

# Appendix 2a Highways and Transport

## Savings Proposals

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## Business Planning: Business Case proposal

Project Title: Traffic Management - Review of network in terms charges, enforcement and powers

Committee: Highways and Transport

2022-23 Savings / Income amount: -£300k

2023-24 Savings / Income amount : -£130K

Brief description of proposal: This includes a review of the following:

Existing powers:

- Review of the strategy for bus lanes / bus gates county wide
- Review on street parking policy and operations

Future powers:

- Explore opportunities for Civil Parking Enforcement (CPE), enactment of part 6 of the Traffic Management Act (moving traffic offences) and pavement parking restrictions
- City Access (potential demand management / environmental management)

Date of version: 25/10/2021

BP Reference: B/R.7.100  
B/R.7.101

Business Leads / Sponsors:

David Allatt

## 1. Please describe what the proposed outcomes are:

The proposal is to undertake a review of existing powers and explore how future powers may generate additional revenue through charges, as well as realising other corporate aims.

### Existing powers include:

#### Bus lanes / Bus Gates

- Protect public transport journey time and attractiveness
- Revenue surplus

#### On Street Parking Policy

- Encourage more sustainable travel choices
- Influence demand for car parking and nature of use
- Revenue surplus

### Potential Future Powers include:

#### Civil Parking Enforcement:

This concerns Civil Parking Enforcement in the Fenland, Huntingdonshire, and South Cambridgeshire districts, as well as Cambridge City. This power would allow the authority to effectively manage and enforce on and off-street parking areas to prevent inconsiderate parking, improve access, support local economies and business and contributes to the Council's overarching environmental objective to reduce congestion and improve air quality.

#### Traffic Management Act Part 6:

This concerns congestion and network management. These powers would give the authority more control over vehicle movements at key intersections which will result in a greater level of resilience of the transport network. Illegal movements at key junctions have significant impact on the flow of traffic and at present there is no consequence for those undertaking this illegal action. The enforcement of these movements would reduce the occurrence, and therefore allow more consistent and efficient management of signal strategies and queuing traffic.

#### The Greater Cambridge Partnership (GCP) City Access (potential demand management / environmental management):

This will create a more attractive environment for buses, and non-motorised users to travel effectively. Beyond being a potentially significant revenue source, in doing this, the authority can tackle air quality and carbon emissions, as well as positive health and wellbeing.

## 2. What evidence has been used to support this work, how does this link to any existing strategies/policies?

The work has been identified as a key priority by the Joint Administration. The Joint Administration Agreement states the following:

‘We will focus on modal shift to encourage more residents out of cars, along with infrastructure development, the encouragement of sustainable travel, and securing safe routes and connections for pedestrians and cyclists.’

## 3. Has an options and feasibility study been undertaken? Please explain what options have been considered.

This business case focuses on (i) utilising existing County powers to better effect, and (ii) harnessing new powers to support enhanced network management. The County is therefore best placed to deliver these initiatives.

The Greater Cambridge Partnership (GCP) is leading the City Access work. County will need to work closely with the GCP – engagement is ongoing in this regard to best shape the approach.

## 4. What are the next steps/ actions the Council should take to pursue it? Please include timescales.

### High Level Timetable

Task	Start Date	End Date	Overall Responsibility
Bus Lanes	Linked to CPE		CCC
Parking Policy:  Full review of charges and tidy up anomalies in the City during FY 22/23  implement	FY 22/23	April 23	CCC
Soham Station analysis	Sep 21	Oct 21	
Station opening –	Dec 21		

CPE:			CCC
Draft Agency Agreements (AA)	Oct 21	Jan 22	
Approval of AA	Feb 22	Jun 22	
Commence review of existing signs, lines and TROs	Mar 22	May 22	
Draft application for Civil Enforcement area in districts	Feb 21	Sep 22	
Raise purchase order and commission remedial works	Jun 22	Aug 22	
Commence remedial works	Sep 22	Sep 23	
Application submitted to Department of Transport (DfT)	Oct 22		
DfT review and parliamentary process	Oct 22	Mar 23	
Statutory consultation process	Apr 23	Jun 23	
Designation order created and CPE brought into effect	Oct 23		
TMA Part 6:			CCC
EoI to DfT	August 21	August 21	
Develop proposal	August 21	Nov 22	
Consult	Jan 22		
Designation orders	March 22		
City Access:			GCP

GCP consultation and strategic business case	Oct 21	Dec 21	
Consultation on preferred scheme	Jun 22	Jul 22	
Implementation	Jan 23	Dec 23	

5. Could this have any effects on people with Protected Characteristics including poverty and rural isolation? If so please provide as much detail as possible.

