

# Highway Infrastructure Asset Management Strategy

November 2016



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## 1 Introduction

Staffordshire County Council has an extensive highway asset valued at over £7 billion providing benefit to all as stakeholders. The highway maintainable at public expense is the largest and most visible community asset for which the county council is responsible. The way it is managed and maintained has a direct impact on the county councils ability to deliver on its priority and other outcomes. Residents, businesses and visitors all depend upon a good reliable service from our highway network to sustain our economic growth and transportation needs.

Staffordshire County Council's Highway Infrastructure Asset Management Plan (HIAMP) Strategy details how we will manage the highway asset to ensure we achieve our priority outcomes, taking into account finance and the current asset condition, differing stakeholder needs, localised priorities and the benefits they provide.

Whilst Highways England are responsible for the management of motorways and trunk roads in Staffordshire, the County Council is responsible for 6060km of carriageway, 4168km of footway, 1391 highway structures and an array of other network infrastructure. In managing the network we work with the other managing parties to plan a joined up approach that enables a seamless service to stakeholders throughout the county.

Staffordshire County Council is committed to an asset management approach encompassing the outcome benefits of a whole cost lifecycle approach, ensuring the most efficient and effective use of the available highway budget and demonstrating the case for additional funding where this is appropriate. The continued use of innovative treatments alongside tried and tested maintenance materials will ensure the appropriate treatment is utilised at the right time.

Staffordshire County Council appreciates the difference the quality of the highway infrastructure and reliable journey times makes to residents, businesses and visitors to the county; it promotes jobs and growth supporting success for the future. We can only achieve our priority outcomes with a well-managed, accessible highway network, regardless of how stakeholders choose to travel around the county.

## 1.1 What will our Highway Infrastructure Asset Management Strategy Achieve

The main purpose of our HIAMP Strategy is to maintain the highway asset in the most effective and efficient manner to meet the corporate priority outcomes and the objectives that feed into these; Figure 1 shows the linkages through the objectives and outcomes.

The strategy will:

Ensure all stakeholders are aware of what we will achieve and how they can influence decisions.

Enable us to change priorities as a result of the political cycle, resilience, economic shifts, weather and other emergencies.

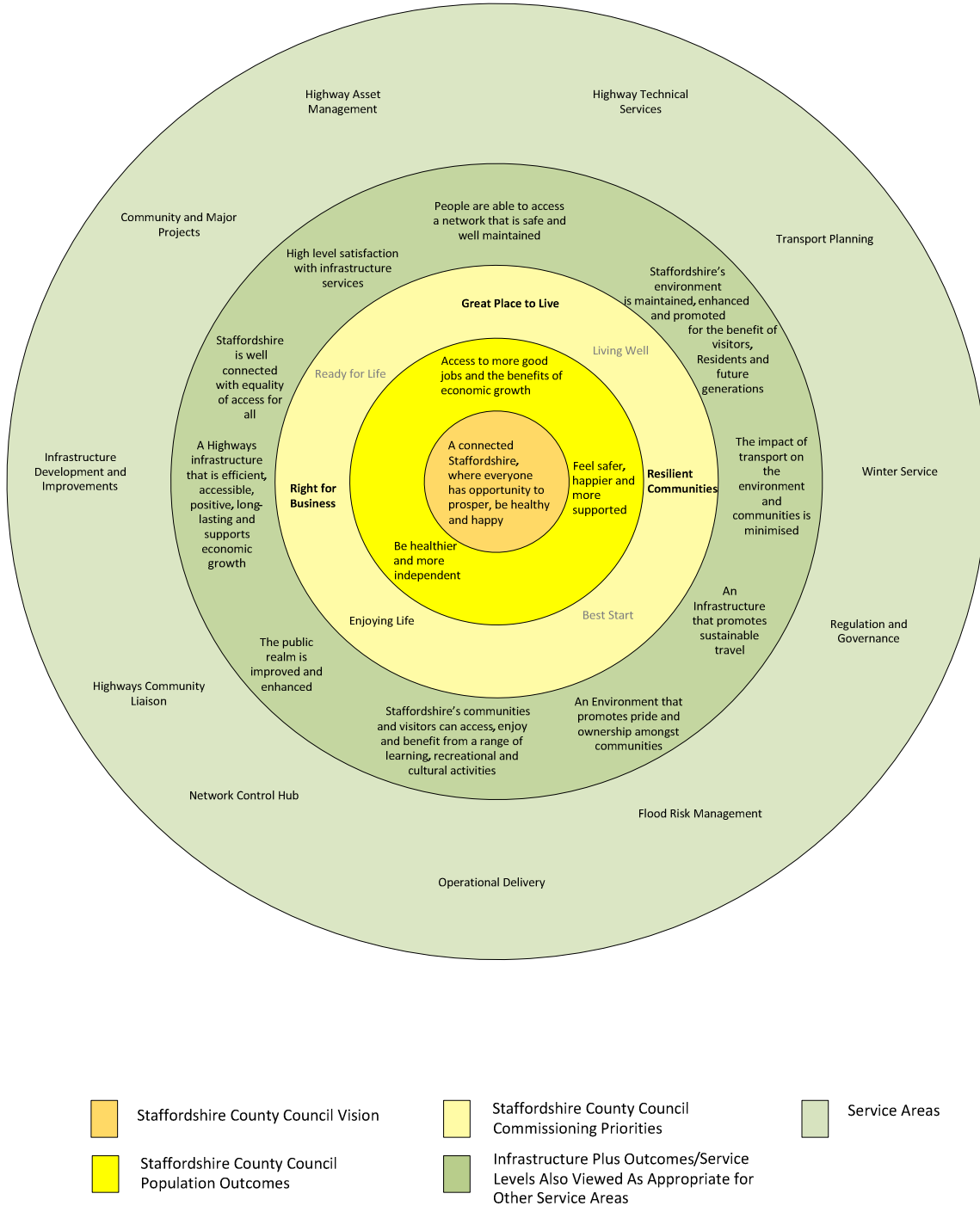
Assist us in working with other public and private asset owners in the county, the midlands region and nationally.

