

Decision Report

Mr Elkins, Cabinet Member for Highways and Infrastructure	Ref No: HI14 (18/19)
September 2018	Key Decision: Yes
Traffic Signals Refurbishment Programme	Part I
Report by Lee Harris Executive Director Economy Infrastructure and Environment and Matt Davey Director of Highways and Transport	Electoral Division(s): All

Summary

This decision concerns the implementation of a refurbishment programme for traffic signal sites across West Sussex.

The West Sussex County Council Traffic Signals Team has developed a system that uses periodic inspections of the traffic signals to capture and categorise equipment and sites that require attention. The number of such locations has been steadily increasing due to the age of the equipment.

It is proposed that a programme of signal refurbishments is progressed, using the current traffic signals maintenance contract, to procure all the necessary elements of the work

Although it would be feasible to investigate the implementation of a full asset management plan the cost of this would be in excess of £2million. However the proposed Traffic Signals Refurbishment Programme will address the most pressing issues.

The Capital Programme 2018/19 – 2022/23 approved by Full Council in December 2017 included £1m for the Traffic Signals Refurbishment Programme as a pipeline scheme, funded by corporate borrowing. The funding is split £250k per annum over 4 years, commencing 2018/19.

A full business case has been developed which includes detailed financial information, the preferred procurement and the associated risks.

West Sussex Plan: Policy Impact and Context

The refurbishment will comply with the latest Traffic Signals Design and Installation standards and will support the aim of a prosperous place - infrastructure that supports a successful economy

Financial Impact

The Capital Programme 2018/19 – 2022/23 approved by Full Council in December 2017 included £1m for the Traffic Signals Refurbishment Programme as a pipeline scheme, funded by corporate borrowing. The funding is split £250k per annum over 4 years, commencing 2018/19 and will enable WSCC to maintain traffic signal assets in a safe condition.

Recommendations

The Cabinet Member will be recommended to approve:

- a) the decision to proceed with the refurbishment programme
- b) the use of the associated funding of £250k per annum from 2018/19 to 2021/22

PROPOSAL

1. Background and Context

Through an asset management plan, the WSCC traffic signals team have developed a system that uses the traffic signals' periodic inspections to capture and categorise equipment and sites that require attention. The quantity of such locations has been steadily increasing due to the age of the equipment.

Although it would be feasible to investigate the implementation of a full asset management plan the cost of this would be in excess of £2million. Therefore it is proposed that a partial plan is implemented to address the most pressing issues.

This asset management plan will enable the County Council to deliver the following improvements

- Reduction in the extent of maintenance, which will reduce the amount of visits and traffic management required. This will have a direct effect on the amount of disruption to the highway network.
- Reduce the traffic signal fault rate and customer complaints across WSCC
- Introduce new control strategies which will improve traffic flows and reduce congestion
- Refurbishment of a site uses the latest technology, such as LEDs, which uses less energy and hence will generate a revenue cost saving and will contribute to WSCC carbon emission saving targets.
- Reduction in fault rate and the use of the latest technology will enable WSCC to be in a better negotiating position when the signals maintenance contract needs renewal

2. Proposal Details

Although it would be feasible to implement a full asset management plan this would require a budget in the region of £2million per annum. It is therefore proposed that an asset management style programme with a limited budget to enable the rectification of the sites and equipment with the highest need is implemented. This will enable the most pressing categorised rectification works to be programmed and equipment that is unable to be maintained replaced. The programme will be managed by the Traffic Signals and Street Lighting Team, using project management structures and the WSCC gateway process. Funding and status of each scheme will be reported through the Traffic Signals monthly highlight reports to the Highways and Transport Hub.

FACTORS TAKEN INTO ACCOUNT

3. Consultation

Individual scheme consultation will be conducted where there are significant alterations to the junction or crossing layout, and the planned works are not simply a refurbishment of the existing equipment. This will include consultation with the West Sussex Rehabilitation Of Visually Impairment (ROVI) group and any statutory stakeholders.

A full business plan has been developed and recommended for approval through the capital governance process.

