

Cabinet

6 March 2018

**Name of Cabinet Member:**

Cabinet Member for City Services – Councillor J Innes

**Director approving the report:**

Deputy Chief Executive (Place)

**Ward(s) affected:**

All

**Title:**

2018/2019 Transportation and Highway Maintenance Capital Programme

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**Is this a key decision?**

Yes – Affects all wards across the City and seeks approval for an £8.9m Programme

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**Executive summary:**

This report brings together an integrated Capital Programme for the maintenance and enhancement of the City's highways and transport infrastructure. This Programme is funded through annual government local transport funding, City Council resources and Whitefriars Right to Buy receipts.

The basic principles for this year's Maintenance and Integrated Transport Programme are:

1. Continue the Programme of rectifying damage and maintaining the City's roads, through a prioritised Programme based on the Council's Highways Asset Management plan.
2. Continue to invest in preventative/proactive maintenance.
3. Carry out packages of complementary schemes to support the continued growth of the City, such as road safety and traffic management schemes to compliment Public Realm and Connecting Coventry proposals.
4. Provide a Programme of footway improvements funded from the Whitefriars Housing Group as part of a £2.3m investment which will be delivered over the next financial year.

**Recommendations:**

The Cabinet is requested to approve:

1. The 2018/19 programme of schemes marked 'A' in table 4
2. To delegate authority to the Cabinet Member for City Services, to approve a programme of scheme development, marked 'B' in table 4

**List of Appendices included:**

Appendix 1 - Description of all Maintenance & Integrated Transport Schemes

Appendix 2 - Breakdown of the Road Maintenance Programme including verges

Appendix 3 - Proposed Safety Schemes Programme

Appendix 4 - Proposed Traffic Management Programme

Appendix 5 - Proposed Urban Traffic Management Control programme

**Background papers:**

None

**Other Useful Papers:**

Budget Report 2018/2019 (City Council)

<http://democraticservices.coventry.gov.uk/ieListDocuments.aspx?CId=130&MId=11418>

**Has it or will it be considered by scrutiny?**

No

**Has it, or will it be considered by any other council committee, advisory panel or other body?**

No

The City Council's five year Capital Programme was approved by Council on 20th February 2018.

**Will this report go to Council?**

No

**Report title:  
2018/19 Transportation and Maintenance Capital Programme**

**1. Context (or background)**

1.1 This report sets out a detailed capital programme of all Highway Maintenance and Integrated Transport schemes which are due to be carried out during 2018/19. The report sets out individual allocations and the various sources of funding in table 4, and sets out the specific details of each project in appendices 1 to 6.

**2. Options considered and recommended proposal**

2.1 As part of the West Midlands Devolution Deal, HM Government agreed to devolve a consolidated local transport budget and provide a multi-year transport funding settlement, which comes under the control of the West Midlands Combined Authority Elected Mayor. This devolved transport grant forms part of the single pot.

2.2 The devolved transport element of the pot is made up of the following funding streams and paid to the Combined Authority, with a firm commitment for the period until 2020/21

- Integrated Transport Block (ITB)
- Highways Maintenance Block (not including PFI)
- Highways Maintenance Incentive Funding

2.3 Following the creation of the West Midlands Combined Authority (WMCA), the West Midlands Integrated Transport Authority and Centro were dissolved on 17<sup>th</sup> June 2016 and replaced with a new Integrated Transport Authority (ITA); Transport for West Midlands (TfWM). TfWM continues the work of its predecessors.

2.4 The multi-year devolved transport grant is set out below:

**Table 1 – Devolved Transport Grant**

<b>Fund</b>	<b>Status</b>	<b>2018/19 £000's</b>	<b>2019/20 £000's</b>	<b>2020/21 £000's</b>
Bus Services Operating Grant (BSOG) Revenue	Revenue for tendered bus services - given to WMCA/TfWM	1,800	1,800	1,800
Integrated Transport Block Capital	Allocated to the WMCA but distributed to LA's and TfWM. LA's allocations based on population size, which is also used to calculate the WMCA Transport Levy	17,618	17,618	17,618
Highways Maintenance Block Capital**	Allocated to the WMCA but distributed straight to LA's via DfT calculated formula	13,112	13,112	13,112
Highways Maintenance Incentive Fund Capital	Currently allocated to the WMCA but distributed straight to LA's via DfT calculated formula.	2,688*	2,688*	2,688*
<b>Total</b>		<b>35,218</b>	<b>35,218</b>	<b>35,218</b>

