore essential to reduce the impact on the environment.
- 1.3 In December 2020, the Council agreed an investment of £10 million in street lighting, over the next 5 years. A major element of this investment, in 2021/22, is for the implementation of a central management system and the completion of upgrading street lighting to LED.

2 Cabinet Member Introduction

- 2.1 A well-maintained highway network is pivotal to daily lives in Haringey as one of London's best-connected boroughs. This network is used by our residents, businesses and by people from across London and beyond, visiting our town centres, our cultural venues or those travelling through the borough. Street lighting is an important element of the transport network because of the safety and confidence it brings to road users.
- 2.2 I am pleased to announce the investment of £4.8m for 2021/22 and to note the ongoing investment commitment in our borough-wide street lighting assets, making our streets safer for all road users.

- 2.3 The key highlights of next year's programme include:
- Completion of the upgrade of all highway street lights to light emitting diodes (LED).
 - Installation of a central management system that will give us much greater overall control over the efficiency and effectiveness of Haringey's street lighting.
- 2.4 The completion of the roll-out of energy-efficient LED lighting across the borough, whilst making people feel safer, supports the Council's commitments to combat climate change by reducing energy use. This will, of course, also reduce costs associated with managing our street lighting.
- 2.6 The introduction of the street lighting central management system will modernise the management of our lighting assets and the direct monitoring of faults, as well as the amount of energy that we use.

3 Recommendations

It is recommended that Cabinet:

- 3.1 Approves the Street Lighting Investment Plan for the 2021/22 financial year, as set out in the attached Appendix 1 – Tables 1 to Tables 5
- 3.2 Gives delegated authority to the Head of Highways and Parking, consequential on the Street Lighting Investment Plan:
- To make decisions relating to scheme design and implementation;
 - To carry out consultation;
 - To consider representations received in response to consultation and to report significant or substantial concerns back to the relevant Cabinet Member; and
 - To make traffic management orders, where there are no valid objections.

4 Reasons for Decision

- 4.1 Street lighting is an important element of the transport network because of the safety and confidence it brings to road users. Investment in the infrastructure is required to ensure that the Council maintains a fit-for-purpose highway infrastructure asset in accordance with nationally accepted asset management principles.

5 Alternative options considered

- 5.1 There are no other relevant options. The 2021/22 investment plan has been shaped by Borough Plan priorities, as well as the Council's Transport Strategy and the draft Climate Change Action Plan. The lantern and column replacement programme has been developed through electrical and structural condition surveys, scouting, visual inspections and lighting levels, ensuring that investment is targeted where most needed.

6 Background Information

- 6.1 The Council is responsible for maintaining approximately 18,600 street lighting columns across the borough – along its public highways, in its parks and green

spaces and in areas maintained by Homes for Haringey. The Council's approach to improving and maintaining the entire street lighting stock balances the need to provide for the safety of road users and supporting safer communities with the need to reduce energy usage and associated carbon emissions, and costs.

- 6.2 The programme involves several work streams, including the implementation of a **Smart Lighting System**. A Smart Lighting System - or, as it is more generally referred to, a central management system (CMS) - is an intelligent control system used to manage street lighting networks. It will provide the Council with full remote visibility and control of the street lighting stock. It will allow a reduction in night scout visits and allow intelligent profiling of lighting levels throughout the hours of darkness to appropriately light roads for the given traffic volumes. Lighting levels will accord with British Standards and the relevant codes of practice of the Institution of Lighting Professionals.
- 6.3 The benefits from the CMS also include:
- Nodes installed within the street lighting luminaire enable wireless connections to other nodes and the central management system.
 - Greater energy saving – over and above switching to LED by flexible enhanced luminaire profiling e.g. dimming, trimming.
 - Fewer “non-working” lights and reduced number of “day burners”.
 - Optimised maintenance.
 - Flexibility to change and override settings to meet specific operational needs.
- 6.4 The Council has been changing its light profile to the use of light emitting diodes (LED) technology in recent years, with an annual lantern replacement programme determined by funding levels. This lantern replacement work was accelerated during 2020/21 so that, of the overall 18,600 lighting columns, only 600 of these would require conversion from older forms of lighting during 2021/22. This significantly reduces energy consumption, improving the Council's carbon footprint, contributing towards carbon emission reduction targets.
- 6.5 Unlike older street lighting lanterns, which are now close to being totally replaced, the lighting pattern from an LED lantern is far more controlled. Lighting is directed downward to illuminate the roads and pavements and with no upward light from the luminaires. This means that the new street lighting schemes support the darker skies initiative by minimising light pollution.
- 6.6 The combination of LEDs and a central management system will allow a far more considered approach to environmental issues (addressed in Section 7 of this report) and local ecology, particularly wildlife that thrives in levels of low or negligible lighting. This is particularly of relevance to LED lighting levels in parks and open spaces.
- 6.7 The additional investment of £3,500,000, in 2021/22, will complete the delivery of the LED programme and connect all the public highway street lights to the CMS across the network. The award of contract for the provision of the street lighting CMS constitutes a separate report on the Cabinet agenda and the