Encourage the adoption of innovative techniques in the maintenance and operation of the highway asset.

Ensure a greater understanding of our stakeholders' needs and expectations of us and how we can accede to their requirements whilst providing an effective and efficient service.

To help drive the authority towards achieving and maintaining the highest score (level 3) under the Department for Transport (DfT) Self Assessment process and their by maximise available funding.

Ensure all of our Senior Asset Managers are appropriately trained to be stewards of the highway asset



**Figure 1 – Vision, Priority and Outcome Linkages**

## 2 The Highway Asset

### 2.1 Asset Inventory

Staffordshire County Council is responsible for a wide variety of highway assets; tables 1 and 2 give details of this infrastructure

**Table 1 : The Staffordshire Highway Infrastructure Key Assets**

Highway Assets	
Asset Group	Elements
Carriageway	Carriageway - including lay-bys, bus lanes etc
Footway, Footpaths & Cycleways	Footways - adjacent to the carriageway
	Footways - remote from the carriageway
	Cycleways - constructed off-carriageway cycleways, shared cycle/footways and cycle/carriageways
Structures	Bridges, sign gantries, culverts, embankments, retaining walls and subways
Lighting (including illuminated signs and bollards)	lighting columns, lamps, cabling, ducts feeder pillars, subway lighting. Illuminated signs & posts, information boards
Integrated Transport Systems	Signalised junctions, signalised pedestrian crossings, detection equipment, cabling, ductwork, bollards and variable message signs
Safety Fences	Vehicle safety fences
Non-illuminated Signs	Non- illuminated signs, warning, regulatory and local direction/information posts, information boards
Closed Circuit Television	CCTV Installations & Monitoring Equipment
Drainage	Gullies & linear drainage channels, highway drains (including pipework, manholes & outfalls), land drainage ditches and watercourses, roadside ditches swales etc
Traffic Calming	Traffic Calming Features - including tables, humps chicanes etc
Road Markings	All road markings
Verges and Planted areas	verges, soft landscaped areas and trees
Street Furniture	Cycle stands, bollards etc

**Table 2: The Staffordshire Highway Asset Inventory**

Asset Type	Amount	Unit	Data Confidence	HIAMP Reference
Carriageway	6060.6	km	High	Carriageway Lifecycle Plan (CWLCP)
Footway	4168	km	High	Footway, Footpaths & Cycleway Lifecycle Plan (FWLCP)
Cycleway	199	km	High	FWLCP
Bridges	1048	No.	High	Highway Structures Lifecycle Plan (HSLCP)
Culverts (1.0 - 1.5m span)	Unknown	No.	No Info	HSLCP
Retaining Walls	200	km	Low	HSLCP
Streetlights	92,656	No.	High	Street Lighting PFI
Illuminated Signs	22,741	No.	High	Street Lighting PFI
Illuminated Bollards	2076	No.	High	Street Lighting PFI
Subway Lights	675	No.	High	Street Lighting PFI
Zebra Crossings	347	No.	High	Traffic Signal Lifecycle Plan (TSLCP)
Twin Amber Flashing Units (school crossing points)	216	No.	High	TSLCP
Feeder Pillars	442	No.	High	TSLCP
Hatpins	311	No.	High	TSLCP
Car Park Monitoring Systems	112	No.	High	TSLCP
Traffic Signal Junctions	174	No.	High	TSLCP
Traffic Signal Pelican / Puffin / Toucan	353	No.	High	TSLCP
Dual Pelican / Puffin / Toucan	42	No.	High	TSLCP
Vehicle Actuated Signs (VAS)	128	No.	High	TSLCP
Variable Message Signs (VMS)	23	No.	High	TSLCP
Car Park Management Systems	6	No.	High	TSLCP
CCTV Cameras	12	No.	High	TSLCP
Non-illuminated Signs	Unknown	No.	No Info	HIAMP
Road Gullies	148,000	No.	High	Drainage Lifecycle Plan (DLCP)
Footway Gullies	Unknown	No.	Medium	DLCP
Rural Verge	5762	km	Medium	HIAMP
Urban Verge	2,240,036	m <sup>2</sup>	Medium	HIAMP
Kerb	Unknown	m	No Info	CWLCP
Culverts	Unknown	No.	No Info	DLCP
Offlet kerbs, bypass kerbs & kerb drain	Unknown	No.	No Info	DLCP
White and Yellow Lining	Unknown	m	No Info	HIAMP
Safety Fencing	50,209	m	Medium	Safety Fence Lifecycle Plan (SFLCP)