An Equality Impact Assessment is to be developed as each project progresses.

6. What financial and non-financial benefits are there and how will you measure the performance of these? Are there any dis-benefits? These MUST include how this will benefit the wider internal and external system.

### Financial Benefits

Review of the strategy for bus lanes / bus gates county wide:

The strategy would be in line with the Local Transport Plan to prioritise public transport, while also restricting car use (or making it a less attractive option). For sites outside Cambridge City we need to wait until CPE is implemented (see timescales above) . In Huntingdonshire and South Cambridgeshire, there are a few sites where County could do bus lane / bus gate enforcement and we are building into the CPE agency agreements that bus lane / bus gates enforcement remains with County.

New possible sites for bus lanes / bus gates include Madingley Road and Victoria Avenue. As these two are already in Cambridge City we can proceed more swiftly. An indicative surplus income figures for the two sites would be £120K PA for both sites (Year 1). Upfront costs would be needed for set up:

- Cameras x 2 £36K,
- Civils for both sites including signs and lines £30K (subject to site visits, target costs etc)
- Traffic Regulation Orders (TROs) £2K - Total £70K to install both sites

Other potential sites for bus lanes/bus gates include:

- Exploring opportunities with GCP regarding funding for Victoria Avenue. This location is outside the existing Special Enforcement Area
- Cambourne bus gate on to Bourn Road. It is anticipated that developers would fund the set up of this bus gate.

- Longstanton / Northstowe at Park and Ride site. This would be funded from local development.
- Huntingdon Road, Girton (SCDC). It should be noted that this bus lane would need funding.

It is too early to give an income figure for the sites outside Cambridge as it is dependent on CPE being introduced. They are unlikely to be high, and some may not cover running costs.

### Review on street parking policy and operations:

For the 2021/22 financial year, the interim traffic management proposal to impact on demand increase in charges will lead to potential increase in surplus of £200K. For the 2022/23 financial year we will do a full review of charges and tidy up anomalies in the city due to be implemented by April 2023 (i.e. without the need for infrastructure investment). This however does need to be carried out in-line with the GCP's parking strategy which may impact on income if more parking is taken out for other kinds of infrastructure (e.g. cycle lanes). There is potential for increased income from parking of £150k (Year 1). It should be noted that this assumes significant on-street parking assets are not removed in favour of cycling projects.

### Future powers:

It is proposed the authority explore opportunities for Civil Parking Enforcement, enactment of part 6 of the Traffic Management Act (moving traffic offences) and pavement/layby parking restrictions. Enforcement of layby CPE will run at a deficit in the other districts but costs to be met by Districts / GCP so should be net zero to CCC and opens up opportunities for bus gate and moving traffic enforcement.

Regarding moving traffic enforcement, it is proposed this is trialled in Cambridge City and then reviewed in further detail to build a more detailed business case for it. Use of this power needs to evidence where there is a congestion / safety problem and that the costs will be covered by income from fines. At this stage it is difficult to predict surplus income. However somewhere busy (e.g. the centre of Cambridge) is likely to be closer to £100k per annum surplus income. Up-front funding would be needed to undertake this analysis and then put the sites in. There is the potential for GCP funding for these set up costs.

Regarding pavement parking, the service is still awaiting further details from DfT. It is therefore difficult to put an income figure against this power at this stage.

Regarding city Access (potential demand management / environmental management) congestion or air quality charging scheme, it is dependent on the nature of the scheme pursued. There is opportunity for significant revenue generation, but discussions will be required in terms of how this is spent.

