INTEGRATED PLAN

PART B - STRATEGIC DIRECTION AND FINANCIAL CONSEQUENCES Highways Portfolio

Contents	Page
Portfolio on a Page	129 - 130
Section 1: Future Strategic Direction	
 Key priorities for the portfolio over the period 2018/19 – 2021/22 	131
 Key pressures and challenges facing the portfolio for 2018/19 – 2021/22 	132
 Key projects/programmes that the portfolio will deliver 2018/19 – 2021/22 	133 - 134
 Benchmarking and other information used in setting Strategic Direction and assessing service outcomes 	134 - 135
Key Savings proposals and impact	136
Key Risks, mitigation and resilience plans	136 - 137
Section 2: Revenue Budget Information	
 Key Budget Movements: Technical Adjustments Exceptional Inflation Pressures Savings 	138 - 139
Revenue Budget by Objective Area	140
Section 3: Capital Programme	141 - 149

Highways

Strategic Direction

Ensuring a safe and efficient highways system & promoting safe, reliable and sustainable travel.

Key priorities and programmes

- Seek continuous improvement of the Highways Service through the extended HST Contract
- Sustain top tier performance for DfT Maintenance Incentive Funding
- Support the growth agenda by developing a Highways & Transport Infrastructure programme, starting construction on A120 Little Hadham Bypass, translate 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

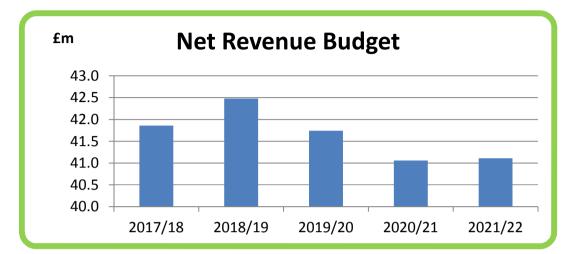
Key services provided

- 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

Key risks in achieving IP proposals:

- Local construction inflation outstripping efficiencies, impacting on the sustainability of the Highways Service Term Contract
- Staff shortages due to the buoyant construction industry and the influence of London

Highways



Summary Revenue Budget Movements

	2018/19 TOTAL £000	2019/20 TOTAL £000	2020/21 TOTAL £000	2021/22 TOTAL £000
Service Specific Inflation	1,116	1,116	1,116	1,116
Previous Policy Decision	50	0	0	0
Demography	64	94	124	155
Other Pressures	(150)	(150)	(115)	(65)
TOTAL PRESSURES	(36)	(56)	9	90
Existing Efficiencies	(7)	(7)	(7)	(7)
Existing Policy Choice	(468)	(1,012)	(1,717)	(1,717)
New Efficiencies	(75)	(248)	(294)	(321)
TOTAL SAVINGS	(550)	(1,267)	(2,018)	(2,045)

	2018/19	2019/20	2020/21	2021/22
	£000	£000	£000	£000
Capital Programme	84,394	110,378	94,728	65,843

Key Revenue Pressures

- Funding required to maintain increased road lengths resulting from A5 de-trunking and adoptions of new roads
- County Travel Survey

Key Revenue Savings Proposals

- Continue LED Street Lighting Phase 4 saving £1.752m p.a. by 2021 and develop further invest to save initiatives for electrical assets for 2019/20 onwards
- Combat local inflation by improved efficiency

Key Capital Schemes

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

Highways Portfolio: Future Strategic Direction

1 What are the key priorities for the portfolio over the period 2018/19 – 2021/22?

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 a core 'Safe & Operational' service, which is 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.
- Improving customer access to the service and enabling them to better fathom
 what services we do and, do not deliver and the standards we work to.
- 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 funding sources and optimising income.
- Continuing development of a collaborative approach to reduce collisions, casualties, costs and community concerns through the Hertfordshire Road Safety Partnership.
- Increasing active travel by delivering cycle training to adults and children, developing travel plans, encouraging children to walk to school and by promoting increased use of cycling and walking infrastructure, in support of HCC Transport, health and environmental strategies.
- Continuing to deliver a School Crossing Patrol (SCP) service that reduces road traffic casualties, encourages more children and parents to undertake daily physical activity by walking to school and meets public expectations, whilst minimising the cost to the authority.
- Develop and expand the range and remit of Driver Training undertaken by HCC on behalf of the National Driver Offender Retraining Scheme (NDORS) and the Constabulary.