Asset Type	Amount	Unit	Data Confidence	HIAMP Reference
Pedestrian Guardrail	Unknown	m	No Info	SFLCP
Boundary Fencing	Unknown	m	No Info	HIAMP
Visibility Fencing	Unknown	m	No Info	HIAMP
Highway Drain	Unknown	m	No Info	DLCP
Bollards	Unknown	No.	No Info	HIAMP
Fingerposts	Unknown	No.	No Info	HIAMP
Trees	Unknown	No.	Low	HIAMP
Bus Stop Flag Posts	Unknown	No.	No Info	HIAMP
Street Furniture, bicycle racks etc	Unknown	No.	No Info	HIAMP
Grit Bins	1774	No.	High	HIAMP

Each asset group has its own lifecycle plan and schedule of works that come together to enable us to identify the optimum management strategy for each group and the highway assets as a whole. The life cycle plans associated with each asset group are appendices to this document

## 2.2 The Value of the Asset

The highway asset has a current gross replacement cost of £7.6 billion, excluding land and a depreciated replacement cost of £6.5 billion. The annual depreciation is £38.6m i.e. the amount of annual funding required to maintain the highway asset in a steady state.

From 2015/16 onwards, it has been necessary to value highway assets on a depreciated replacement cost basis to comply with Whole of Government Accounts (WGA) and International Financial Reporting Standards (IFRS). In Staffordshire we have been voluntarily reporting highway asset values in accordance with WGA and IFRS since 2012.

**Table 3 : The Staffordshire Highway Asset Valuations**

	£000's	£000's	£000's
Asset Group	Gross Replacement Cost	Depreciated Replacement Cost	Annual Depreciation
Carriageway	5,414,823	5,214,597	18,620
Footways + Cycleways	750,171	730,454	1,225
Structures	1,273,490	479,766	14,046
Lighting	97,082	42,023	2,427
Traffic Management	29,507	17,684	1,440
Street Furniture	35,581	14,479	822
<b>Total</b>	<b>7,600,654</b>	<b>6,499,003</b>	<b>38,580</b>



### 3 Management of the Asset

Infrastructure services are delivered through a number of different contract models depending upon the asset group. Highway maintenance, design and construction services are delivered through the Infrastructure Plus (I+) Strategic Partnership, Street lighting is delivered through a Private Finance Initiative (PFI) and a number of other services are delivered internally.

The I+ Partnership with Amey is a first for any local highway authority and demonstrates our forward thinking and determination to achieve the required outcomes for our county. I+ has also enabled us to provide an end to end service for developers, attracting investment into Staffordshire and enabling us to retain engineering skills in the county whilst attracting the next generation of talent who will give us the foundations for continuous improvement and growth within this wonderful county. Continual service reviews through monthly Delivery Project Team (DPT) meetings are an integral part of the strategic partnership with outturn performance indicators reported to the Operational Commissioning Board (OCB) on a monthly basis along with actions required and/or implemented as a result of any under-performance.

Our street lighting PFI maintains over 99,000 lighting units and contributes to Staffordshire County Council's priority outcomes and aims through the provision of efficient lighting coupled with a good standard of lighting stock.

Over the lifetime of our previous Transport Asset Management Plan (TAMP) 2011-2016 (now HIAMP) we have developed systems which evaluate schemes against asset management criteria and community need. We have strived to improve our citizens' experience of preventative treatments by working with our supply chain to introduce innovative, cleaner and less disruptive treatment methods. Over the lifetime of this HIAMP we aim to build on this and drive further innovation.

Staffordshire County Council has and continues to be a leading highway authority both regionally and nationally, sharing our good practice and continual improvement through the Highway Maintenance Efficiency Programme (HMEP), United Kingdom Roads Board (UKRB), Midland Service Improvement Group (MSIG), Midlands Highway Alliance (MHA) and Highway Asset Management Financial Information Group (HAMFIG).

Leadership and involvement with the above, 10 years of dedicated asset management and training for our Asset Managers, along with our additional £35m investment early in the life of the 2011-2016 TAMP has enabled us to not only

maintain a steady state in highway condition but to improve it despite overall reductions in available finance for management of the asset.

The ongoing financial challenges mean we are moving into a period of greater prioritisation of overall funding across the authority; however, our strategy of preventative maintenance and whole lifecycle cost management will ensure the impact on the asset is proactively managed and we remain in a strong position in readiness for when the economic climate improves.

Our I+ Partnership has enabled us to utilise Amey's Asset Management System to identify whole lifecycle costed programmes of work, prioritised using our locally developed asset value management prioritisation criteria that takes into account not only the condition of each length of highway but also managed risk and the benefit to stakeholders using the highway. We can also predict the effect of funding strategy and budget decisions on each section of the highway rather than just at a network level. This allows us to calculate the whole cost of those decisions and other options using a mechanised approach that is extremely efficient.

