

INTEGRATED PLAN

PART B - STRATEGIC DIRECTION AND FINANCIAL CONSEQUENCES

Highways Portfolio

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Highways Portfolio

Strategic Objectives: Ensuring a safe and efficient highways system & Promoting safe, reliable and sustainable travel.

Scope

- Develop and implement transport strategies
- Deliver core maintenance services to keep the highway network safe and operational
- Work in partnership with others to reduce the numbers of people killed or injured on our roads
- Develop and deliver minor capital Integrated Transport Projects and major capital projects
- Undertake statutory network management and development management functions
- Encourage active travel by delivering cycle training to adults and children, and by ensuring cycling and walking facilities are as safe as possible

Summary of Key Savings Proposals

- LED & CMS Street Lighting Phase 2 – saving £0.404m p.a.
- An invest to save bid for LED Street Lighting phase 4 could save £1.752m p.a. by 2020/21
- Additional Driver Training Income £0.100m p.a.

Key Risks in achieving IP proposals

- Changes within the S106 and CIL regimes and fewer opportunities to match fund, leading to uncertain future funding availability
- Local construction inflation impacting on the sustainability of the Highways Service Term Contract
- Staff shortages due to the buoyant construction industry and the influence of London
- The contract for driver training will be reviewed in 2017/18 and there is a risk that HCC may not be the provider in future.

Summary of budget

	16/17	17/18 forecast	18/19 forecast
Net Budget (Revenue)	£41.0m	£41.9m	£41.2m

Summary of Key Priorities and Programmes

- Seek continuous improvement of the Highways Service through the HST Contract and considering whether to extend or re-procure
- Achieve and sustain top tier performance for DfT Maintenance Incentive Funding
- Support the growth agenda by starting construction of A120 Little Hadham Bypass and A602 Stevenage to Ware and translating emerging strategies for Hemel East, Stevenage and A414 corridor into defined projects for delivery post 2021
- Complete the conversion of Hertfordshire's remaining conventional street lighting to LED and CMS technology
- Review the current financial arrangements in support of the safety camera partnership
- Cycle and driver training
- Education programmes such as 'Learn 2 Live'

Capital Programme

	17/18	18/19	19/20
Capital Programme	£67.4m	£98.5m	£71.3m

Key Capital Schemes:

- Programmes of structural maintenance and Integrated Transport Improvements
- Major Capital Projects such as Little Hadham bypass; A602 Ware-Stevenage and converting lights to LED & CMS

Capital Strategy:

- To reduce the reliance on county council capital funding for highway works through seeking and deploying funding from alternative sources

Highways Portfolio: Future Strategic Direction

1 What are the key priorities for the portfolio over the period 2017/18 – 2019/20?

The key priorities of the Highways Service are to ensure a safe and efficient highway system to **deliver safe, reliable journeys, sustainably**. It will do this by:

- Developing and implementing transport strategies in support of the Local Transport Plan and, in particular, to support the economic and housing growth agenda.
- Delivering core services, which are determined and funded strategically, based upon need. Overall technical strategies and all the core programmes will be determined and delivered using most appropriate current practice and economies of scale. Reactive and responsive works will be related either to safety or asset protection and planned schemes will be conceived and delivered in technically derived programmes for maximum effectiveness and efficiency.
- Supporting elected members in taking decisions, within the overall policy framework, which affect their local area including discretionary Highway Locality Budget funded work using the most efficient methods available.
- Delivering effective network and development management.
- Minimising the draw on County Council resources for delivering maintenance services and infrastructure improvements to support the growth agenda by securing alternative sources and optimising income.
- Continuing development of a collaborative approach to identifying priorities and delivering further reductions in collisions, casualties, costs and community concerns through the Hertfordshire Road Safety Partnership.
- Encouraging active travel by delivering cycle training to adults and children, and by ensuring cycling and walking facilities are as safe as possible, in support of Public Health and environmental priorities.
- Continuing to deliver a School Crossing Patrol Service at prioritised sites across Hertfordshire using new and innovative methods.
- Develop and expand the range and remit of Driver Training undertaken by HCC on behalf of NDORS and the Constabulary.

2 What are the key pressures and challenges facing your portfolio for 2017/18 – 2019/20?

The County Travel Survey, transport planning and pre-application development management help provide robust demographic predictions. The main demographic

changes are associated with traffic growth, changes in travel patterns and modes and the construction of new roads.

The key pressures and challenges facing the service arise from the geography of Hertfordshire, the pressure for growth and development, population change and the high expectations of our communities. The challenge will be to meet those pressures without adversely changing the character of the county.

Budgetary provision is made to fund the maintenance of increased road lengths and capital budgets support the delivery of sustainable transport schemes and Intelligent Transport Systems.