4. Financial (revenue and capital) and Resource Implications

- 4.1 The Capital Programme 2018/19 – 2022/23 approved by Full Council in December 2017 and included £1m for the Traffic Signals Refurbishment Programme as a future scheme, funded by corporate borrowing. The funding is split £250k per annum over 4 years, commencing 2018/19.

	Current Year 2018/19 £m	Year 2 2019/20 £m	Year 3 2020/21 £m	Year 4 2021/22 £m
Capital budget	£0.25	£0.25	£0.25	£0.25
Change from Proposal	N/A	N/A	N/A	N/A
Remaining budget	£0.00	£0.00	£0.00	£0.00

- 4.2 The introduction of a partial refurbishment programme will enable WSCC to maintain traffic signal assets in a safe condition although some equipment will still continue to deteriorate require replacement in the future. The status of all the traffic signals installations will continue to be monitored through the inspection process and any potential issues escalated through the appropriate mechanisms.
- 4.3 It is estimated that for every £250,000 spent there will be a reduction of approximately £1,000 in revenue spend per annum, generated by the use of LED technology. The savings will contribute towards the ongoing maintenance of new traffic signals introduced by developers and WSCC improvement schemes.
- 4.4 If no action is taken, the traffic signal assets will continue to deteriorate.

5. Legal Implications

There are no identifiable legal implications as the works will be carried out using the existing contract management arrangement for the current traffic signals maintenance contract which will be in place for the duration of the funding; this project will use the same arrangements, including the same monthly meetings and financial reporting mechanisms.

6. Risk Assessment Implications and Mitigations

The key risk is that with a limited budget, compared to a full asset management plan, some traffic signals won't be replaced in this refurbishment programme. This will potentially create further pressures in the future.

The ability to gain a road space permit, which is the approved permission to manage traffic on the highway network and allow the works to be completed could impact on the programme. However, the programme can be adjusted to locations which have the required available road space permit and can be monitored through the 5 year delivery programme.

7. Other Options Considered (and Reasons for not proposing)

Option Name	Description	Advantages	Disadvantages	Conclusion
Do nothing	Carry on with the reducing revenue budget	No additional finances required	Traffic signals will continue to deteriorate and West Sussex may not be able to fulfil its duty to maintain a safe highway and will ultimately increase traffic congestion.	West Sussex may be open to legal claims and increasing customer complaints Discount
Option 1	Implement a full asset management plan	This will enable the traffic signals to be maintained in optimal working condition and will ultimately reduce the amount of faults and traffic congestion.	The cost to implement would be in excess of £2m per annum and additional staff would be required to manage the programme	The cost is prohibitive Short-List
Option 2	Reactive works only, repair failed or safety critical components of a site	Lower financial investment.	Traffic signal faults will increase which may leave West Sussex open to challenges over the safety of the traffic signals and the road network.	West Sussex may be open to legal claims and increasing customer complaints Discount
Option 3	Partial refurbishment programme	This will enable the rectification works to be programmed and some equipment that	A number of the traffic signal assets will continue to deteriorate and therefore the situation will need to	Limiting the refurbishment work to the top priorities will limit the required budget and enable the

To enable West Sussex to perform its duty to keep the highway in safe working condition the only two viable options are 1 and 3. Although both of these are acceptable, the implementation of a full asset management programme, option 1, would require funding in excess of £2m per annum and would require additional resource to enable the traffic signals team to implement. It is therefore considered that the only practicable option is 3.

8. Equality and Human Rights Assessment

There will be no material impact of the proposal on individuals or identifiable groups as the project will be replacing an existing set of traffic signals with those which use the latest technology and control systems.

9. Social Value and Sustainability Assessment

The main sustainability advantage to implementing the project is the reduction in electricity used to power the new signals and the associated carbon emission reductions. In addition, changes to the traffic signals control strategies will enable the signals to react more quickly to changes in traffic flows, thus reducing congestion and reducing vehicle emissions.

There will be a limited improvement to the social value act implications as the project will be replacing an existing traffic signals system with one that uses the latest technology. Therefore, to individuals and businesses there will be some improvement as the introduction of the new control system will improve journey times and minimise queuing traffic.

10. Crime and Disorder Reduction Assessment

There are no identifiable Crime and Disorder Act implications.

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Appendices : None

Background papers

Business Case (Part II – exempt)