Knowing the effects of various budgeting strategies on each asset group and how the performance of each asset affects our delivery of corporate priorities, along with the direct links to stakeholder's satisfaction that they receive from the use of the network makes this paramount to customer satisfaction with our management of the highway asset.

### 3.1 Funding

The capital maintenance funding available over the last 6 years inclusive of any additional funding is shown in Table 4 below. By contrast, the funding for subsequent years is also shown and demonstrates the importance of ensuring our asset management approach minimises the impact of the authority's prioritisation of resources to at least 2020/21.

<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>
£(m)	£(m)	£(m)	£(m)	£(m)	£(m)	£(m)	£(m)	£(m)	£(m)	£(m)
33	35	31	29	17	16	15.75	15.5	15.25	15	14.75

**Table 4 – Capital Maintenance Highway Funding 2010/11 – 2020/21**

In December 2014, the Secretary of State for Transport announced that £6 billion will be made available between 2015/16 and 2020/21 for local highways maintenance capital funding. In November 2015 he also announced a further £250 million for a dedicated Pothole Action Fund. From this funding, £578 million has

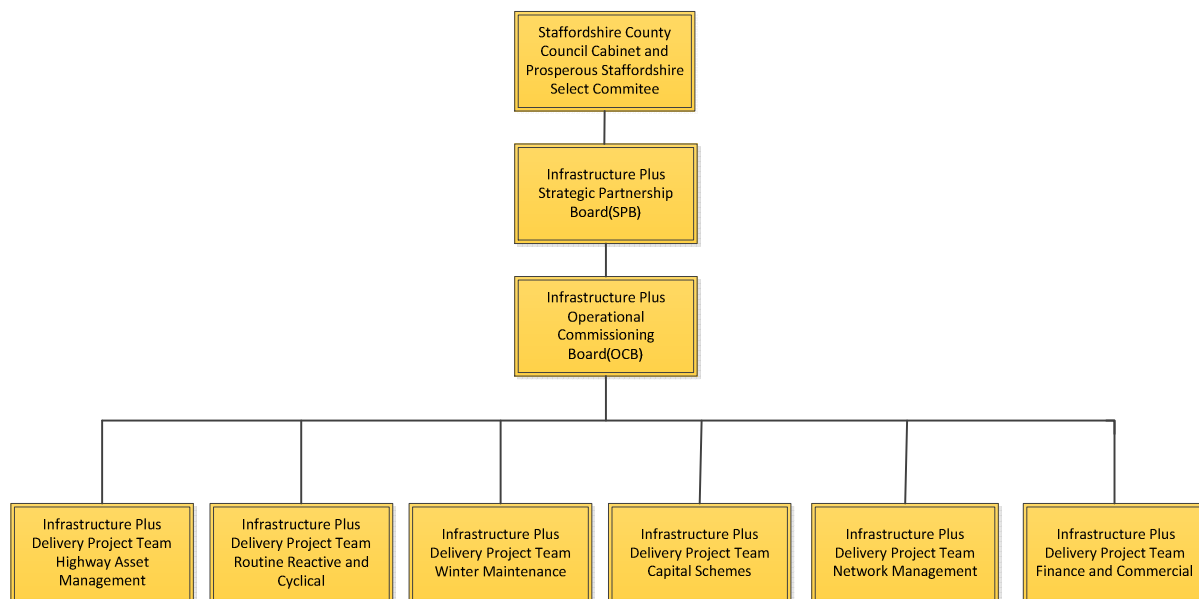
been set aside for an Incentive Fund scheme, to reward councils who demonstrate they are delivering value for money in carrying out cost effective improvements.

It is anticipated that in the near to medium term future the majority of funding will be provided by the above two mechanisms. As opportunities occur, further funding will be sought through various bidding mechanisms and the Stoke on Trent and Staffordshire Local Enterprise Partnership.

### 3.2 Decision making and Governance

The day to day implementation of asset management is undertaken by the Highway Asset Manager. Performance at this level is monitored by the Highway Asset Management DPT of the I+ governance structure.

Figure 3 illustrates the governance structure which is in place to drive and shape the partnership