What are the key pressures and challenges facing your portfolio for 2018/19 – 2021/22?

The County Travel Survey, transport planning and pre-application development management help provide robust demographic predictions. The main demographic changes come about from traffic growth, changes in travel patterns and modes and the construction of new roads associated with the drive for economic and housing.

The growth will increase the demand for travel, despite the improvements in technology enabling more Smart working.

The challenge will be to meet those pressures without adversely changing the character of the county.

Technology will have a bearing in a number of ways, via:

- Enabling greater accessibility to and from customers who will be desiring an interactive, responsive service
- Enabling the Highways Service to improve its communications, processes and design efficiency
- The revolution in transport technology enabling 'Movement As A Service' and the onset of autonomous, electric vehicles

As the surge of national infrastructure projects continues, the service is struggling to recruit and hold onto 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.

Whilst HCC has been very successful in securing funding for its current major portfolio (A120 Little Hadham Bypass; A602 Stevenage to Ware and MLX) and medium sized projects such as Essex Road and A10 Buntingford Roundabout through DfT and LEP funding challenges, it now does not have a ready bank of deliverable schemes sufficiently prioritised and progressed to bid for.

The impact on traffic flow through current traffic growth, the 70-80,000 authorised highway activities per year undertaken by HCC, Utilities alongside the blight of 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 cardinal challenge is that the boom in capital investment in infrastructure is not mirrored by the growth in revenue needed to develop and maintain the infrastructure and to support the day to day service delivery on the things that matter to local people and members.

Competing priorities and reduced capacity within partner organisations are leading to fewer driver training (speed awareness) courses being delivered by HCC. This potentially could lead to a reduction in the resources available for road safety prevention activity. This is to be considered within an emerging context of an increasing number of road casualties in Hertfordshire after many years of decline.

What are the key projects/programmes that the portfolio will deliver 2018/19 – 2021/22

The key initiatives are to:

- Ensure that the customer journey is simple, efficient and effective through improved processes and systems, anchored by comprehensive staff training.
- Evolve and future-proof the Highways Service by seeking continuous improvement through the extended Highways Service Term (HST) Contract
- Continue to deliver efficiency improvements that will enable current service levels to be maintained in the face of continued inflation.
- Maintain the serviceability of the highway and thus stem the need for a future Restoration programme by introducing annual campaigns of Routine maintenance directed by HCC and funded by revenue liberated by restructuring the HLB funding model. Campaigns could include fixing broken signs and fencing, refreshing lines, controlling vegetation etc.
- Sustain top tier performance for DfT Maintenance Incentive Funding and ensure that its approach takes on board the new code of practice 'Well Maintained Highway Infrastructure' in order to retain peak funding from DfT and keep HCC in the vanguard.
- Support the growth agenda by:
 - Delivering A120 Little Hadham Bypass; Essex Road, A10 Roundabout at Buntingford and A602 Stevenage to Ware improvements
 - Translating emerging strategies for Hemel East and the Enterprise Zone,
 Stevenage and A414 corridor into defined projects for delivery post 2021
 - Producing a master Highways & Transport Infrastructure Programme (HTIP) to capture all of the medium sized and major projects, which will enable HCC to
 - Deploy resources more effectively;
 - Give clarity to potential partners about HCC's role;
 - Chase funding opportunities to deliver HCC's priorities.
 - Developing a bow wave of business cases for medium sized projects to put HCC on a better tack to compete for funding.
 - Re-focusing DfT's ITP Block Allocation towards delivering medium sized projects
- Complete the conversion of Hertfordshire's remaining conventional street lighting to LED and CMS technology and introduce new dimming strategies to burn even less carbon and avoid costs. Introduce greater resilience to the ageing cable network.