progression of the Street Lighting Investment Plan rests heavily on that outcome. As well as reducing energy consumption, though, the LED upgrade and CMS provision will contribute to reducing crime and the fear of crime. The LED lights also provide more natural colour rendering, favoured by the emergency services and those managing public safety CCTV surveillance operations.

- 6.8 At present, around 15% of the street lighting columns in the borough are at or close to their end-of-life expectancy. The Institution of Lighting Professionals Guidance Note 22 (Asset Management Toolkit: Minor Structures) reinforces the principle of considering lighting column residual life as good asset management, in line with the requirements of the Well-Managed Highway Infrastructure national code of practice. Haringey's lighting stock is monitored by visual inspections and further assessed via annual electrical and structural testing programmes (in order to ascertain levels of corrosion and deterioration). The street lighting column maintenance programme will fund the replacement of any priority columns identified through the inspections and testing, as well as supporting a rolling programme of street-by-street replacement of the oldest stock. This approach mitigates against the risk of impromptu lighting column collapse.
- 6.9 The Festive Lighting programme supports the testing, replacing, installation, and maintenance of seasonal lighting every year. This includes a rolling programme of replacement of the oldest or failed equipment.
- 6.9 Additionally, £225,000 (revenue funding) has been allocated to undertake responsive improvements to street lighting and other illuminated street furniture throughout the year on a needs-led basis.
- 6.10 Regeneration, new developments and transport projects approved through separate investment programmes will also include elements of street lighting and illuminated street furniture. These works will be directly undertaken by or overseen by the Council's Highways and Parking Service and will complement the Street Lighting Investment Programme.

Design, Consultation and Engagement

- 6.11 The Council is committed to ensuring that local communities are informed of the street lighting improvements in their neighbourhoods.
- 6.12 The proposals identified within this report will be developed in accordance with national, regional, local standards and best practice, including those referred to in paragraphs 6.2 and 6.7.
- 6.13 The level of consultation/ notification for schemes is set out in the attached Appendix 2.
- 6.14 The Council will continue to improve the quality of information available to residents and other interested parties on street lighting and other highways and transport projects planned for their areas. This will involve information being made readily available on the Council's website, as well as through improved

works signing and advance warning to minimise disruption and inconvenience associated with works.

7.0 Contribution to strategic outcomes

- 7.1 The SLIP supports two Themes within the Borough Plan 2019-2023;
- 7.2 People Theme: A Haringey where strong families, strong networks and strong communities nurture all residents to live well and achieve their potential. The lighting improvements programme will contribute to specific outcomes within this Theme, by improving road safety and thus encouraging active travel and modal shift.
- 7.3 Place Theme: A place with strong, resilient and connected communities where people can lead active and healthy lives in an environment that is safe, clean and green. The lighting improvements will contribute to specific outcomes within this Theme, by improving the public realm and road network condition, reducing accidents, while improving accessibility for all road users. Those improvements to lighting will also help reduce crime and fear of crime.
- 7.4 London-wide contribution to a healthier London – the proposals in this report will support delivery of The Mayor of London's Transport Strategy and the Council's 2018 Local Implementation Plan 3.
- 7.5 The Council's Local Plan sets out the Council's key planning policies, which include a focus on sustainable transport to be delivered. The introduction of LED lighting will help address climate change through carbon management.
- 7.6 The Council's Transport Strategy sets out the strategic vision, objectives, and priorities on the future of transport in Haringey over the next 10 years. The strategy outlines how the priorities in the Haringey Borough Plan will be achieved and the role that the SLIP projects and programmes play in achieving this.
- 7.7 The Council is currently consulting on the draft Walking and Cycling Plan, following the approval to do so at the 9th February Cabinet meeting. Besides the identified need in that document for 'street lighting to be of high quality throughout the borough', street lighting also has a direct bearing on the aspiration that 'walking will be the natural choice for short trips in the borough'. As clarified in the accompanying report on the Road Safety Investment Plan elsewhere on the Cabinet agenda, effective and efficient street lighting will strongly influence road safety and the inclination for residents to walk and cycle in safety within Haringey.
- 7.8 Haringey's draft Climate Change Action Plan sets out how the borough will become net zero carbon by 2041. The completion of the LED roll-out and the introduction of the CMS will positively impact upon an initial reduction in energy consumption and associated carbon emissions. However, further reductions in energy consumed and carbon emitted can be achieved by more critically assessing illumination levels and the hours at which they operate.