**Figure 3 - Infrastructure Plus Governance Structure**

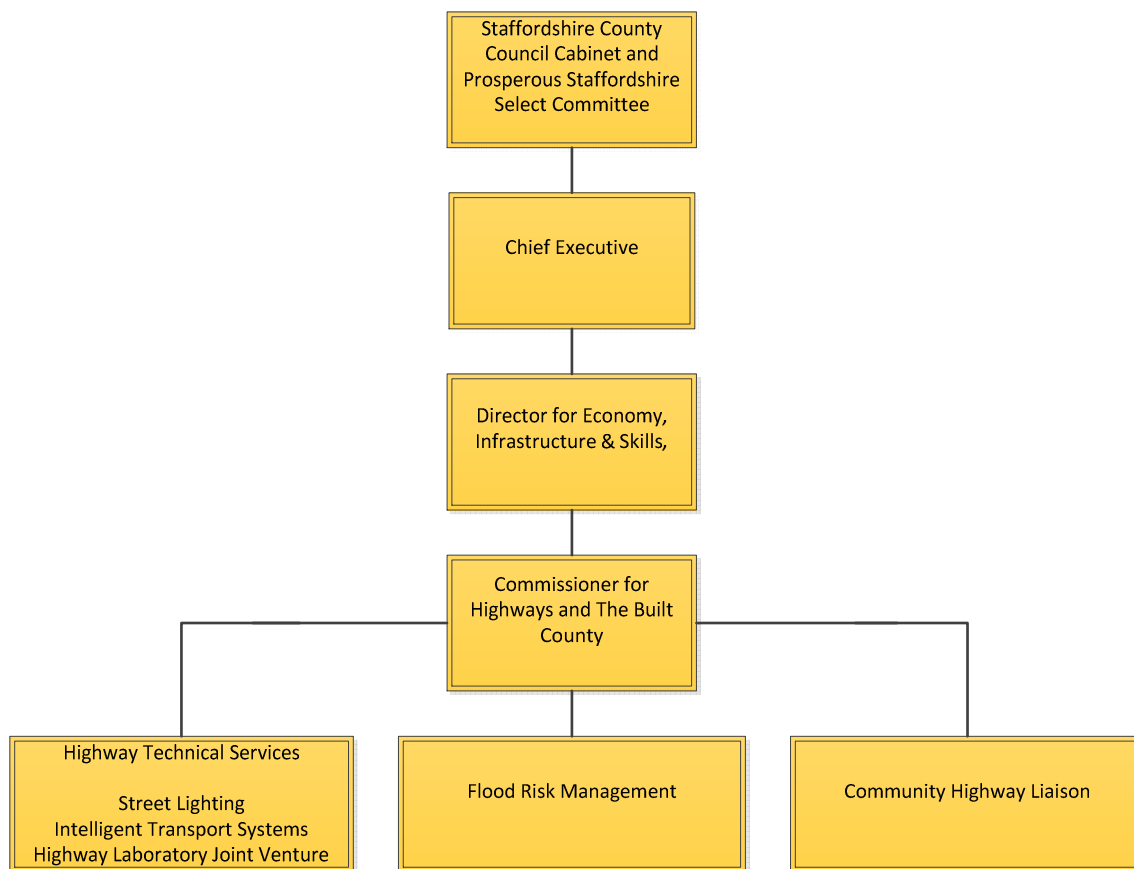
Staffordshire County Council Cabinet considers key decisions relating to highways; this is defined as decisions which are termed significant, either in financial terms or in its effects on communities or working in an area comprising two or more electoral divisions in the county area.

The Strategic Partnership Board (SPB) comprises of Staffordshire County Council and Amey Senior Leadership Teams and the Staffordshire County Council Portfolio Holder for Transport and Highways. The objective of the SPB is to lead the strategic direction of the partnership and determine how it shall meet the outcomes.

The OCB comprises of Staffordshire County Council and Amey Senior Management; its primary objective is to lead the performance and contractual requirements of the partnership to meet the outcomes.

DPTs deliver the services and enable the partnership to meet the outcomes whilst achieving best value for the County Council.

The performance of the partnership is monitored via suite of key performance and operational performance indicators which through the governance structure enables a continuous cycle of improvement.