As the economy has improved and major national infrastructure projects are underway, the service is struggling to recruit and retain engineering staff in the face of competition particularly from London.

Similarly the impact of major national infrastructure projects, a recovering economy, increasing energy prices and green taxes are increasing costs.

The Highways Service had to consider 4,000 planning applications in 2013/14, but this is rising to a projected number of 5,200 in 2016/17 with numbers expected to rise further as the economy continues to improve.

Following the award of £170 million from the LEP for infrastructure, the service has a major challenge to progress delivery of a number of high profile infrastructure projects over the next three years including the A120 Little Hadham bypass and A602 improvements whilst enabling the development and delivery of projects such as Metropolitan Line Extension and A1(M) improvements.

The adverse impact on traffic flow through current traffic growth, the 70-80,000 authorised highway activities per year undertaken by HCC, Utilities (gas, electricity etc) intertwined with the growing unauthorised activities is moderated by pro-active network management that keeps traffic moving as efficiently as possible and provides multi-media real time information.

The Highways Service will continue to deliver revenue efficiency savings, particularly through the introduction of 'invest to save' type initiatives, such as the LED lighting and optimising income through Transport Management Act activities.

Maintaining day to day service delivery on the things that matter to local people and members in the face of these pressures and anticipated growth is a major challenge.

A review of the NDORS Driver Training provision in Hertfordshire by the Constabulary which could impact on income and funding for road safety activity.

Competing priorities and reduced capacity within partner organisations leading to reduced levels of collaboration. A subsequent failure to recognise and respond to emerging trends may lead to an increase in the number of casualties.

An increase in the population and subsequent number of road users including older drivers and more cyclists.

3 What are the key projects/programmes that the portfolio will deliver 2017/18 – 2019/20?

The key initiatives are to:

- Ensure that the customer journey is simple, efficient and effective through improved processes and systems, backed up by comprehensive training.
- Evolve and future-proof the Highways Service by seeking continuous improvement through the Highways Service Term (HST) Contract and considering whether to extend the Term Contracts, or to re-procure.
- Following the investment in 2016/17 to mitigate the effects of local construction inflation, continue to deliver efficiency improvements that will enable current service levels to be maintained.
- Help keep up the appearance of the highway assets, following the 2016/17 restoration programme, through the deployment of the High Impact Gangs that were introduced in 2016/17 as part of the ongoing investment.
- Achieve and sustain top tier performance for DfT Maintenance Incentive Funding to retain maximum funding from DfT and to maintain HCC's reputation of being a high performing asset manager.
- Support the growth agenda by:
 - Starting construction of A120 Little Hadham Bypass and A602 Stevenage to Ware improvements
 - Translating emerging strategies for Hemel East, Stevenage and A414 corridor into defined projects for delivery post 2021
- Complete the conversion of Hertfordshire's remaining conventional street lighting to LED and CMS technology (subject to capital funding being made available), which will burn less carbon and provide financial savings for the County Council.
- Introduce Highways Resilience strategies and schemes, which will reduce the amount of highway maintenance operations that typically disrupt the network and reduce the costs of routine maintenance.
- Continue to promote smart working through the Highway Service's 12 point action plan.
- Providing support and leadership to the multi-agency Road Safety Partnership including overview and administration of the Police and Crime Commissioner's Road Safety Fund.
- Continuing to develop and refine the Road Safety Strategic Assessment of Priorities and subsequent Road Safety Strategy in order to focus available resources.

- Prepare tender and bid documents for delivery, and potential expansion, of driver training courses on behalf of the Constabulary.
- Deliver a 4 year Bikeability cycle training programme for children and develop further cycle training and support for adults following the successful award of a £400k grant from the DfT.
- Review the current financial arrangements in support of the Hertfordshire Safety Camera Partnership.
- Coordination of sustainable travel planning arrangements for schools, new developments, businesses and transport hubs.

4 How has the portfolio reviewed its effectiveness / value for money in delivering service outcomes?

A Peer review of the Highways Service, under the auspices of the LGA and the Highways Maintenance Efficiency Programme was undertaken in Summer 2014. The Review Team noted the significant savings made within the service and their headline judgement was that our “approach is brave and we have a strong, ambitious, customer focused organisation with strong political and managerial leadership, talented staff and a desire for continuous improvement”. Various areas of “notable practice,” included the Whole Client Service, which could be of national interest, were identified along with three main areas for the Council to consider improvement, viz. – systems, focusing on the future, and managing public expectations.