- 7.9 As Haringey has LED lighting with a colour temperature of 4,000 Kelvin (which is at the 'blue end' of the spectrum), the opportunity exists to reduce the harshness of the lighting by stepping down all lighting by one energy class. The clarity provided by 4,000K LED lighting is not noticeably different to the human eye until power throughput drops below 50% (equivalent to two energy classes).
- 7.10 The point at which illumination levels can be reduced is linked to traffic volumes and road class. 'Traffic adaptive street lighting' trials elsewhere in the UK and in Europe suggest that dimming to 40% of full power throughput can be achieved with no adverse consequential impact on road safety or visibility. This represents a significant potential reduction in energy consumption and carbon emissions with many local highway authorities considering this, in conjunction with extended periods of part-night lighting, as part of their carbon management reduction plans.
- 7.11 Given these potential benefits and the consequential opportunity to reduce the adverse impact on light pollution during the hours of darkness, these opportunities will be explored further during 2021/22. Due regard will be taken of the impact of street lighting on crime and the fear of crime, although the introduction of part-night lighting has, where implemented elsewhere in the country, culminated in a reduction of 20% across all crime classes.

8. Statutory Officers' comments

8.1 Comments of the Chief Financial Officer

- 8.1.1 This report sets out the Street Lighting Investment Plan for the Highways and Parking Service in the forthcoming year detailing all the street lighting improvement proposals.
- 8.1.2 The list below provides a breakdown of the budgets for the street lighting capital investment for 2021/22 as agreed at the Council's budget setting meeting of the 1st March 2021.

| | £m |
|--|---------------|
| Street Lighting improvements | £1.665 |
| Energy-efficient LED replacement and CMS | £3.135 |
| Total | £4.800 |

The revenue costs of the proposed investment are budgeted for in the MTFS as agreed by the Council at its budget setting meeting of the 1st March 2021.

8.2 Comments of the Head of Legal Services

- 8.2.1 The Head of Legal & Governance has been consulted on the preparation of this report and comments as follows
- 8.2.2 The Council, as a highway authority, has a statutory obligation to maintain the public highways it is responsible for in the Council's borough and may provide and maintain lighting for those highways.

8.2.3 This report seeks approval for the works programme for street lighting on the public highway for the financial year 2021/22 which is a decision that Cabinet can take in accordance with the Council's Constitution.

8.3 Strategic Procurement Comments

8.3.1 The works programme is being implemented through a term contract that is in place with Marlborough Highways. The CMS project is being tendered in early 2021 and, at the time of writing this report, the award is to be made.

8.4 Equalities Comments

8.4.1 The Council has a Public Sector Equality Duty under the Equality Act (2010) to have due regard to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act
- Advance equality of opportunity between people who share those protected characteristics and people who do not
- Foster good relations between people who share those characteristics and people who do not.

8.4.2 The three parts of the duty applies to the following protected characteristics: age, disability, gender reassignment, pregnancy/maternity, race, religion/faith, sex and sexual orientation. Marriage and civil partnership status applies to the first part of the duty.

8.4.3 An Equalities Impact Assessment (EqIA) formed part of the statutory consultation process in 2018/19 which informed the development of the Local Implementation Plan 3 (LIP). The LIP sets out the objectives, delivery plans and monitoring arrangements for all transport scheme proposals including that of street lighting works.

8.4.4 The EqIA identified several disproportionate impacts that may occur on equalities groups because of the implementation of highways works associated with the LIP and the Council's transport schemes.

8.4.5 The key beneficial impacts for these lighting works relate to:

- Improved access to facilities, which will benefit all Haringey residents and visitors. Some protected groups such as disabled people, older people and children will benefit disproportionately.
- Improved light colour rendering through installation of LED lights which will benefit all Haringey residents and visitors by potentially improving perceptions of safety in the borough. This is likely to disproportionately benefit some protected groups who are known to feel less safe in the borough at night, including women, young adults, older people, and disabled people (particularly those who are visually impaired).