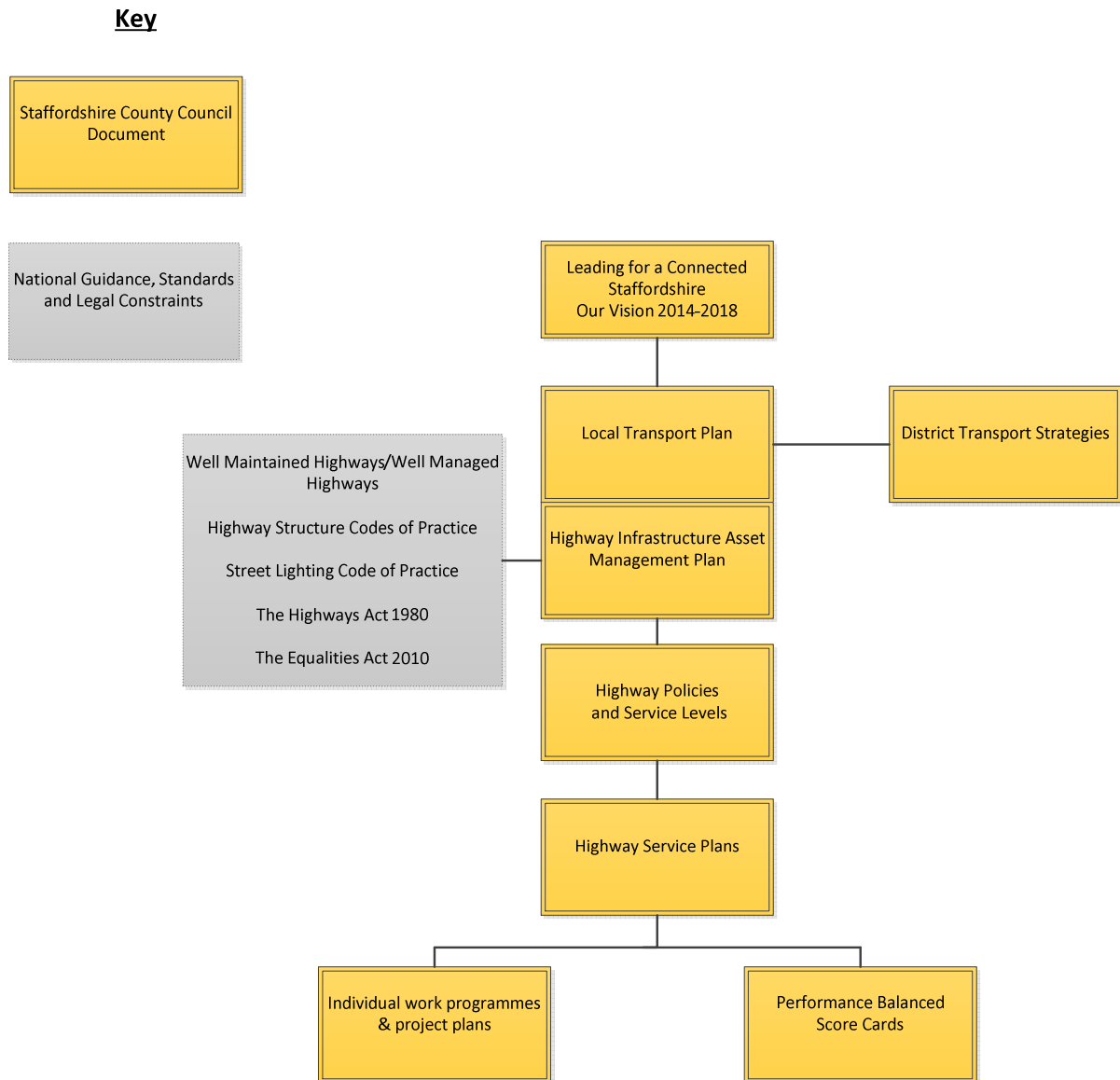


**Figure 4 – Staffordshire County Council Services Outside of I+**

As figure 4 indicates, services outside of I+ follow a traditional governance model, reporting through the Staffordshire County Council Senior Leadership Team and Cabinet.

### 3.3 Legal Obligations, National Guidance and the Strategic Document Framework

The HIAMP aims to enable asset management guided by the principles of BS ISO 55000, 55001 and 550002; forming part of a wider strategic document framework, Figure 2 details how the HIAMP interlinks with various other strategic documents.



## Figure 2 – Strategic Documents Framework

There are several policy documents that do or will form part of this HIAMP and ensure national guidance is adhered to and also ensure that we can provide the most efficient and effective highway service possible.

These include but are not limited to:

The Highways Safety Inspection Policy

The Skid Resistance Strategy

The Winter Service Policy

The Management of Highway Trees Policy

The Management of Drainage Assets Policy

The Maintenance of Grass and Weed Control Policy

The Management of Commercial Obstructions Policy

The Development Design Guide

The Combined Specification

The Resilient Network

The Strategically Sensitive Network

### **3.4 Data capture**

Whilst it is important to collect inventory and condition data related to existing assets, this needs to be progressed proportionately in accordance with the relevant risk and resources available. New developments and integrated transport improvements that are taken into the adopted highway provide the ideal opportunity to put these assets onto whole lifecycle management. We therefore record all new assets in the asset register, ensuring procedures are in place internally and externally to capture these.

### **3.5 Integrated Highway Asset Management Systems**

The collection and analysis of inventory and condition data enables us to make the right investment and priority decisions for each asset group. The storage, sharing and use of that data is therefore paramount to the continued strategic planning and implementation of asset management works. Across all major asset groups integrated highway management software systems are in place, furthering our use of quality data in decision making. An example of this is the utilisation of asset management planning software, supplemented by our asset value management prioritisation toolkits to inform asset management in relation to planned programmes of work on footways and carriageways.

### 3.7 Condition Surveys

Asset condition information is collected at regular scheduled intervals to ensure the information held in the asset systems is up to date and supports the performance management framework in place as part of the I+ Partnership and wider services. It also ensures the risk and value of premature failure associated with each asset is monitored and corrective actions at both a strategic and practical level can be instigated to prevent or minimise those risks in good time. By having foresight of potential risks at an early stage, investment decisions can be altered to ensure the efficiency and effectiveness of the overall management of the asset. New or accelerated risks are identified before they compromise delivery of the required outcomes.

### 3.8 Homogeneous Asset Group Strategies

Different types of asset have their own asset management strategies that reflect national codes of practice and the individual needs of each asset. The contribution of each asset group to the corporate priority outcomes, along with the relative risks of reduced maintenance on those assets link directly to the overall strategy for the maintenance of all highway assets.

Each group of assets have their own asset manager and are managed in different ways to reflect their need. For example street lighting is managed under a 25 year PFI agreement, traffic signals and intelligent transport systems are managed in-house by the county council, whereas all other highway maintenance is managed by Amey under the I+ Partnership.

A major part of budget strategy is assessing the effect of budget decisions for an asset group on the delivery of corporate priority outcomes and customer satisfaction. We therefore ensure the effects of all strategic funding decisions are considered at an early stage to achieve the most efficient and effective outcome for the authority and our customers within the finance available for the service. Whilst all our required investment would produce the greatest outcomes, in reality it is unlikely that the funding required will be available in the short to medium term; therefore we have a duty to live within our means whilst reducing as far as is reasonably practical the effects on our corporate priority outcomes and consequently our customers.