## Non-Financial Benefits

Key Benefit	Measure	Baseline	Target & Timescale
Improved traffic management	Reduced congestion	Current traffic levels	TBD as part of the review
Improvements to public transport	Bus journey times	Current bus journey times in Cambridge	TBD as part of the review
Improved air quality	Air quality data	TBD as part of the review	

7. Are there any identified risks which may impact on the potential delivery of this? What is the risk if we do not act?

Risk	Mitigation	RAG (should the risk occur)	Overall Responsibility
Public and political resistance to more penalties	Effective comms strategy	Amber	CCC / GCP

8. Scope: What is within scope? What is outside of scope?

The specific powers available for review are set out in Section 1.

## Business Planning: Business Case – Savings proposal

Project Title: Highways Service Delivery Efficiencies

Committee: Highways & Transport

2022-23 Savings amount: £110k

Proposal: Improvements in Highway service delivery through improved resource planning and works scheduling, together with a review of the operational delivery of services to identify future efficiencies. This will include the development of greater integration with our supply chain partners, scheduling works and planning programmes of work.

Date of version:05/11/21

BP Reference: B/R.6.220

Business Leads / Sponsors: Emma Murden

## 1. Please describe what the proposed outcomes are:

The proposal ties in to the following CCC outcomes:

- Communities at the heart of everything we do
- A good quality of life for everyone
- Cambridgeshire: A well-connected, safe, clean, green environment
- Protecting and caring for those who need us

There is an opportunity to identify business efficiencies in planning and scheduling work. Avoiding duplication will achieve business efficiencies in scheme development, as well as construction, and will result in a positive impact on budgets. Through the Highways Services Contract we can jointly achieve this through better business processes, sharing information and integrated IT systems with the service provider Milestone.

This proposal forms part of the business savings identified in the contract, which will be rolled out collaboratively. However as new opportunities arise, we can improve existing processes. This is largely dependent upon the implementation of the IT systems by both the Client and Service Provider.

It is anticipated that the key outcomes of the proposal will include a more efficient and responsive highway service, less disruption on the network and resources being more aligned to where they are needed. Operational needs will be better served with improved planning and resource allocation, and we have already seen contract efficiencies in this area. Savings can also be achieved by bringing forward efficiencies in combined use of road space, rather than doubling over the same areas. It is also anticipated that more significant operational efficiencies could be achieved in the longer term through greater integrated working with Milestone.

By developing integrated teams to reduce duplication and combine schemes not into budget areas but rather as a holistic corridor scheme which includes all expenditure and delivery, this proposal reduces the amount of resources required for CCC and also reduces the disruption to the travelling public. There is also the added benefit of cost efficiencies where there is sufficient flexibility in budgets to move money into the year it is required and combine spend, which again may lead to savings. The proposal will also result in a reduced carbon footprint due to less duplication and fewer journeys.

## 2. What evidence has been used to support this work, how does this link to any existing strategies/policies?

Well Managed Highways is national Code of Practice and by changing our ways of working, we will be enhancing our adherence to these guidelines. The proposal also reflects the Highway Operational Standards document which outlines highways asset management policies. The proposal aligns to the organisation's business strategy by delivering a better service through better processes and systems, while

simultaneously offering the service delivered on the ground to be more streamlined and efficient. In addition, the proposal delivers services to agreed budgets and delivers value for money by not duplicating work or unnecessary resources, for projects and programmes of work within the service.

The efficiencies will deliver savings as this is a known business model and the need to avoid any unnecessary costs with service delivery to achieve the desired outcomes is straightforward. Feedback from stakeholders confirms improved service delivery, in a timely and cost-effective way.

### 3. Has an options and feasibility study been undertaken? Please explain what options have been considered.

This initiative needs to be delivered in collaboration with the strategic supply chain partner for delivering the Highway Service, Milestone. As such, a partnership approach is essential to deliver these outcomes. However, it should be noted that there are opportunities to avoid duplication and double counting on costs internally too. This will be achieved through improved project management, planning and scheduling resources and works, thereby reducing person marking and the costs involved.

The core advantage of this initiative therefore is that it offers better value for money, customer care and avoids duplication for all three elements of this proposal. Our supply chain partner has been engaged as part of this process, as these opportunities are not achievable without them. However, further review and challenge for both CCC and Milestone will continue to identify further opportunities for efficiencies.