\*indicative figures provided by DfT

\*\* Excludes Birmingham City Council due to their Highways PFI

- 2.5 The Highways Maintenance allocation is awarded via TfWM; Coventry's allocation for 2018/19, based on the DfT revised needs formula is £2.225m. The ITA has made it clear that these resources are released on the condition that they are spent on highway maintenance schemes in accordance with the authorities' Highways Asset Management Plan (HAMP) and the Highways Maintenance Efficiency Programmes (HMEP). The Council has also given this undertaking to the DfT.
- 2.6 The Highways Maintenance Incentive Fund is dependent on the Authority's efficiency and approach to highways asset management. This fund is allocated based on an assessment of data provided by Local Authorities, which determines their band rating and subsequent percentage share of the available funding. Authorities fall into one of three bands, with band three authorities receiving maximum incentive funding over the following four years.
- 2.7 For 2017/18 DfT decided that authorities within a combined authority met the criteria for band three and on this basis, Coventry received maximum funding. It is anticipated that DfT will follow the same approach for 2018/19, this equates to £463k, which when added to the £2.225m Highways Maintenance allocation, forms a total Highways Maintenance Block amount of £2.688m, as shown in table 3.
- 2.8 The total ITB allocation in 2018/19 for the West Midlands is £17.618m. This funding is split, as in previous years, on a percentage basis; 25% to TfWM and 75% to the Local Authorities, distributed via the ITA pro-rata'd per capita.
- 2.9 The £0.09m top slice has also been retained this year. An element of this supports the West Midlands Transport Information Gateway (WMTIG) which is an ongoing £20k commitment annually, with the remaining £70k available to bid into on an annual basis for key initiatives and programmes.

The distribution of the regional Integrated Transport budget is as follows:

**Table 2 – West Midlands funding allocation**

Budget Heading	2018/19 Allocation (£m's)	Notes
TfWM Allocation	4.382	25%
Local Authorities Allocation	13.146	£1.620m for Coventry
Joint Initiatives Top Slice	0.090	
<b>Total</b>	<b>17.618</b>	

- 2.10 Table 3 sets out the available capital resources for transport schemes (such as Corporate Capital Resources and Whitefriars Right to Buy Capital receipts).

**Table 3 – Coventry Capital Resources**

Funding Source	2018/19 (£m's)
Integrated Transport Block	1.620
Highways Maintenance Block	2.688
Corporate Capital Resources	2.369
<b>Subtotal of Core Funding</b>	<b>6.677</b>
Whitefriars Housing Group contribution	2.300
<b>Total</b>	<b>8.977</b>

- 2.11 In 2016, WMCA approved the West Midlands Strategic Transport Plan “Movement for Growth”; which set out plans to greatly improve the transport system to support economic growth and regeneration. As part of a ten year delivery plan, and to establish development funding for Local Authorities to undertake feasibility and develop strategic business cases for emerging schemes, 15% of the total ITB funding is to be ring-fenced for scheme development. This ring fence will be applied from 2017/18 up to 2020/21.
- 2.12 As a substantial proportion of the funding for this programme is received as part of the ITA process, allocations received must therefore deliver schemes which contribute towards the objectives, outcomes and targets in the West Midlands Strategic Transport Plan. TfWM will monitor and assess the types of schemes district authorities are planning and whether they meet the relevant objectives.
- 2.13 As a continuation to the 2017/18 programme, there is an emphasis on making the best use of existing infrastructure rather than creating new. The maintenance programme will focus on ensuring that the worst affected roads and pavements across the City are properly repaired and preventative maintenance is carried out. This is a key theme in the West Midlands Strategic Transport Plan and is driven by the City Council's Highways Infrastructure Asset Management Policy and Strategy (January 2016).
- 2.14 Right to buy receipts (RTB) of £2.3m will be used to carry out a comprehensive programme of highway improvements in Whitefriars estates across the City. Ongoing works in the Manor Farm area will continue, providing extensive changes to pavements, roads and landscaping to enhance the major improvements to the housing stock which Whitefriars are carrying out separately.
- 2.15 In compiling the programmes contained within this report, an underlying principle has been to maximize value for money by looking for opportunities to integrate projects wherever possible. As well as saving money, this minimizes disruption to the travelling public, businesses and residents.
- 2.16 Table 4 sets out the proposed capital programme for Integrated Transport and maintenance schemes for 2018/19. Each line represents either a programme of works or an individual scheme. Specific details of these programmes and schemes are provided in appendices 1 to 6 of this report.
- 2.17 In addition to making the best use of existing infrastructure, as outlined above, wherever possible we will seek to reduce ongoing revenue expenditure through the removal of unnecessary infrastructure. This achieves two objectives: decluttering to improve the look of the city and reducing the ongoing maintenance.
- 2.18 Safety schemes will continue to be utilised to try to address areas where injury collisions occur and all requests or concerns raised by the public, both from individuals or petitions will continue to be investigated to determine if a local safety scheme should be implemented. We continue to use moveable vehicle activated signs which can be rotated around sites of concern, and in addition, we continue to collaborate with local police and work with residents to encourage the use of community speed-watch to monitor the speed of vehicles.
- 2.19 Approval is sought for those schemes and scheme programmes (as detailed in the appendices) marked with an A in Table 4.