- The potential longer-term reduction of crime rates by encouraging social cohesion and community surveillance that may deter criminal behaviour. While this may positively impact on all residents, this has the potential to make a particular difference in areas such as the East of the borough where there are relatively high levels of crime and anti-social behaviour. As these are areas which also have higher numbers of low-income households, among whom BAME residents are overrepresented, individuals from these demographic groups may benefit disproportionately from lighting improvements.
- Greater use of the network by cycling or walking which will be well-lit, which is likely to improve the health and wellbeing of all residents and visitors but particularly for groups with protected characteristics who are known to experience health inequalities. This beneficial impact is likely to be amplified in the wake of lockdown restrictions and resulting increased numbers of people exercising outdoors, which improvements to the borough's lighting infrastructure should make easier and safer.
- Reduced levels of pollution by greater use of walkways and cycling networks which are likely to benefit people in some of the protected groups, such as older and/or disabled people with respiratory illnesses more than for the general population.

8.4.6 While the proposed works are likely to have a beneficial long-term impact on individuals from protected groups, interim works to roll-out the lighting improvements may have the following negative impacts for particular groups:

- The works programme includes site works which may require excavation of pavements, around which barriers will be placed to protect the public and Council operatives. This may reduce accessibility for pavement users, disproportionately impacting those with disabilities and/or reduced mobility due to long-term illness, children and parents of young children, and older people.
- The functionality of individual street lights may be impacted during the upgrade, resulting in reduced street lighting for short periods of time. This may have a particular negative impact on protected groups set out previously who are more worried about their safety during the night.

8.4.7 While it is recognised that the works may involve these negative impacts on protected groups, they are outweighed by the need to achieve a well-managed and effective street lighting network and the proposed decision therefore represents a proportionate means of achieving a legitimate aim.

8.4.8 Moreover, to minimise these impacts, schemes will be individually planned and delivered. Mitigations will include planning and undertaking work at off-peak times when pavements are less likely to be in use, reducing the impact of the works on accessibility for all, and at a time when street lighting will not be needed. As most of the work involved to upgrade the lighting system will be

undertaken remotely, this should minimise any negative impacts to residents and visitors.

8.4.9 Measures that increase cycling and walking through improved safety and awareness aim to improve the health and wellbeing of groups with protected characteristics who are known to experience health inequalities.

8.4.10 The communication and engagement measures for site works in the Street Lighting investment Plan 2021/22 will also increase awareness of works and minimise disruption caused. This will allow residents adequate time to make alternative arrangements, and any necessary adjustments for protected groups will be made on a scheme-by-scheme basis.

9 Use of Appendices

Appendix 1 – List of street lighting schemes in the programme identified by Ward

Appendix 2– Consultation

10 Local Government (Access to Information) Act 1985

- Borough Plan 2019-2023
- 2018 Transport Strategy
- Local Plan
- Highways Asset Management Plan
- Haringey's draft Walking and Cycling Action Plan
- Haringey's draft Climate Change Action Plan

11 Web links to schemes

- www.haringey.gov.uk/smartertravel
- www.haringey.gov.uk/majorschemes
- <http://haringey.roadworks.org>

Appendix 1 – Street Lighting Funding Proposals 2021/22

Table 1: Street Lighting Works Plan Summary 2021/22

| Scheme Name / Location | Ward | Allocation (£k) |
|---|---------|-----------------|
| Column and LED lantern replacement | Various | 965 |
| Lantern replacement, LED complete rollout programme | Various | 390 |
| Festive lighting | Various | 175 |
| Electrical and structural testing | Various | 135 |
| Central management system | Various | 3135 |
| Total | | 4800 |

*The Central Management System will be installed and funded over several years.

Table 2: Street Lighting Column Replacement (including lanterns) 2021/22

| Road Name | Ward | Allocation (£k) |
|--------------------------------------|----------------|-----------------|
| Access Lane Rosebery Mews | Alexandra | 5 |
| Coleridge Road Car Park | Crouch End | 25 |
| Colina Mews | Harringay | 15 |
| Colina Road | Harringay | 15 |
| Access Road Southwood Lane 88 to 112 | Highgate | 20 |
| Summerland Gardens Car Park | Muswell Hill | 75 |
| Martins Walk | Noel park | 25 |
| Westbury Avenue | Noel park | 50 |
| Fenman Court | Tottenham Hale | 10 |
| Millmead Road | Tottenham Hale | 30 |
| Marsh Lane | Tottenham Hale | 25 |
| StoneBridge Road Car A | Tottenham Hale | 50 |
| StoneBridge Road Car B | Tottenham Hale | 50 |
| Watermead Way | Tottenham Hale | 490 |
| Subway Frome Road | Tottenham Hale | 50 |
| Subway Muswell Hill | Tottenham Hale | 30 |
| Total | | 965 |