This initiative should be understood as the start of the process of achieving on-going efficiencies. The various options available for the different parts of end to end Highway Delivery will be better understood once the business modelling commences, and businesses are engaged in achieving this.

### 4. What are the next steps/ actions the Council should take to pursue it? Please include timescales.

#### High Level Timetable

Task	Start Date	End Date	Overall Responsibility
Reduce resource allocation to work; by smart allocation of people resources to deliver programmes of	April 2022	Ongoing	Cambridgeshire Highways

work in an integrated way.			
Smart planning and scheduling, through the whole project lifecycle. Including use of POWA (project management online tool) and Project Management principles through the contract.	April 2022	Ongoing	Cambridgeshire Highways

5. Could this have any effects on people with Protected Characteristics including poverty and rural isolation? If so, please provide as much detail as possible.

It is anticipated that the proposal would have no impact on people with protected characteristics, however an EqIA will be completed as work progresses to ensure that proposals are inclusive for staff / communities with protected characteristics that may be affected.

6. What financial and non-financial benefits are there and how will you measure the performance of these? Are there any dis-benefits? These MUST include how this will benefit the wider internal and external system.

### Financial Benefits

Smart planning and scheduling

This will be achieved through bringing forward efficiencies in the combined use of road space and avoiding duplication, improved work planning and service integration.

### Non-Financial Benefits

Key Benefit	Measure	Baseline	Target & Timescale
Less disruption to the travelling public, combining works wherever possible.	Less road space booked and coordination of resources to deliver the desired outcomes.	Existing KPI monitors booking road space and noncompliance.	Annual going forward

Better resource allocation to the public.	Better customer care, less unnecessary touch points with our service. First point of contact can assist and respond.	Customer Reporting Notifications	Annual Reporting
Less duplication at a cost	More service for the budget	Productivity and budget allocation	Y1 and benchmarking previous years
Communication improvements to the travelling public on programmes of work and delivery timescales	Planned works shared in a proactive way.	SharePoint and info available on the website.	Y1 and ongoing.

7. Are there any identified risks which may impact on the potential delivery of this? What is the risk if we do not act?

<b>Risk</b>	<b>Mitigation</b>	<b>RAG (should the risk occur)</b>	<b>Overall Responsibility</b>
Rollout	Early engagement	Amber	Cambridgeshire Highways
Savings not achieved	Tracking throughout the year	Amber	Cambridgeshire Highways
Systems and processes aligned	Check compatibility and system integration, organisational governance	Amber	Cambridgeshire Highways, IT

8. Scope: What is within scope? What is outside of scope?

Only the Highway Term Service Contract is in scope for this business case.

However, if a full Project Management Office was in operation it could potentially be achieved across more contracts (throughout P&E and any associated Cambridgeshire County Council departments) through joint delivery.

## Business Planning: Business Case – Income

Project Title: Review and re-baselining of Place & Economy Income

Committee: Highways and Transport

2022-23 Income Amount: -£500k

2023-24 income amount -£400k

2024-25 income amount -£250k

Brief Description of proposal:

Place & Economy (P&E) as a directorate, generates many income streams associated with the services it provides. These will be reviewed, to ensure the income is maximised whilst adhering to any conditions applied to the income generated.

This will involve re-baselining the income streams to capture how our business within the county has evolved.

Whilst reflecting on these changes we anticipate there is further income to be secured. Initially we would expect additional income of £500k across the directorate in 2022/23 as the changes are implemented. This will reduce to £400k per annum for 2023/24 & to £250k per annum from 2024/25.

Date of version: 5 November 2021

BP Reference: B/R.7.102

Business Leads / Sponsors: David Allatt

## 1. Please describe what the proposed outcomes are:

The P&E directorate will undertake a comprehensive review of its income streams, mindful of the respective conditions associated with said income. The review will focus on ensuring that income is appropriately maximised.

Initially we would expect additional income of £500k across the directorate in 2022/23 as the changes are implemented. This will reduce to £400k per annum for 2023/24 and to £250k per annum from 2024/25.