- Introduce Highways Resilience strategies and schemes, which will reduce the amount of highway maintenance operations that typically disrupt the network and to reduce the costs of routine maintenance.
- The future Highways Service Model will need to have been identified by 2021/22 in readiness to start the procurement of the next highways contracts.
- 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.
- To provide oversight and administration of the Police and Crime Commissioner's Road Safety Fund, ensuring that the PCC's fund continues to contribute and add value to HCC priorities.
- Continuing to focus and target available resources by developing and refining the Road Safety Strategic Assessment of Priorities and Partnership Road Safety Strategy through adoption of a 'Safe Systems' approach.
- Prepare tender and bid documents for delivery, and potential expansion, of driver training courses on behalf of the Constabulary.
- A range of initiatives including promotion, publicity and reassurance designed to increase the numbers of people walking or cycling particularly for short journeys.

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

One of the key milestones during 2017/18 was the decision to extend the Highways Service Term (HST) contract and the Client Support Term (CST) contracts.

The extensive exercise undertaken to inform the decision included consulting with, and benchmarking against other highway authorities across the country.

The exercise concluded that there was nothing to suggest that there are better services or contract models in the market and that Highways Authorities are cutting their jibs very much to meet their own, local circumstances.

Research, including the recent benchmarking exercise suggests that HCC is almost unique in its approach to providing funding for member discretion, with only a few Unitaries in the north of England providing something similar.

Most Highways Services have a defining feature that influences their overall model and its scope for effectiveness and efficiency. The model for North Yorks CC, for example, was designed around the needs of its winter service. The approach to locality is recognised as HCC's defining feature.

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 from 2016/17 onwards to keep the service on an even keel.

In broad terms, HCC has halved the number of classified (A, B and C roads) roads in 'poor' condition over the past five years through the capital funded programmes.

This triggered a review of condition targets and July 2017 Cabinet agreed new targets based on current condition vis:

Classification	Target
A - Roads	3%
B & C - Roads	6%
Unclassified - Roads	15%

The percentages refer to the proportion of the network that 'should be considered for maintenance' and therefore broadly equate to the number of roads in a 'poor' condition; a lower number is consequently better.

HCC is able to predict long term condition performance of its bridge stock against investment levels and has introduced a programme to ensure it remains at steady state.

A recent restructure within the Transport Access and Road Safety team has delivered £271k or 13% savings through 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

What are the key savings proposals that have been identified to meet the budget gap 2018/19 – 2021/22; what additional actions will need to be taken to achieve these, and what are the potential impacts?

The major savings in the service were driven out during with the design of the current service model and the crafting of the HST contract that prevents the contractor over-recovering overheads and limits its margins.

Hence, there is limited scope to drive future savings from either the current contractor's business, or any future contractor, unless the markets ail and deflation sets in.

Savings will therefore be driven through working more efficiently, doing things differently, or doing fewer things.

A thorough review of income and charging opportunities will be undertaken in 2018/19.

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 (permits, licences and penalties for breaches).

There are further opportunities to deliver savings in energy and operational maintenance by investing in the modernisation of other electrical assets including signals, Baldock Tunnel lighting and illuminated signs.

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:

- Local construction inflation thwarting the sustainability of the Highways Service Term Contract.
- The impacts of climate change, which can potentially lead to roads melting, freezing and flooding all within one year. Excessive swings in moisture content can create heave to shrinkage movements in the subgrade, creating failure of the road.
- Hertfordshire's chalk geology leads to the particular risk of highway collapse due to swallow holes or the historical sinking of chalk pits.
- Staff shortages due to the buoyant construction industry and the influence of London.
- Potential swamping of the Development Management service by the scale of planning applications and developments
- 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

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 counter inflation. However, if the inflation costs beat the efficiency savings then service reductions may need to be considered.