Value for money is optimised in the delivery of Highways Service by:

- Taking a risk based approach to service levels across all services
- Adopting strategic, rather than micro-financial management
- Investing in programme planning and co-ordination
- Bulking like-activities into countywide work streams
- Removing inter-organisational boundaries within the Whole Client Service
- Streamlining the design process through the use of ‘walk and build’
- Maintaining competitive tension between contractors
- Reduced personal officer support to members and customers whilst promoting channel shift and the local member community leadership role.

Compared to 2010, the operational service in 2015/16 was being delivered with:

- 87 fewer HCC FTE’s, which equated to a 42% reduction
- £10.1m equating to 26% reduction in revenue budgets for works and services (including budget increases for inflation, growth in network and the like)
- £13.0m equating to 28% reduction in revenue budgets for staff, works and services overall

However, the impact of construction inflation necessitated an ongoing cash injection of £2.3m revenue funding (plus £700k capital) in 2016/17

The increased capital budgets has meant that overall investment in highway maintenance has been fairly stable over the same period and this has enabled the refurbishment and replacement of assets, but not the routine operations.

Traditionally, local authorities have not relished volunteering for benchmarking exercises, while desktop studies undertaken at arm's length by third parties have proved to be flawed. Hertfordshire carried out a 'one-off' benchmarking exercise involving 16 authorities in 2013/14. Other authorities were not keen to participate and so information was requested under FoI legislation. This information showed that HCC was placed in the group's upper to top quartile for vfm for highways maintenance.

However, as the pressures on public spending continue to bite, Highway Authorities across the country are having to re-interpret what is 'safe & operational' and are adapting their service levels to what is affordable. It appears there may be a kindling of desire to benchmark so as to gain comfort that they are not alone in the actions they have had to make and the quality of services that they procure with the funding available.

HCC is therefore attempting again to initiate a voluntary benchmarking exercise with other authorities. The exercise will be capturing comparative cost data, service levels, objective and subjective performance information, working practices and contract models. This will support next year's Integrated Plan process and inform medium term procurement strategies.

For over 10 years HCC has been able to accurately predict the impact of maintenance investment levels on carriageway condition. HCC's targets are to maintain a steady state for carriageways, with A Roads at 8% (in need of repair), B and C Roads at 11% and U-Roads at 17%. The results of the carriageway condition surveys indicate that the 2015/16 maintenance programme delivered condition results of 3%, 6% and 15% respectively.

The tools to enable effective asset management of bridges became available nationally in 2014/15. It is now possible to predict long term condition performance against investment levels. The annual capital budget of £4.5m from 2016/17 onwards is aimed at ensuring the risks to HCC remain at steady state.

Hertfordshire has a high density of street lights. For example, Hertfordshire has almost double the quantity maintained by Gloucestershire County Council, but HCC's operational costs per column are approximately only 2/3 of those of GCC.

The adoption of the County Council's 'Safe and Operational' policies including Part Night Lighting has enabled HCC to reduce its revenue budget from £9.2m in 2010 to £6.1m in 2016/17 despite energy cost increases and the introduction of carbon tax.

A recent restructure of the Transport Access and Road Safety (TARS) team has delivered a substantial reduction in staff costs and FTEs. The road safety team has been completely redesigned and teams have merged to deliver a single point of contact for all school related issues including road safety, school crossing patrols, sustainable travel and cycle training.

Third party evaluation of Learn 2 Live has identified positive changes in attitude for attendees in a range of issues including drink and drug driving, use of mobile phones and speeding. Furthermore 80% of attendees felt they had benefited from attending.

The numbers of people killed and seriously injured on Hertfordshire's roads are at historically low levels. However recent data suggests figure may be plateauing. The Road Safety Partnership continues to monitor the situation closely and identify emerging trends.

5 What are the key savings proposals that have been identified to meet the budget gap 2017/18 to 2019/20; what additional actions will need to be taken to achieve these, and what are the potential impacts?

The Highway's service has embarked on a series of initiatives aimed at achieving the same service outputs and outcomes by delivering services more efficiently in order to mitigate against the ongoing impacts of inflation flamed by the construction industry and provide greater resilience.

A review of the street lighting service has identified fluctuating service demands through the seasons and changing productivity levels, for example. The resulting proposal addressed the consequential inefficiency by changing the modus operandii of the service, which now enables a usage of latent resource for scouting day burners and cleaning illuminated signs.

The invest to save projects to introduce LED lighting under the Central Management System (CMS) Phase 2 and 3 have been combined and are well underway.

A £19m project to convert the remaining conventional lighting over 2-3 years starting in 2017/18 is being considered. Once all street lighting is under CMS control, the street lighting service can be redesigned, which could mean only scouting of illuminated signs would be required, which can be done on a less frequent basis and street lights could be dimmed further, both options giving further savings.

The TARS unit underwent a significant review of functions and resources required to deliver its diverse range of services. This will deliver savings across the Highways and Environment, Planning & Transport portfolios of £271,000 by April 2017.