## 2. What evidence has been used to support this work, how does this link to any existing strategies/policies?

The Place and Economy directorate is responsible for a wide range of services, including:

- Road safety
- Traffic management
- Street lighting
- Guided Busway
- Transport
- Minerals and waste
- Energy
- Waste management
- Highways maintenance

In providing these services, the directorate generates a range of income sources. This document sets out that a review will be undertaken to ensure that income is maximised, where appropriate within the directorate.

## 3. Has an options and feasibility study been undertaken? Please explain what options have been considered.

The option of 'do nothing' was considered, which would naturally result in no net change on income.

Through review, we anticipate additional income of £500k across the directorate in 2022/23 as the changes are implemented. This will reduce to £400k per annum for 2023/24 & to £250k per annum from 2024/25.

## 4. What are the next steps/ actions the Council should take to pursue it? Please include timescales.

## High Level Timetable

Task	Start Date	End Date	Overall Responsibility
Review initiated	Late 2021	Early 2022	Steve Cox
Implementation	Early 2022	Ongoing	See above

5. Could this have any effects on people with Protected Characteristics including poverty and rural isolation? If so please provide as much detail as possible.

We do not anticipate the review to have a disproportionate impact on people with protected characteristics, but this will be considered as part of the review and a full EqlA (Equality Impact Assessment) will be undertaken.

6. What financial and non-financial benefits are there and how will you measure the performance of these? Are there any dis-benefits? These MUST include how this will benefit the wider internal and external system.

The benefits of this proposal are solely financial as set out above. Increasing income levels will mean that a higher percentage of the costs associated with providing the service will be covered, and therefore prevent service reductions within P&E.

7. Are there any identified risks which may impact on the potential delivery of this? What is the risk if we do not act?

N/A

8. Scope: What is within scope? What is outside of scope?

This proposal relates only to income across P&E

## Business Planning: Business Case proposal

Project Title: Recycle asphalt, aggregates and gully waste

Committee: Highways & Transport

2022-23 Savings amount: -£15k

2023-24 Savings -£20k

Brief Description of proposal:

Reduce waste to refuse through recycling aggregates and gully waste and reuse the products back in the highway service.

Date of version: 14 September 2021

BP Reference: B/R.6.215

Business Leads / Sponsors: Emma Murden

## 1. Please describe what the proposed outcomes are:

This proposal is centred around efficiencies in recycling by reducing waste to refuse through recycling aggregates and gully waste, and then reusing the products back in the highway service. To facilitate this kind of recycling in the depots, there will be costings around licenses and depot refurbishment; these are currently being undertaken. Core options are for a large scale recycling centre on a new site or alternatively a smaller scale opportunity within an existing depot.

This proposal links to a variety of CCC outcomes, including:

- Communities at the heart of everything we do
- A good quality of life for everyone
- Helping our children learn, develop and live life to the full
- Cambridgeshire: A well-connected, safe, clean, green environment
- Protecting and caring for those who need us

In addition to delivering financial savings, this initiative ties into CCC's overarching strategies to reduce its carbon footprint, and further utilising a source of renewable materials that can be reused at reduced costs, with less haulage overall. It is hoped that if successful, then this model could be rolled out to other service providers and this opportunity may open new markets to CCC's services in the private sector.

There will be environmental or climate change outcomes, these are currently being assessed and an outline measure can be seen in the table calculations attached in the appendix.

## 2. What evidence has been used to support this work, how does this link to any existing strategies/policies?

Recycling supports national, local, and business policies for reducing the carbon footprint and reduction of using virgin aggregates. The proposal meets the Environment Strategy and the administrations broader objectives for the Highways service. Furthermore, it meets the Environment and Climate Change Strategy for the reduction in the carbon footprint of the service and CCC's overall business. The proposal aligns with feedback from stakeholders and communities telling us that they would like to see a greener service, at less cost but still as effective.

## 3. Has an options and feasibility study been undertaken? Please explain what options have been considered.

At this stage, the scale of the project can be varied. It is suggested that small facilities are trialled initially with a view this fits with a wider scale depot rationalisation. This small facility option incurs less of a cost but also only allows for less production, whereas the larger scheme, while costing £2m, has the potential to bring about more business and better margins, should the smaller hired set up be a success. Discussions are ongoing

with our Service providers in terms of how we can deliver such a project. This project will be delivered jointly with our strategic partners for the highway service, Milestone. Insourcing is not an option at this stage.