The service will reach out to customers through new web pages (which will be easier to navigate) and the use of new media and improve the quality and reliability of communication through the integration of HCC and Ringway Communications and training of CSC staff.

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 apprenticeships, pro-actively searching for interns and running a graduate programme.

HCC works in partnership with Hertfordshire Constabulary to deliver the suite of NDORS Driver Offender Retraining Courses. The contract for this service is due to expire and, due to the number of other service providers, there is a risk that the County Council is not successful in regaining the contract. As previously stated there has been a recent reduction in the number of referrals to speed awareness courses which could directly impact on a range of non-statutory HCC road safety prevention activity. Work is already underway to prepare a response document to any invitation to tender received from the Constabulary.

KEY BUDGET MOVEMENTS 2018/19 - 2021/22

	2018/19 TOTAL	2019/20 TOTAL	2020/21 TOTAL	2021/22 TOTAL
	£000s	£000s	£000s	£000s
Service Specific Inflation	1,116	1,116	1,116	1,116
Previous Policy Decision	50	0	0	0
Demography	64	94	124	155
Other Pressures	(150)	(150)	(115)	(65)
TOTAL PRESSURES	(36)	(56)	9	90
Existing Efficiencies	(7)	(7)	(7)	(7)
Existing Policy Choice	(468)	(1,012)	(1,717)	(1,717)
New Efficiencies	(75)	(248)	(294)	(321)
TOTAL SAVINGS	(550)	(1,267)	(2,018)	(2,045)

Ref	Description	Dept	Type of budget movement	2018/19 TOTAL £000s	2019/20 TOTAL £000s	2020/21 TOTAL £000s	2021/22 TOTAL £000s
	Technical Adjustments						
	None						
	Service Specific Inflation						
	Highways: Ringway Contract - expenditure Indexation for 2018/19 under the contract is based on estimated Highways Term Maintenance Association indices	Environment	Service Specific Inflation	741	741	741	741
	Highways: Opus Arup Contract - expenditure Indexation for 2018/19 under the contract is based on RPIX estimated between January 2017 and January 2018.	Environment	Service Specific Inflation	375	375	375	375
	Pressures						
PPD1	County Travel Survey A comprehensive travel survey is carried out every three years so that the county can identify changing needs and trends for its services and react accordingly.	Environment	Previous Policy Decision	50	0	0	0
D3	Road length increases - routine maintenance Additional budget is required to finance the extra maintenance requirements due to increased road adoptions for new residential and commercial developments.	Environment	Demography	64	94	124	155
OP11	Essential Upgrade of Highways Asset Management System 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)	(50)	(50)	(50)
OP13	Legal Support for Procurement Removal of time-limited pressure in 2017/18	Environment	Other Pressures	(100)	(100)	(100)	(50)
OP14	Revenue impact of the A120 Bypass Capital programme.	Environment	Other Pressures	0	0	35	35
	Savings						
EPC1	Revenue impact of the LED Street Lighting – Phase 4	Environment	Existing Policy Choice	(468)	(1,012)	(1,717)	(1,717)
NE12	Revenue impact of the Street Lighting Refurbishment Revenue savings are achieved via the ongoing reduction in energy consumption, carbon emissions and maintenance costs.	Environment	New Efficiencies	(26)	(133)	(161)	(188)

Approx	
curr	
bud	
£'0	0υ
	16,864
	10,004
••••	
	
	15,656
	15,656

Ref	Description	Dept	Type of budget movement	2018/19 TOTAL £000s	2019/20 TOTAL £000s	2020/21 TOTAL £000s	2021/22 TOTAL £000s
NE22	Revenue impact of the Replacement of Existing Belisha Beacons with LED Units Capital programme 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 Efficiencies	(31)	(31)	(31)	(31)
NE14	Reduced Street Lighting Scouting frequency	Environment	New Efficiencies	(18)	(53)	(71)	(71)
NE70	Revenue savings from the Traffic Signals Replacement 18/19 Capital Bid The new installations enable the Council to review future maintenance regimes and costs. This creates the potential to reduce future maintenance costs by £225,000 over the 15 year lifespan. Replacement of the signal equipment will cut energy consumption by 78%. Without factoring in rising energy costs this generates a total saving over the 15 year lifespan of project of £245,325.	Environment	New Efficiencies	0	(31)	(31)	(31)
EE3 (X1)	Printing Contract Savings Savings through a reduction in print costs achieved through the new managed print service contract.	XC	Existing Efficiencies	(7)	(7)	(7)	(7)