The lifecycle plans for each asset group allow the effects of different budget strategies to be considered before implementing the most advantageous strategy for the authority's stakeholders.

### 3.9 Implementing Planned Works

To ensure effective network management and co-ordination, our works programmes are planned up to 5 years in advance. This allows other 3<sup>rd</sup> parties with major infrastructure within the highway to have sight of planned works and to co-ordinate

the sequence of works to both cause the least disruption for stakeholders and abortive works on the network.

Preventative works will generally cover between 1/10<sup>th</sup> and 1/12<sup>th</sup> of the network each year and as these works are seasonal to apply and usually require some preparation works their effective planning is key to their success for stakeholders and their required lifecycle. This early planning also enables our I+ Partnership sub-contractor to plan works and material deliveries in the most economical and efficient way. This in turn ensures the sub-contractor can procure the required materials etc. in plenty of time to ensure they are available and at the most economically advantageous price that allows them to offer competitive rates to the contract that could not be achieved without such detailed forward planning.

With all works, quality management systems will be employed to ensure the durability/quality of products and works.

Whilst forward planning is essential, annual reviews are necessary to consider any changing needs of all the asset groups and thereby ensure efficiency and effectiveness are maintained within the management of the highway asset.

Our I+ Partnership has collaboration between the County Council and Amey at its heart to ensure the required outcomes are achieved. The partnership has been working towards formal recognition of this collaboration with BS11000 certification. This is expected to be awarded in the early part of 2017. In addition we are also working with our key supply chain to formally extend collaboration recognition.

The lifecycle planning approach also allows tracking of performance against investment for each group and thereby informs following future strategies to ensure the investment achieves the outcomes planned

### **3.10 Utility and Developer**

An increasingly important factor in the preservation of long term asset life is the appreciation of Statutory Undertaker Asset Management Plans and the priorities and constraints placed upon them by their respective national service regulators. This has a direct impact on the life of highway assets and is another area being targeted for improvement. Increased understanding of these external constraints and vision of external party delivery objectives will be targeted through the life of this HIAMP, with all parties encouraged to share their longer term asset programmes. As well as ensuring that highway investment is not wasted by undermining excavations in the longer term, improvements in this area will also improve forward planning for disruptive works, improve public perception of partnership working and increase the potential for collaborative working on site.

Staffordshire have received funding from Innovate UK, the Government's innovation arm to drive collaboration between utilities, developers and Staffordshire County



Council under the banner of Project Heineken. Through the life of the HIAMP the project will reduce highway occupations and improve the end to end delivery of works on the highway.

### **3.11 Training**

Effective management of the highway network requires professional well trained staff. The strategic partnership ensures the experience and level of training required is developed through personal development plans. As a minimum, Asset Managers and other senior staff complete Highway Maintenance Efficiency Programme Asset Management modules, with key staff undertaking ongoing training as approved by the Institute of Asset Management.

## **4 Engagement**

### **4.1 Key Stakeholders**

Ultimately everyone is a highway stakeholder to some extent; however, the needs of each stakeholder group and the way in which they use the highway asset vary to some degree. This variation in highway users needs requires an array of approaches to engagement and information dissemination. This has resulted in the identification of the following key stakeholder groups:

- Elected members
- Citizens of Staffordshire (cyclists/motorists/ footway users)
- Businesses and the Chamber of Trade
- Public facility organisations and services
- Visitors to Staffordshire
- Transiting network users
- Emergency services
- Utility apparatus owners
- Local Enterprise Partnership
- Members of Parliament
- Parish/Town Councils
- District and Borough Councils

### **4.2 Communications Strategy**

Communications and stakeholder engagement are co-ordinated across the partnership through the Community Liaison Team. Communication is implemented in accordance with the Communications Guideline Document and stakeholders are consulted with regard to improvement and maintenance schemes. Elected members and other affected stakeholders will be engaged in the co-production exercises throughout the life cycle of the asset to create highways that add to the fabric of society.

In today's financial environment demand management must be practised, proactive communication is key to this. The partnership will manage expectations through clear sight of proposed works programmes and typical activity cycle times; in addition to this, the partnership will promote the use of community capacity via self-help groups within communities to complete minor tasks. An example of this is the well-established Ice Busters scheme.

To keep our communities and stakeholders informed, the following information will be published on the authority's website:

- Annual maintenance programmes (Routine, reactive and cyclical)
- Scheme programmes (Integrated transport, highway structures, highways structural and preventative maintenance)
- Policy documents
- Performance figures
- Life cycle plans

All highway defects will be managed through the Operational Control Room (OCR) using the Standard Operating Model (SOM) allowing defects to be easily tracked. Citizens reporting defects digitally will be kept updated with the defects remedial works via email. Through the same system, feedback will be sought regarding their experience of dealing with the authority.

Our Communication Strategy is supplemented by a Communication Guideline Document which informs how we communicate highway works.