#### 4. What are the next steps/ actions the Council should take to pursue it? Please include timescales.

There are a number of detailed business cases due to be developed by CCC and the strategic service provider as outlined below. Milestone, the Highways Contractor has introduced similar facilities elsewhere and are working in partnership with us on this project. Other teams that will be involved with the process include the Commercial Team who will be able to monitor the business case and ensure that the proposal continues to provide value, as well as and Environment Team and Finance.

Stakeholders and partners will be able to monitor the progress of this proposal via the current Highway Services Contract governance through Joint Management Team and Board. Members and then the local teams (including Property and Communities) will then be involved.

#### High Level Timetable

Task	Start Date	End Date	Overall Responsibility
Gully waste recycling	Summer 2022	Ongoing	CCC
Aggregate recycling – small scale	Summer 2022	Ongoing	CCC
Aggregate recycling – large scale	Summer 2023/4	Ongoing	CCC

#### 5. Could this have any effects on people with Protected Characteristics including poverty and rural isolation? If so, please provide as much detail as possible.

It is anticipated there will be no impact on people with protected characteristics including poverty and rural isolation from these proposed changes. However, an EqIA will be carried out before the scheme proceeds, to ensure proposals are equitable.

#### 6. What financial and non-financial benefits are there and how will you measure the performance of these? Are there any dis-benefits? These MUST include how this will benefit the wider internal and external system.

## Financial Benefits include:

- Gully waste reduction costs reduce by £15 per tonne, that equates to approx. £12,285 per annum savings.
- Asphalt, stone, and aggregate recycling CCC currently produce 9982 tonnes a year, 5000t could produce savings of £106,000 and 48 tCO<sub>2</sub>e. Costs of a small-scale facility would be beneficial, and a larger commercial set up could be costs if the small-scale facility is successful in an existing depot and there is a greater demand for the service.
- The marketplace may be more attractive with the recent material shortages and increasing costs of materials by 10-20%, therefore a smaller facility may be the preferred option, in the short term and developed if demand out stretches production.
- Asphalt and aggregate recycling smaller scale costs are currently being assessed. But it could generate £21,200, in Year 2 after setting up costs.
- The project is likely to generate an a saving of approx. £10-30k in the first year and depending on the scale of project will affect the savings, accordingly, going forward.

## Non-Financial Benefits

Summary of non-financial benefits is tabled below.

Key Benefit	Measure	Baseline	Target & Timescale
Carbon reduction – gully waste	tCO <sub>2</sub> e	2 based on CCC current tonnage	4 per 1000 t.
Carbon reduction – asphalt/ aggregate recycling	tCO <sub>2</sub> e	48 +	Per 5000 t

7. Are there any identified risks which may impact on the potential delivery of this? What is the risk if we do not act?

Risk	Mitigation	RAG (should the risk occur)	Overall Responsibility
Not getting the consents required to run the facility from the Environment Agency	Work with them on setting up the facility	Amber	CCC
Not sufficient supply for demand	Look for other sources	Green	CCC

## 8. Scope: What is within scope? What is outside of scope?

For the purposes of this business case, the proposal covers the Highway Services Contract only. However, the scheme could potentially be rolled out to other contracts (e.g waste), from other contractors in Cambridgeshire if similar savings and benefits could be realised.

## Business Planning: Business Case – Savings proposal

Project Title: Review Street Lighting service requirements

Committee: Highways and Transport

2022-23 Savings amount: -£10k

Brief Description of proposal:

Review Street Lighting service requirement: to reduce scouting to checks consistently throughout the year, and lighting regimes could be changed to reflect environmental priorities.