Approximate current budget £'000
-370
1,050
N/A

Note

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

EE3 (X1) - Printing Contract Savings	(37)	(37)	(37)	(37)
NE2 (X1) - Serco SMS contract savings	(199)	(533)	(691)	(665)
EE13 (X2) - Enabling the Worker	(685)	(685)	(685)	(685)

ANALYSIS OF REVENUE BUDGET BY OBJECTIVE AREAS

2017/18 Original Net Budget £'000	Objective Area	Gross Budget 2018/19 £'000	Income £'000	Net Budget 2018/19 £'000	Net Budget 2019/20 £'000	Net Budget 2020/21 £'000	Net Budget 2021/22 £'000
	Environment						
	Structural Maintenance						
	This primarily consists of works which slow the rate of highway deterioration caused by wear and tear or extreme weather	4,013	(124)	3,889	3,889	3,889	3,889
	Routine Maintenance						
17,137	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.	18,473	(500)	17,973	18,003	18,068	18,099
	Winter Maintenance						
3,410	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.	3,509	0	3,509	3,509	3,509	3,509
	Lighting						
	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.	6,948	(122)	6,826	6,109	5,358	5,331
	Traffic Management and Safety						
4,316	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.	6,285	(1,763)	4,522	4,522	4,522	4,522
	Transport Planning Policy and Strategy						
3,920	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.	8,915	(4,799)	4,116	4,066	4,066	4,116
	Advance Preparation and Consultation						
1,668	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.	1,645	0	1,645	1,645	1,645	1,645
41,857	Highways Total	49,788	(7,308)	42,480	41,743	41,057	41,111

Highways Capital Programme 2018/19-2021/22

The total Capital Programme 2018/19 to 2021/22 for the portfolio is £365.343m and for 2018/19 is £85.394m. This includes all new bids and re-programming from 2017/18 at the end of quarter 2.

	2018/19	2019/20	2020/21	2021/22	Total
	£'000	£'000	£'000	£'000	£'000
HCC Funding	51,777	56,631	58,341	48,533	215,282
Grant	21,673	21,673	21,510	17,310	82,166
Contributions	10,944	32,074	14,877		57,895
Total	84,394	110,378	94,728	65,843	355,343

New Capital Bids

There are five new capital bid for the directorate that requires £7.117m in 2018/19 and £46.425m for 2018/19-2021/22

Scheme	Total Cost 2018/19	HCC Funding 2018/19	External Funding 2018/19	Total Scheme Cost 2018/19- 2021/22	Total HCC funding 2018/19- 2021/22	Total External funding 2018/19- 2021/22	
	£'000	£'000	£'000	£'000	£'000	£'000	
Introduction of weight limit on A507	40	40	-	110	90	20	This project is the result of a petition to HCC to intervene to address safety concerns on this road.
A10 Buntingford South Roundabout	77	-	77	1,715	-	1,715	This project proposes major improvements to the roundabout on the A10 where it meets London Road, the southern exit from Buntingford. This will address capacity issues as the result of future development in and around the town.
A414 Hertford Major Project	1,750	1,750	-	9,000	9,000	-	To undertake the development work in identifying a series of different options for a Hertford major intervention project
Carriageway maintenance - improving local roads	5,000	5,000	-	29,000	29,000	-	This project complements the existing carriageway maintenance capital programmes by providing additional funds targeted on unclassified roads that are in or approaching a poor condition