During the life of the 2011-2016 TAMP we have proactively participated in the National Highways and Transportation (NHT) survey, helping to mould the form which the survey takes. The survey is undertaken annually and looks at a number of satisfaction themes; the theme relating to highway maintenance benchmarks condition of the highway, highway maintenance, street lighting and highway enforcement/obstructions. The results of the survey have provided a valuable insight into the services we deliver and areas where we can improve. Over the life of this HIAMP we will continue with our involvement and aim to shape the process to provide the maximum value to ourselves and other authorities; using the findings to help further improve our services.

Details of the latest NHT survey can be found at the below web link:

<http://www.nhtnetwork.org/nht-network/home/>

## 5 The Future of the Network and Risk

### 5.1 Risk Management

Through the life time of the HIAMP we will annually review asset risk registers and lifecycle plans to provide a dynamic approach to current and future risks to the asset.

### 5.2 Climate Change

Staffordshire County Council must react to climate change by reducing the impact of the highway asset upon the environment and ensuring that the asset is suitably prepared to deal with an increase in the magnitude and number of extreme weather events.

The County Council has adopted an emissions reduction target of 80% by 2050, from a 1990 baseline. We have also adopted a short term target to reduce our emissions by an average of 3% each year, up to 2016/17.

The HIAMP will help to contribute to the targets through continuing to promote the use of recycled materials and materials that consume less energy in their production. Over recent years the Street Lighting PFI has introduced lower energy consuming LED technology and variable lighting levels which has so far saved over 4 million KWh. Over the life of the HIAMP the PFI will continue to mitigate energy consumption against planned growth of the street lighting asset.

The HIAMP will improve the resilience of the highway network through enabling the development and continual improvement of a resilient network as identified in The Transport Resilience Review 2014.

### 5.3 Network Growth and Demand

The highway asset is constantly evolving to support the needs of the people of Staffordshire; assets are added and removed as a result of highway schemes commissioned by Staffordshire County Council and private developers. The evolution of the asset is heavily influenced by the economic activity of Staffordshire. Over the next five years it is anticipated that the asset will increase in length by 10km per annum.

Alongside the anticipated growth in asset size it is envisaged that overall network demand will increase by 7% between 2016 and 2021

## 6 Glossary

Annual Depreciation	The value by which the asset depreciates over a 12 month period as a result of condition deterioration.
Asset	In the context of the HIAMP, an asset refers to an item that forms part of the highway fabric, i.e. carriageway, footway and street lighting.
Asset Management	Asset management is an approach to maintaining items of infrastructure in a methodical manor. It identifies the optimal allocation of resources to maintain the best achievable asset condition with the available level of funding.
BS ISO 110000	The British and International Standard for Collaborative Business Relationships.
BS ISO 55000, 550001 & 55002	The British and International Standard for the Implementation of Asset Management.
Capital Funding	Grants from Government through the Department for Transport and contributions to fund capital schemes to pay for items like roads.
Carriageway	Within the HIAMP carriageway refers to a surfaced right of way intended for use by vehicles and maintained at the public expense.
Culvert	A structure that allows the flow of water under an asset..
Depreciated Replacement Cost (DRC)	The cost of bringing an assets current condition up to 'as new' condition.
Footway	Pedestrian path maintained at public expense that is usually alongside a carriageway.
Gross Replacement Cost (GRC)	The total cost of replacing an element of or the entire asset with an equivalent new asset.
Highway	In the context of this document a highway is a road or thorough fair that is maintained at the public expense.
Infrastructure	Infrastructure describes fixed assets that form part of a larger network, in the terms of this document it refers to carriageways, footways, drainage, lighting, fencing and the like.
LED	An LED is a Light Emitting Diode which is a highly efficient form of lighting.

Life Cycle Plan	A Life Cycle Plan is key to asset management and takes into account the whole-of-life implications of acquiring, operating, maintaining and disposing of an asset.
Local Enterprise Partnership (LEP)	Local voluntary partnership between local authorities and businesses set up to help drive economic growth.
Preventative Maintenance	The treatment of an asset at an optimal time to prevent asset deterioration, enabling the efficient use of funding. Essentially implementing the principle that prevention is better than cure.
Private Finance Initiative (PFI)	A partnership between a public and private organisation where funding for a public scheme is provided by the private organisation and repaid over the duration of the agreement.
Revenue Funding	This is income that the authority gets to deliver everyday services. It is made up of an element of business rates and Government grants through the Department for Communities and Local Government.
Safety Fence	A barrier intended to prevent an errant vehicle leaving the highway
Stakeholder	An individual, group or organisation that have a legitimate interest in a project
Standard Operating Model (SOM)	A system operated by Amey to help organise and manage highway works.
Statutory Undertaker	A utility company such as British Telecom and the like.
Structure	A structure can be a bridge, retaining wall or culvert.
Whole of Government Accounting	Whole of Government Accounts consolidates the audited accounts of over 5,500 organisations across the public sector in order to produce a comprehensive, accounts-based picture of the financial position of the UK public sector

For more information please contact:

Staffordshire Place 1,

Stafford,

ST16 2DH

Tel: 0300 111 8000

Email: [contactus@staffordshire.gov.uk](mailto:contactus@staffordshire.gov.uk)

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