Table 3 - Street Lighting LED Replacement Programme

| Road Name | Ward | Allocation (£k) |
|---|-----------------|------------------------|
| Commerce Road | Bounds Green | 10 |
| Ireland Place | Bounds Green | 10 |
| Briston Grove | Crouch End | 10 |
| Crescent Road | Crouch End | 10 |
| Elm Grove | Crouch End | 10 |
| Oakington Way | Crouch End | 10 |
| Clifton Road | Crouch End | 10 |
| Russell Road | Crouch End | 10 |
| Beech Drive | Fortis Green | 10 |
| Ringwood Avenue | Fortis Green | 10 |
| St Marys Church Yard | Hornsey | 10 |
| Footpath - High Street 80m south to Temple Rd | Hornsey | 10 |
| The Campsbourne | Hornsey | 10 |
| Footpath Penstock | Hornsey | 20 |
| Cross Lane | Hornsey | 10 |
| Harold road | Hornsey | 10 |
| Harvey Mews | Hornsey | 10 |
| Hermiston Avenue | Hornsey | 15 |
| Hillfield Avenue | Hornsey | 15 |
| Rosebery Gardens | Hornsey | 15 |
| Arnold Bennett Way | Noel Park | 10 |
| Footpath High Road To Caxton Road | Noel Park | 10 |
| Footpath Side of Library | Noel Park | 10 |
| Brampton Road | St Ann's | 10 |
| Cape Road | Tottenham Green | 5 |
| Cunningham Road | Tottenham Green | 10 |
| Spondon Road | Tottenham Green | 10 |
| Ferry Lane | Tottenham Hale | 25 |
| Stone Bridge Road | Tottenham Hale | 15 |
| Smithson Road | White Hart Lane | 10 |
| Spottons Grove | White Hart Lane | 10 |
| High Road | Woodside | 15 |
| The Crossway | Woodside | 5 |
| James Gardens | Woodside | 10 |
| Croxford Gardens | Woodside | 10 |
| Total | | 390 |

Table 4 - Street Lighting CMS Replacement

| Road Name | Ward | Allocation (£k) |
|--|----------|-----------------|
| Total for Alexandra Ward | | 85 |
| Total for Bounds Green Ward | | 95 |
| Total for Bruce Grove Ward | | 70 |
| Total for Crouch End Ward | | 90 |
| Total for Fortis Green Ward | | 100 |
| Total for Harringay Ward | | 90 |
| Total for Highgate Ward | | 95 |
| Total for Hornsey Ward | | 100 |
| Total for Muswell Hill Ward | | 120 |
| Total for Noel Park Ward | | 105 |
| Total for Northumberland Park Ward | | 105 |
| Total for Seven Sisters Ward | | 105 |
| Total for St Ann's Ward | | 90 |
| Total for Stroud Green Ward | | 75 |
| Total for Tottenham Green Ward | | 95 |
| Total for Tottenham Hale Ward | | 140 |
| Total for West Green Ward | | 90 |
| Total for White Hart Lane Ward | | 120 |
| Total for Woodside Ward | | 115 |
| | | |
| Additional control for festive lighting in CMS | | 250 |
| | | |
| Set Up costs CMS Programme & software | Off Site | 1000 |
| Total | | 3135 |

Table 5 – Street Lighting Other - Festive Lighting & Testing

| Road Name | Ward | Allocation (£k) |
|--------------------|---------|-----------------|
| Festive Lighting | Various | 175 |
| Electrical Testing | Various | 60 |
| Structural Testing | Various | 75 |
| Total | | 310 |

Appendix 2: Consultation Street Lighting Site Works

The various street lighting site works will be the subject of further consultation/ notification. The level of consultation/ notification will depend on the impact of the scheme on the local community. The three consultation/notification types are:

- Notification of works (All works) – residents and businesses of affected by street lighting improvement works will be notified by letter drop in advance of work commencing.
- Statutory notification is generally not required in the implementation of street lighting works. Temporary traffic regulation orders occasionally may be required – e.g. to close off footways during the works.
- Consultation – any high-profile street lighting column replacement or new works may be subject to consultation. This consultation will include residents and businesses of affected properties being notified by letter drop before commencement of detailed design works to allow comments to be made on the proposals that can be considered in the final design. In addition, they will be notified by letter drop and any other appropriate media in advance of work commencing.