Scheme	Total Cost 2018/19	HCC Funding 2018/19	External Funding 2018/19	Total Scheme Cost 2018/19- 2021/22	Total HCC funding 2018/19- 2021/22	Total External funding 2018/19- 2021/22	
	£'000	£'000	£'000	£'000	£'000	£'000	
A414 Scheme development	250	89	161	6,600	1,876	4,724	Investment to improve the corridor to assist in facilitating growth set out in Local Plans along the A414 and help to mitigate the impacts of development on the network
Total	7,117	6,879	238	46,425	39,966	6,459	

Revised Capital Bids - Annual Programmes

The portfolio has 8 bids for annual programmes, of which 6 have requested increased HCC funding. These 6 bids total £144.349m in HCC funding and £69.410m from other sources. An additional £6.089m of HCC funding/borrowing is required in 2018/19 compared to the previous Integrated Plan.

As these are annual programmes, these 6 bids are requesting an additional £33.489m of HCC funding over the next 4 years. If approved, this will need funding from additional borrowing.

The portfolio has 1 Capital Bid which decreases total funding required in 2018/19 by £2.6m compared to the previous Integrated Plan. A reduction of £5m over the next 4 years in \$106 contributions is anticipated in relation to this annual programme.

Scheme	Total Increase/ (decrease) 2018/19	HCC Funding Increase/ (decrease) 2018/19	External Funding Increase/ (decrease) 2018/19	Total Increase/ (decrease) 2018/19 to 2021/22	HCC Funding Increase/ (decrease) 2018/19 to 2021/22	External Funding Increase/ (decrease) 2018/19 to 2021/22	
	£'000	£'000	£'000	£'000	£'000	£'000	
Traffic Signals Replacement	819	649	170	881	711	170	This is due to a large number of traffic signals becoming life expired and in need of refurbishment or replacement. Modern installations will also result in improved operational efficiency which will help tackle congestion.
Highways Locality Budgets	1,113	1,113	-	4,452	4,452	-	This is part of a strategy to release revenue funding that can be directed at annual campaigns of routine maintenance, therefore avoiding the need for the funding of future Restoration projects

Scheme	Total Increase/ (decrease) 2018/19	HCC Funding Increase/ (decrease) 2018/19	External Funding Increase/ (decrease) 2018/19	Total Increase/ (decrease) 2018/19 to 2021/22	HCC Funding Increase/ (decrease) 2018/19 to 2021/22	External Funding Increase/ (decrease) 2018/19 to 2021/22	
	£'000	£'000	£'000	£'000	£'000	£'000	
Bridge Asset management and maintenance	-	-	-	918	918	-	Annual Programmes are aimed at delivering our targets, which means if we are seeking steady state through implementing a steady programme then we need the same purchasing power each year. Therefore inflation has been built into the bids
Carriageway maintenance:	4,158	4,158	-	25,677	25,677	-	The amount of additional funding required to ensure that the carriageway condition targets of steady state are met following detailed modelling and after considering available grants from the DfT (that tend to vary each year), mitigating inflation impacts and the need to provide for the incidence of coal tar
Highways Drainage Asset Maintenance and resilience	69	69	-	710	710	-	Annual Programmes are aimed at delivering our targets, which means if we are seeking steady state through implementing a steady programme then we need the same purchasing power each year. Therefore inflation has been built into the bids
Footway & Cycleway maintenance	100	100	-	1,021	1,021	-	Annual Programmes are aimed at delivering our targets, which means if we are seeking steady state through implementing a steady programme then we need the same purchasing power each year. Therefore inflation has been built into the bids
Integrated transport projects	(2,605)	-	(2,605)	(5,005)	-	(5,005)	The reduction in funding of the programme is due to the reallocation of the DfT block grant towards the new A414 scheme
Total	3,654	6,089	(2,435)	28,654	33,489	(4,835)	

Revised Capital Bids - Projects

The portfolio has 1 Capital Bid which increases total HCC funding since the scheme was approved in February 2016. The increase in HCC funding required is by £2.6m over the next 4 years. There is also an increase in external funding of £2.429m over the next 4 years.