Date of version: October 2021

BP Reference: B/R.6.216

Business Leads / Sponsors: Alan Hitch/ Emma Murden

## 1. Please describe what the proposed outcomes are:

The proposal involves carrying out a review of the street lighting dimming regime for street lights owned by the County Council. This would include reviewing the current dimming regimes as detailed in County Councils Street lighting policy to look at the possibility of additional dimming for residential areas and areas with low night time usage (commercial areas etc). It must be noted that whilst changes to the dimming regimes of our street lights which are controlled by the central management system (CMS) can be changed remotely, those which are not controlled by the CMS system (majority of village locations and smaller communities) would have to be changed by an engineer physically visiting the light with the associated cost linked to this activity having to be paid. Further information is provided in the table below:

<b>Road Type</b>	<b>Dimming Regime/Lighting Levels</b>
Traffic Routes	Dimmed between the hours of 20:00 and 00:00 by one (1) lighting class (20%) to give 80% light output and then dimmed between 00:00 and 06:00 by two (2) lighting Classes (40%) to give 60% light output
Residential/Public Areas	Dimmed between the hours of 22:00 and 06:00 by 40% Lamp light output to give 60% light output

This proposal as such recommends changing the frequencies of the current night time street light outage detection inspections. Currently, they are inspected every fourteen days during winter (October to March inclusive) and every twenty-eight days during summer (April to September inclusive). The proposal recommends that scouting be carried out every twenty-eight days throughout the year (January to December), thereby delivering a saving of £10k per annum.

This proposal is made as the performance indicators for the street lighting maintenance performance (LP3 Percentage of Lighting Points not working as planned) have consistently shown that the required target of 99% of streets lights to be working, has been consistently met and we do not believe that changing the scouting frequencies will alter this level of performance.

In addition to delivering cost savings, the dimming regime review would also decrease the authority's energy usage, which could create both energy savings and carbon savings. We would look to introduce a small LED replacement programme for the most inefficient lights: approx. 9000 units at a cost of £3.7m providing an annual saving of £380k once the payback period of nine years has been achieved. This suggested rollout should be incorporated into the maintenance regime, to minimise the capital costs, so over a four-year period the replacement LED lanterns can be installed.

It should be noted that part night lighting for street lighting assets across Cambridgeshire will also be reviewed.

## 2. What evidence has been used to support this work, how does this link to any existing strategies/policies?

The replacement proposal targets our street lighting lanterns which use the most energy per lantern.

The replacement proposal covers street lighting lanterns that are primarily located on traffic routes and so their replacement with white light LED lanterns would improve the lighting on these roads from a road user perspective.

The replacement of the selected high-pressure sodium (SON) lanterns, which as noted above, will be primarily located on traffic routes, will result in fewer required planned maintenance visits by our service provider Balfour Beatty Living Places (BBLP) as lamp changes will not be required, and fewer fault visits as LED lanterns are significantly more reliable than conventional lanterns. Fewer maintenance visits on traffic routes also results in less exposure to risk for our operatives and fewer vehicle journeys which helps with our carbon reduction aims.

The replacement proposal would also look to include the lighting controls of the lanterns and where possible look to include central management system (CMS) controls, which would enable the lanterns to be controlled remotely and, in the future, possibly be controlled dynamically so that the road could be lit in line with the actual traffic usage at any given time.

A caveat to note is that there is a current risk with regards to material costs rising significantly for street lighting equipment and materials (Street lighting lanterns, Street Lighting columns and associated materials).

The proposed change to LED lanterns will result in a significant reduction in carbon emissions and energy usage, which would assist in reducing the County Councils carbon footprint in line with its climate change and environment strategy.

This proposed project has used evidence from the previous LED replacement project that was completed in December 2018 which included replacing 3,635 inefficient street lighting lanterns with LED lanterns. This project significantly reduced energy consumption for the upgraded street lights saving 743,961 kWh per year whilst also improving the lighting provision. Feedback from residents in the areas where the new LED lanterns were installed was very positive.

As noted in the point above, the County Council replaced 3,635 inefficient street lighting lanterns with LED lanterns in 2018, with feedback received from the residents in the areas where the LED lanterns were installed being very positive, informing us that they were pleased that the new lanterns have been installed. We have also received a number of requests from residents asking when LED lanterns will be fitted to their roads in areas near to where the new LED lanterns were installed.