6 What are the key risks in delivering projects and programmes for this portfolio, and what mitigations are in place? What steps are being taken to ensure resilience?

The major risks to delivery are:

- The impacts of climate change, which can potentially lead to roads melting, freezing and flooding all within one year.
- The state of flux within the S106 and CIL regimes and fewer opportunities to match fund, leading to uncertain future funding availability.

- Local construction inflation impacting on the sustainability of the Highways Service Term Contract.
- Staff shortages due to the buoyant construction industry and the influence of London.
- Managing customer expectations for service levels that the County Council cannot afford.

Mitigating in-year weather events tend to require a re-programming of works and a fresh casting of the budget

Hertfordshire's chalk geology leads to the particular risk of highway collapse due to swallow holes or the historical digging of chalk pits. Highways law indicates that HCC is only responsible for the 'top two spits' of the highway, so HCC is not responsible for the full remediation costs of such a collapse.

Strategies are being developed within 2016/17 to tackle risks around tree health, including Ash Die Back, Oak Processional Moth and Oriental Gall Wasp.

The service structure, levels of service, affordability and efficiencies are consistently under review, in order to deliver a sustainable service for the future and try to mitigate inflation. However, if the market remains heated this approach may not be sufficient and service reductions may need to be considered.

Customer expectations will be better managed through improved communications particularly through new web pages and the integration of HCC and Ringway Communications teams.

The Highways Service is developing strategies to develop a pipeline of talent and a robust talent development programme to ensure it retains key staff. In particular, these include growing our own staff through the introduction of apprenticeships, pro-actively searching for interns and creating a graduate programme.

The Transport Access and Road Safety works in partnership with the Hertfordshire Police force to deliver the NDORS Driver Training provision. The contract for this service will need to be reviewed in 2017-18 and there is a risk that the county council might not be successful in delivering this scheme in the future. The benefit to Hertfordshire in delivering this service is significant as it brings in a significant income to the council that is then reinvested into its road safety activities and educations and training programmes. Officers are working closely with the police to develop and business case to bid for future contracts.

KEY BUDGET MOVEMENTS 2017/18 - 2019/20

	2017/18 TOTAL £000s	2018/19 TOTAL £000s	2019/20 TOTAL £000s
Service Specific Inflation	466	466	466
Demography	31	92	183
Other Pressures	(23)	(173)	(173)
TOTAL PRESSURES	8	(81)	10
Existing Efficiencies	(54)	(81)	(104)
Existing Policy Choice	(404)	(404)	(404)
New Efficiencies	(223)	(223)	(223)
New Policy Choice	35	(534)	(1,078)
TOTAL SAVINGS	(646)	(1,242)	(1,809)

Ref	Description	Dept	Type of budget movement	2017/18 TOTAL £000s	2018/19 TOTAL £000s	2019/20 TOTAL £000s	Approximate current budget £'000
	Technical Adjustments						
	None						n/a
	Service Specific Inflation						
	<u>Highways Maintenance - Ringway (1.30%)</u> Calculation based on Highways Term Maintenance Association (HTMA) indices	Environment	Service Specific Inflation	304	304	304	23,399
	<u>Highways Maintenance - Opus (2.0%)</u> Calculation based on RPIX as per advice from our contract consultant BuroHappold at the time to contract documents were being put together	Environment	Service Specific Inflation	162	162	162	8,090
	Pressures						
D07	<u>Road length increases - routine maintenance</u> Additional budget is required to finance the extra maintenance requirements due to increased road adoptions for new residential and commercial developments.	Environment	Demography	31	92	183	16,864
OP05	<u>Essential Upgrade of Highways Asset Management System</u> This is the removal of a pressure that was added in 2016/17 for an update to the highways asset management system for which supplier support is being withdrawn.	Environment	Other Pressures	(50)	(100)	(100)	n/a
OP07	<u>Budget for Additional County Councillor</u> Due to boundary changes, next year's county elections will see the number of county councillors raised by one to 78. The extra cost assumes a full allocation for revenue element of highways locality budget (expenses and locality budget handled via Resources & Performance portfolio).	Environment	Other Pressures	27	27	27	2,079