The portfolio has 1 Capital Bid where a total overall scheme reduction of £1.688m in county capital is forecast over the next 4 years.

Scheme	Total Increase/ (decrease) 2018/19	HCC Funding Increase/ (decrease) 2018/19	External Funding Increase/ (decrease) 2018/19	Total Increase/ (decrease) 2018/19 to 2021/22	HCC Funding Increase/ (decrease) 2018/19 to 2021/22	External Funding Increase/ (decrease) 2018/19 to 2021/22	
	£'000	£'000	£'000	£'000	£'000	£'000	
A120 Little Hadham Bypass	-	-	-	5,029	2,600	2,429	This is due to a combination of inflation, geotechnical investigations showing the need for additional construction costs and Planning conditions requiring additional measures to address environmental issues.
A602	-	-	-	(1,688)	(1,688)	-	The overall forecast cost for the A602 Improvements scheme has reduced. The LEP Growth Deal Funding allocation of £18.47m remains the same but the profile of spend has changed. Some cost reduction in the construction estimate for the first phase (currently on site) was identified. In the second phase of the project, revised designs have significantly reduced the costs of bridge structures from the outline estimates.
Total	-	-	-	3,341	912	2,429	

Risks

The Maintenance of the Highway asset to prolong serviceable life and the Integrated Transport Projects allocations are based on assumed grant figures from DfT, which have yet to be confirmed.

The maintenance allocation from DfT is also based on HCC retaining its level 3 status within the Incentive Fund. In particular, HCC will need to evidence is that it is 'walking the talk' regarding asset management. Inflation remains a risk, particularly for major projects, which cannot be scaled back to meet budget pressures.

Proposed Highways Directorate's Capital Programme 2018/19 - 2021/22

			Total		2018/19 Ir	ntegrated	d Plan	2019/20	2020/21	2021/22
	Description New request (N), Existing request (E) or Revised request (R)	Portfolio	scheme cost	Cost	HCC Funding	Grants	Contribution	Cost	Cost	Cost
	The vised request (IT)		(£000)	£'000	£'000	£'000	£'000	£'000	£'000	£'000
1	Essex Road New River Bridge Scheme (E) To construct a new road and bridge adjacent to the existing Essex Road link.	Highways	7,378	501	-	-	501	852	5,545	-
2	Street Lighting Refurbishment Programme (E):	Highways	Annual Programme	2,432	2,432	-	-	2,432	2,432	2,325
3	Traffic Signals Replacement (R): Programme to replace the traffic signals which are older than their useful life of 15 years.	Highways	Annual Programme	1,489	1,319	-	170	677	697	718
4	Highways Locality Budgets (R): Annual programme which allows councillors to direct funding in consultation with residents and communities.	Highways	Annual Programme	6,006	6,006	-	-	6,006	6,006	6,006
5	Highways ITP Budget (R): Projects are a mix of transport and highways improvement measures. Schemes seek to help manage and reduce congestion, provide journey time reliability, address air quality issues by encouraging a shift to the bus, walking or cycling, and the reduction of road casualties. Improve the quality of life for residents through speed compliance, and accessibility schemes and support economic development.	Highways	Annual Programme	5,595	-	4,202	1,393	5,800	3,200	-

					2018/19 Ir	ntegrated	Plan	2019/20	2020/21	2021/22
	Description New request (N), Existing request (E) or Revised request (R)	Portfolio	Total scheme	Cost	HCC Funding	Grants	Contribution	Cost	Cost	Cost
	Revised request (R)		cost	£'000	£'000	£'000	£'000	£'000	£'000	£'000
6	Bridge Asset management and maintenance service (R): HCC has a statutory duty to maintain highway bridges. Successful management of bridges will also prevent network disruption.	Highways	Annual Programme	4,950	4,950	-	-	5,100	5,255	5,413
7	Carriageway maintenance (R): This is 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. 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.	Highways	Annual Programme	33,665	16,355	17,310	-	35,848	36,548	37,644
8	Highways Drainage Asset Maintenance and resilience (R): This programme carries out major repairs, renewals, and upgrades to the highway drainage system with the aim of extending the life of the highway drainage assets and ensure they meet their full service potential.	Highways	Annual Programme	2,369	2,369	-	-	2,440	2,513	2,588
9	Footway & Cycleway maintenance (R) This is an ongoing project to extend the life of the highway footway and cycleway infrastructure and ensure they meet their full service potential and preserve their value to Hertfordshire.	Highways	Annual Programme	2,800	2,800	-	-	2,884	3,077	3,060