### 3. Has an options and feasibility study been undertaken? Please explain what options have been considered.

The proposed street lighting service requirements review is the only option being proposed and this review would be carried out by the County Councils highway commissioning team. Doing nothing would result in opportunities for financial savings and energy improvement to be missed.

### 4. What are the next steps/ actions the Council should take to pursue it? Please include timescales.

The outline plan would be to carry out the proposed street lighting service requirements review and compile findings into possible options to be considered for consultation and, if agreed, future implementation.

The project leads for this proposal will be Emma Murden and Alan Hitch, responsible for Highway Contracts and Commissioning in CCC Project Delivery. Scouting is currently provided by the service provider under the private finance initiative (PFI) contract so will be negotiated with them. It is anticipated that the Commercial team involvement will be explored in more detail as the project progresses. Given the nature of the proposal, a stakeholder communication plan will be developed as the proposal is progressed based on options selected for implementation.

### 5. Could this have any effects on people with Protected Characteristics including poverty and rural isolation? If so, please provide as much detail as possible.

There is, at present, no identified impacts on people with protected characteristics including poverty and rural isolation from these proposed changes. There could be some impact in less frequent scouting of the lights, but this is unlikely, and we will work with stakeholders to ensure that we can be quickly notified if any street lights fail. An EqIA will be developed to ensure we comply with our Public Sector Equality Duty and mitigate against any adverse risks to people with protected characteristics in our communities.

### 6. What financial and non-financial benefits are there and how will you measure the performance of these? Are there any dis-benefits? These MUST include how this will benefit the wider internal and external system.

## Financial Benefits

1. The review of the scouting regime will deliver a £10k per annum saving
2. The replacement LEDs saving of £325k per annum in year 10 (following the payback period) may be achieved in less time if it can be incorporated as part of the routine maintenance replace programme over the next four years.

## Non-Financial Benefits

1. The replacement proposal targets the street lighting lanterns that we have that use the most energy per lantern.
2. The replacement proposal covers street lighting lanterns that are primarily located on traffic routes and so their replacement with white light LED lanterns would improve the lighting on these roads from a road user perspective.
3. The replacement of the selected SON lanterns, which, as noted above, will be primarily located on traffic routes, will result in fewer required planned maintenance visits by BBLP as lamp changes will not be required. It will also result in fewer fault visits as LED lanterns are significantly more reliable than conventional lanterns. Fewer maintenance visits on traffic routes also results in less exposure to risk for our operatives and fewer vehicle journeys which helps with our carbon reduction aims.
4. The LED replacement proposal would also seek to include the lighting controls of the lanterns and, where possible, look to include CMS controls, which would enable the lanterns to be controlled remotely. In the future, these could possibly be controlled dynamically so that the road could be lit in line with the actual traffic usage at any given time.

## 7. Are there any identified risks which may impact on the potential delivery of this? What is the risk if we do not act?

There is a current risk with regards to material costs rising significantly for street lighting equipment and materials (Street lighting lanterns, Street Lighting columns and associated materials) which could affect the overall cost of the proposal to introduce a small LED replacement programme for the most inefficient lights.

The risk of not changing the most inefficient street lighting lanterns to LED lanterns is that energy costs continue to rise and in turn the street lighting energy expenditure continues to rise also.

As far as a reduction in scouting is concerned, there may be a perception of an impact on community safety as the public will need to report faulty lights if there is an issue before the next monthly check, this would be the same level of service as currently in the summer months. However, if the level of lighting were to decrease if there was part night lighting, this would need a full community safety audit working with the District councils and Police before any lighting services were reduced.

## 8. Scope: What is within scope? What is outside of scope?

The following elements are within the scope of the proposal:

- Street lighting dimming regime review for street lights owned by the County Council or partial part night lighting introduced.
- Investigate viability and associated costs to change the frequencies of the current night time street light outage detection inspections from the current frequency, provided by the service provider under the PFI contract.
- Develop/investigate proposal to introduce a small LED replacement programme for the most inefficient lights, approx. 9000 units with the suggested rollout to be part of the maintenance regime over a four-year period.

The following elements are out of scope for the proposal:

- Future smart technology and dynamic lighting, part night lighting or similar lighting regime.