Ref	Description	Dept	Type of budget movement	2017/18 TOTAL £000s	2018/19 TOTAL £000s	2019/20 TOTAL £000s	Approximate current budget £'000
OP09	<u>Legal Support for Procurement</u> The terms of the Highways Service Team and Client Support Team contracts requires the County Council to notify the contractors by 31/3/18 if it intends to extend the contracts. If the contracts are extended it is likely that the county council will want to negotiate changes to the contract. If a decision is taken to re-procure, significantly more resources are likely to be required.	Environment	Other Pressures	100	0	0	n/a
OP11	<u>Highways - Reacting to Ash Dieback and Other Tree diseases</u> A review of this pressure has enabled it to be reduced by £100,000 per year.	Environment	Other Pressures	(100)	(100)	(100)	14,205
Savings							
ENV01	<u>LED & CMS street lighting Phase 2 - Invest to save</u> Introduce LED lighting under centrally managed service control with 25% dimming and trimming to all sites currently in full night lighting.	Environment	Existing Policy Choice	(404)	(404)	(404)	3,830
ENV02 (X1)	<u>Printing Contract Savings</u> Savings through a reduction in print costs achieved through the new managed print service contract.	Environment	Existing Efficiencies	(8)	(9)	(9)	n/a
ENV07 (X3)	<u>Review of Departmental Overheads</u> Savings will be achieved in the department's overheads.	Environment	New Efficiencies	(98)	(98)	(98)	710
ENV14	<u>Revenue impact of the LED Street Lighting – Phase 4 Capital programme</u> This bid is for the capital funding to convert this remainder [69,800 Street Lighting Lanterns] to LED/CMS. A comprehensive review of the potential to save revenue costs has been undertaken based on how a new street lighting service would operate utilising LED/CMS technology across the whole lighting asset. This is based on the assumption that all lighting is dimmed by 25% for the whole lighting period, and trimming applied to switch the lights on later in the evening, and off earlier in the morning (in line with existing national practice). • Annual Maintenance saving resulting from redesigning the street lighting service, Energy & Carbon Tax and Consultancy.	Environment	New Policy Choice	35	(503)	(1,047)	15,656
ENV15	<u>Revenue impact of the Street Lighting Refurbishment Programme – 2017/18-2019/20 Capital programme</u> There is a need to discharge the County Council's statutory duty under the Highways Act, 1980 to maintain the public highway in a safe condition, thus ensuring the safe and efficient movement of people and goods in line with the hierarchy.	Environment	Existing Efficiencies	0	(26)	(49)	15,656
ENV16	<u>Revenue impact of the Replacement of Existing Belisha Beacons with LED Units Capital programme</u> This bid sets out the proposal to replace the existing units with LED technology, which will significantly reduce both the energy consumption and ongoing maintenance visits. It is estimated there will be an annual reduction in maintenance costs, with a potential saving in charges associated with energy and carbon tax.	Environment	New Policy Choice	0	(31)	(31)	370

Ref	Description	Dept	Type of budget movement	2017/18 TOTAL £000s	2018/19 TOTAL £000s	2019/20 TOTAL £000s	Approximate current budget £'000
ENV20	<u>Driver Training</u> Each of the last 4 years has seen a growth in the number of National Driver Offender Retraining (NDORS) courses delivered by HCC Driver Training to meet demand (in line with national growth trends) and the introduction of a new motorway course in 2017 which HCC will deliver on behalf of the police alongside the 6 existing courses means income is expected to increase.	Environment	New Efficiencies	(100)	(100)	(100)	-925
ENV22	<u>Safety Camera Partnership</u> The conversion to digital is nearing completion and digital technology requires less maintenance than traditional wet film cameras so the contribution HCC provides to the Partnership can be reduced.	Environment	New Efficiencies	(25)	(25)	(25)	244
ENV23 (X2)	<u>Enabling the Worker Savings</u> More extensive use of new technology, greater flexibility provided by remote working and a smarter approach to work planning will result in efficiencies and increased productivity.	Environment	Existing Efficiencies	(46)	(46)	(46)	n/a

Note 1

A number of pressures and savings impact on a several portfolios. The total amounts across all portfolios is given here:

Savings - Printer savings cross cutter (X1)

Savings - Enabling the worker (X2)

Savings - Environment departmental overheads (X3)

(76)	(113)	(113)
(1,122)	(1,807)	(1,807)
(174)	(174)	(174)