					2018/19 Ir	ntegrated	Plan	2019/20	2020/21	2021/22
	Description New request (N), Existing request (E) or Revised request (R)	Portfolio	Total scheme cost	Cost	HCC Funding	Grants	Contribution	Cost	Cost	Cost
	Trevised request (IV)		COSI	£'000	£'000	£'000	£'000	£'000	£'000	£'000
10	Introduction of weight limit on A507 (N): Result of petition to HCC to intervene to address safety concerns on this road.	Highways	110	40	40	-	-	70	-	-
11	A120 Bypass (Little Hadham) and Flood Alleviation Scheme (R): Will provide a northern 3.9km bypass of Little Hadham	Highways	39,019	8,250	1,100	-	7,150	23,074	3,442	-
12	A602 Improvements Stevenage to/from Ware (R): To improve overall journey times and increase journey time reliability on the A602 route between Stevenage and Ware by increasing the capacity of specific junctions and reducing the curvature of specific bends on the A602 to meet current standards	Highways	22,662	1,553	-	-	1,553	6,290	7,513	89
13	LED - Phase 4 (E): Street Lighting Programmer for completion of LED replacement. The conversion will provide the Council with the ability to control the level of lighting along with the operating period, and as a consequence, reduce the costs associated with energy and carbon emissions. In addition, the LED/CMS units will significantly increase reliability and reduce ongoing maintenance.	Highways	18,500	6,167	6,167	-	-	6,167	-	-

					2018/19 Ir	ntegrated	Plan	2019/20	2020/21	2021/22
	Description New request (N), Existing request (E) or Revised request (R	Portfolio	Total scheme cost	Cost	HCC Funding	Grants	Contribution	Cost	Cost	Cost
	·		COSI	£'000	£'000	£'000	£'000	£'000	£'000	£'000
14	A120 Standon (E): 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.	Highways	1,600	1,500	1,400	-	100	-	-	-
15	A10 Buntingford South Roundabout (N): This project proposes major improvements to the roundabout on the A10 where it meets London Road, the southern exit from Buntingford. This will address capacity issues on the roundabout which will evolve as the result of future development in and around the town and, if not addressed, will cause severe congestion on the A10 itself and within the town.	Highways	1,715	77	-	-	77	1,638	-	-
16	A414 Hertford Major Project (N): To undertake the development work in identifying a series of different options for a Hertford major intervention project	Highways	9,000	1,750	1,750	-	-	2,250	5,000	-
17	Carriageway maintenance - improving local roads (N): This project complements the existing carriageway maintenance capital programmes by providing additional funds targeted on unclassified roads that are in or approaching a poor condition	Highways	37,000	5,000	5,000	-	-	8,000	8,000	8,000

			_ , .		2018/19 Ir	ntegrated	Plan	2019/20	2020/21	2021/22
	Description New request (N), Existing request (E) or Revised request (R	Portfolio	Total scheme cost	Cost	HCC Funding	Grants	Contribution	Cost	Cost	Cost
			COSI	£'000	£'000	£'000	£'000	£'000	£'000	£'000
18	A414 Scheme development (N): Investment to improve the corridor to assist in facilitating growth set out in Local Plans along the A414 and help to mitigate the impacts of development on the network	Highways	6,000	250	89	161	-	850	5,500	-
	Total			84,394	51,777	21,673	10,944	110,378	94,728	65,843