ANALYSIS OF REVENUE BUDGET BY OBJECTIVE AREAS

2016/17 Original Net Budget £'000	Objective Area	Gross Budget 2017/18 £'000	Income £'000	Net Budget 2017/18 £'000	Net Budget 2018/19 £'000	Net Budget 2019/20 £'000
	Environment					
	<u>Structural Maintenance</u>					
4,080	This primarily consists of works which slow the rate of highway deterioration caused by wear and tear or extreme weather	4,252	(121)	4,131	4,130	4,130
	<u>Routine Maintenance</u>					
16,950	This area covers work of a cyclical nature required to maintain highways in a serviceable and operational condition, such as grass cutting, emptying gullies, keeping signals operational and sign cleaning.	18,069	(932)	17,137	17,198	17,289
	<u>Winter Maintenance</u>					
3,367	Aimed at keeping roads and footpaths open and as safe as possible during periods of severe cold winter weather, most of the budget is spent on precautionary salting but provision is also made for the emergency clearance of snow and ice	3,410	0	3,410	3,410	3,410
	<u>Lighting</u>					
6,530	This budget covers the regular maintenance and energy costs of all aspects of road lighting – lit signs and bollards as well as the county's 100,000 plus street lights	7,397	(122)	7,275	6,680	6,113
	<u>Traffic Management and Safety</u>					
4,582	The primary aim of this budget is to reduce road accident casualties and improve movement. This means addressing the issues of safety, ease of movement and environmental concerns of all road users - motorists, pedestrians, cyclists and those affected by, or living alongside, roads	6,335	(2,019)	4,316	4,315	4,315
	<u>Transport Planning Policy and Strategy</u>					
3,860	This budget is concerned with the development and monitoring of transport policies providing the basis for bids made to government and other external funding sources and the development of transportation plans. It is also the place where the charges made to utilities under the New Roads and Street Works Act and Traffic Management Act to reduce congestion are managed.	8,587	(4,667)	3,920	3,769	3,769
	<u>Advance Preparation and Consultation</u>					
1,652	The department has a medium term programme of projects which are in preparation. Part of this development work requires close working with local communities and consulting widely on all transportation schemes.	1,668	0	1,668	1,668	1,668
41,021	Environment Total	49,718	(7,861)	41,857	41,170	40,694

Proposed Highways Portfolio Capital Programme 2017/18 to 2019/20

The total proposed Capital Programme 2017/18 to 2019/20 for the portfolio is £237.183m and for 2017/18 is £67.367m. This includes all new bids and re-programming from 2016/17 at the end of quarter 2. HCC Funding of £37.263m is requested in 2017/18 and £117.114m over the next 3 years.

	2017/18 £m	2018/19 £m	2019/20 £m	Total £m
HCC Funding	37.263	41.035	38.816	117.114
Grant	22.171	21.510	21.510	65.191
Contributions	7.933	35.992	10.953	54.878
Reserves	-	-	-	-
Total	67.367	98.537	71.279	237.183

New Capital Bids

The Portfolio has proposed 3 new capital bids, as below. The new schemes have capital costs over the total project lives of £20.184m, of which £20.084m is HCC funding.

Scheme	Total Cost 2017/18	HCC Funding 2017/18	Total Cost project cost including 2017/18	Total HCC funding for the project	Total External Funding for the project
	£m	£m	£m	£m	£m
A120 – Standon Highway Improvements Highways Improvements to the A120 through the Village of Standon in East Herts to reduce the severance caused to the community by the road and maintain traffic flows. - No revenue impact	0.100	0.100	1.600	1.500	0.100
LED Street Lighting Programme Phase 4 Convert remaining 69,800 non LED part night lanterns to LED/CMS. This will provide the ability to control the level of lighting & the operating period, and as a consequence, reduce costs associated with energy and carbon emissions. Net Revenue (excluding capital borrowing costs) savings are projected at £503k in 18/19, £1,047 in 19/20 and £1,752 per year after.	6.167	6.167	18.500	18.500	-
Replacement of Belisha Beacons Convert 388 Belisha beacons to LED. Saving on energy and maintenance costs (£31k per year). There will be a cost of £48.5k every 6 years when the units need replacing.	0.084	0.084	0.084	0.084	-

Revised Capital Bids increasing total HCC Funding- Annual Programmes

The portfolio has 8 bids for annual programmes, of which 4 increase total HCC funding in 17/18 (by £4.51m). These 4 bids total £19.891m in HCC funding and £17.310m from other sources, an increase of £13.137m HCC funding over the next 3 years. If approved, this will need funding from additional borrowing.

The Drainage Resilience and Footway & Cycle path maintenance bids were both previously incorporated as one bid within the maintenance of carriageways. The single bid made in last year's programme was for £12.905m of HCC funding per annum. The combined three revised bids are for £17.197m of HCC funding in 17/18 and a further £17.197m per annum after.

Scheme	Additional Cost 2017/18	Total HCC Funding 2017/18 to 2019/20	Additional HCC Funding 2017/18 to 2019/20	
	£m	£m	£m	
Maintenance of Carriageways an ongoing project to extend the life of the highway carriageway infrastructure and ensure they meet their full service potential and preserve their value to Hertfordshire	2.292	36.591	7.176	The service re-costed, from zero base the funding needed to keep the carriageways at current target standards for the medium term.
Highways Drainage Resilience	1.000	6.900	3.000	The service re-costed, from zero base, the funding needed to keep the drainage resilience at current target standards for the medium term.
Footway and Cycle path maintenance	0.900	8.100	2.700	The service re-costed, from zero base, the funding needed to keep the footways and cycle paths at at current target standards for the medium term..
Street lighting refurb and emergency maintenance	0.318	7.485	0.261	Increase in funding requested due to an increase in column replacements and an increase in the unit cost.

Revised Capital Bids increasing total HCC Funding- Projects

The portfolio has 1 Capital Bid which increases total HCC funding since last year's Capital Programme. The scheme has been reprofiled and has some additional costs, including a further £0.5m HCC funding in 2017/18 to meet the costs of design and build, following a review of available funding.

Scheme	Additional Cost 2017/18	HCC Funding 2017/18	External Funding 2017/18	Total Additional Cost 2017/18-2019/20	Total Additional HCC funding 2017/18-2019/20	Total Additional External Funding 2017/18-2019/20	
	£m	£m	£m	£m	£m	£m	
A120 Little Hadham Bypass	(12.205)	0.500	(12.705)	3.323	0.500	2.823	An additional £0.500m HCC funding is requested to fund the design and build which is being carried out up front.

Funding Risks

The Maintenance of the Highway asset to prolong serviceable life assumes grant funding of £17.31m per annum. The grant allocation declines in future years but there is the opportunity to top this up with the 'incentive fund' allocation. This is dependent on HCC achieving a level of performance yearly as measured by a DFT self-assessment questionnaire.

In 16/17 HCC met the mid band, which provided the same funding as the top. However, in future years the level of funding becomes far more dependent on performance. The bid assumes HCC will achieve the top rating but this is dependent on HCC finishing a number of tasks. Failure to achieve this and achieving the mid would result in a decrease of £0.15m in funding in 2017/18 and £2.535m over the next 3 years. Any shortfall in grant funding will have to be met by a reduction in the capital programme.

Proposed Highways Capital Programme 2011/18-2019/20

		2017/18 Integrated Plan				2018/19	2019/20	
<u>Highways</u>		Total Scheme Cost	Cost	HCC Funding	Grants	Contribution	Cost	Cost
<i>New Request (N) or Existing Request (E) or Revised Request (R)</i>		£'000	£'000	£'000	£'000	£'000	£'000	£'000
1	Maintenance of carriageway assets to prolong serviceable life (R): This is an ongoing project to extend the life of the highway infrastructure assets. HCC is responsible for 5,112km of roads. Funding will be drawn from a combination of the DfT Highway Maintenance Capital Funding Block, supplemented to the required level by County Capital. *Note that the DfT needs-based allocation declines in future years but there is the opportunity to see this topped up through the incentive fund process which maintains a steady level of funding overall, subject to suitable performance in key areas such as asset management on the part of HCC. The bid assumes that HCC's performance is sufficient to maintain that constant level of DfT funding.	Annual Programme	29,507	12,197	17,310	-	29,507	29,507
2	Pothole Grant (N) Central Government funded grant to be used on improving the state of the highways.	1,293	1,293	-	1,293	-		
3	Highways Drainage Resilience (R) This aims to extend the life of the highway drainage assets and ensure they meet their full service potential. While routine cleaning and minor maintenance sits as part of the HST contractor-directed service, this programme carries out major repairs, renewals, and upgrades to the highway drainage system.	Annual Programme	2,300	2,300	-	-	2,300	2,300
4	Footway & Cycleway Maintenance (R) This is an ongoing project to extend the life of the highway 5376km footway and 99km cycleway infrastructure and ensure they meet their full service potential and preserve their value to Hertfordshire. This is delivered by means of a county-wide programme of targeted preventative treatments on identified sections and repair/ rehabilitation of failing/failed sections when practicable.	Annual Programme	2,700	2,700	-	-	2,700	2,700
5	Integrated transport projects to deliver Local Transport Plan (LTP) Targets (R): Accessibility, Casualty Reduction, Congestion, Cycling, Mode Share to School, Quality of Life, Speed Compliance, Passenger Transport Infrastructure and Intelligent Transport Systems.	Annual Programme	6,209	-	3,568	2,641	8,200	8,200

	Highways <i>New Request (N) or Existing Request (E) or Revised Request (R)</i>	Total Scheme Cost £'000	2017/18 Integrated Plan				2018/19	2019/20
			Cost £'000	HCC Funding £'000	Grants £'000	Contribution £'000	Cost £'000	Cost £'000
6	LED Street Lighting Programme – Phase 4 Programme for completion of LED replacement (N): The Council are currently progressing through a phased programme to convert the existing street lighting to light emitting diodes (LEDs), which are controlled by a Central Management System (CMS). There are circa 115,500 street lighting lanterns, of which around 45,700 will be converted to LED/CMS upon the completion of Phases 1, 2 and 3 by March 2017 . This leaves a remainder of approximately 69,800 existing non LED lanterns which operate on a part night basis. This will continue imcreasing the savings from phase 1,2 & 3. The replacement is expected to mean an extra cost of £35k in 1718, £70k in 1819 and £106k in 1920.However, it is expected to make savings of £573k in 18/19, £1153k in 19/20 and then rising to an ongoing savings of £1.858m per year.	18,500	6,167	6,167	-	-	6,167	6,166
7	A602 Improvements Stevenage to/from Ware (R): The road is dual carriageway through the urban areas of Stevenage but the rest of its length to Ware is predominantly rural single carriageway. It is considered to be of low standard for a primary route, with junction and alignment issues and poor visibility. The proposed A602 scheme comprises a series of improvements at various locations to upgrade the overall standard of the route, ease congestion, reduce journey times, improve journey time reliability and improve safety characteristics. The Local Transport Body will provide £18.5m capital funds for delivery of a Local Major Transport Scheme. £18M of this is accounted for in the funding profile.	24,350	5,197	-	-	5,197	14,043	2,574
8	Highways Locality Budget (R): The Highways Locality budgets are designed to achieve two of the key Hertfordshire Local objectives by allocating resources to local County Councillors and encouraging them to direct funding in consultation with residents and local communities.	Annual Programme	4,893	4,893	-	-	4,893	4,893
9	Maintenance of Bridges and Highway Structures (R): Project to extend the life of Highway infrastructure assets and ensure they meet their full service potential and their value is preserved. The County is responsible for the safe upkeep and maintenance of 1,768 bridges and highway structures including several large multispan viaducts. Asset management modelling has determined that an annual investment of £4.5m in bridge maintenance will hold the bridge stock at a 'steady state condition'. This steady state will mean Hertfordshire's 'risk' of bridge collapse or bridge restrictions (such as weight limits) will not increase.	Annual Programme	4,950	4,950	-	-	4,950	4,950

	Highways <i>New Request (N) or Existing Request (E) or Revised Request (R)</i>	Total Scheme Cost £'000	2017/18 Integrated Plan				2018/19	2019/20
			Cost	HCC Funding	Grants	Contribution	Cost	Cost
			£'000	£'000	£'000	£'000	£'000	£'000
10	Street Lighting Refurbishment and Emergency Replacement (R): Replaces old and inefficient lighting equipment (street lighting, illuminated traffic signs, subway lighting, private cable network and high mast units), removes potentially dangerous equipment, and contributes to Corporate objectives of health & well-being and independent living by ensuring safe neighbourhoods (i.e. reduction of crime and the reduction in fear of crime) and reducing carbon emissions. Savings of £26k in 18/19, £49k in 19/20, rising to £70k pa due to a reduction in annual maintenance costs and charges associated with energy and carbon tax.	Annual Programme	2,694	2,694	-	-	2,432	2,359
11	Signals Refurbishment (R): The Traffic Management Act) requires HCC to ensure the "expeditious movement of traffic" and the Highways Act requires HCC to ensure that highways are safe. Capital expenditure is largely spent on replacement parts to bring sites up to current standards and typically include poles, lighting units and control systems. This has been revised to include 1% HTMA inflation.	Annual Programme	663	663	-	-	670	677
12	A120 Bypass (Little Hadham) (R): The A120 Bypass (Little Hadham) project will provide a northern 3.9km bypass to the village of Little Hadham. The bypass also includes a flood alleviation scheme which would be delivered in collaboration with the Environment Agency. The flood alleviation scheme will result in a reduction of flood risk to Little Hadham. With the bypass in place, congestion would be removed in the village and journey times along the A120 would be reduced and journey time reliability will be improved. After the project is completed there is potential revenue cost of £35k pa due to operational and maintenance costs for signals, pumps, lighting, swales etc, starting 20/21.	33,990	595	500	-	95	21,175	6,953
13	A120 Standon Highway Improvements (N) Further assessment and subsequent delivery of Highways Improvements to the A120 through the Village of Standon in East Herts to reduce the severance caused to the community by the road and maintain traffic flows.	1,600	100	100	-	-	1,500	-
14	Replacement of Belisha Beacons (N) This bid sets out the proposal to replace the existing units with LED technology, which will significantly reduce both the energy consumption and ongoing maintenance visits. This will create £31k savings but also need replacing every 5 or so years, costing £48.5k.	84	84	84	-	-	-	-
15	Highways network revisions in response to new A5 - M1 Link Road	215	15	15	-	-	-	-
TOTAL FOR HIGHWAYS			67,367	37,263	22,171	7,933	98,537	71,279