Transportation & Maintenance Capital Programme 2018/19

Table 4

	Maintenance	£000s	£000s	£000s	£000s	£000s	Approval
		Corporate Capital Resources	Integrated Transport Block	Highways Maintenance Block	Whitefriars RTB	TOTAL	
1	Planing and Patching	0	0	400	0	400	A
2	Resurfacing	19	0	1503	0	1522	A
3	Surface Treatments	450	0	460	0	910	A
4	Footway Improvement Schemes	900	0	200	2300	3400	A
5	Verges	0	0	125	0	125	A
6	Vehicle Safety Fence	50	0	0	0	50	A
7	Structures	500	0	0	0	500	A
8	Drainage Surveys / Maintenance	450	0	0	0	450	A
	<b>Sub Total</b>	<b>2369</b>	<b>0</b>	<b>2688</b>	<b>2300</b>	<b>7357</b>	
	<b>Integrated Transport</b>						
9	UTMC	0	350	0	0	350	A
10	Safety Schemes	0	400	0	0	400	A
11	Vulnerable Users	0	250	0	0	250	A
12	Scheme Development	0	240	0	0	240	B
13	Traffic Management	0	380	0	0	380	A
	<b>Sub Total</b>	<b>0</b>	<b>1620</b>	<b>0</b>	<b>0</b>	<b>1620</b>	
	<b>Grand Total</b>	<b>2369</b>	<b>1620</b>	<b>2688</b>	<b>2300</b>	<b>8977</b>	

### Externally funded projects

- 2.20 Coventry are working with Midlands Connect, Coventry & Warwickshire Local Enterprise Partnership (CWLEP) and WMCA along with DfT and developers to plan and fund this ambitious programme. The Council has recently been awarded £12.7m Housing Infrastructure Fund for a new junction onto the A45 at Eastern Green, more detail is provided in the Connecting Coventry report.
- 2.21 Coventry has been very successful in developing and securing new funding for innovative transport solutions, which use emerging technology to improve transport information with the intention of influencing road user behaviour to reduce congestion. We continue to work on a number of transport innovation projects, which are being delivered in conjunction with local partners and small and medium sized enterprises supporting economic growth in this area.
- 2.22 As well as delivering Intelligent Mobility projects where funding has already been secured, Coventry will work with other partners, including the WMCA to identify and secure further funding for new projects.
- 2.23 Through partnership working with the Environment Agency (EA) and the Regional Flood and Coastal Committee (RFCC), the City Council has secured Local Levy and Grant in Aid funding to help deliver flood alleviation schemes at Butt Lane and Broad Lane. To enable these schemes to be brought forward the Council, subject to approval, will top slice £250k for each of the next 3 years from the drainage programme. This will address the city's worst flood hit areas.

### **3. Results of consultation undertaken**

- 3.1 The West Midlands Strategic Transport Plan 'Movement for Growth' replaced the Local Transport Plan (LTP 3). The WM ITA consulted with the public and key stakeholders and adopted the plan in July 2015, it was approved by the WMCA in June 2016. In addition, many of the specific larger schemes within the programme have or will be consulted on widely as individual schemes.
- 3.2 In all cases, no scheme will be implemented without appropriate consultation being undertaken to ensure that all interested parties are involved in the process and that anticipated funding is secure.

### **4. Timetable for implementing this decision**

- 4.1 The programme of schemes will be implemented throughout the 2018/19 financial year. The exact timing of individual schemes will depend on how well developed they are, and feedback from consultation. It is anticipated that all budgets described in the programme will be spent by the end of March 2019.

### **5. Comments from the Director of Finance and Corporate Services**

- 5.1 Financial implications  
The core funding for the Transportation and Maintenance Capital Programme totalling £6.677m is set out in Table 3 and this was approved by Cabinet on 20th February 2018. This programme is supplemented by additional funding from Whitefriars Right to Buy receipts. This report sets out a strategic integrated highways and transportation programme that explicitly recognises all sources of funding and implements a strong emphasis on robust project and programme management.

## 5.2 Legal implications

The Council is under various statutory duties relevant to this report which includes:

- (a) Maintaining the City's adopted highway network and associated structures;
- (b) Maintaining the City's traffic management infrastructure;
- (c) Managing the City's road network to secure the expeditious movement of traffic;
- (d) Promoting/encouraging safe, integrated, efficient and economic transport facilities and services in conjunction with the ITA;
- (e) Investigating road accidents and introducing measures to reduce their recurrence;
- (f) Producing a definitive map recording all public rights of way in the City;
- (g) Acting as a 'risk management authority' in respect of highway drainage for the purposes of the Flood and Water Management Act 2010

The Council also has various statutory powers which allow it to improve or add to the existing highway/traffic management infrastructure.

Any major contracts will be let so as to comply with EU/UK procurement rules and the Council's own Rules for Contracts.

The core funding for the Transportation and Maintenance Capital Programme is set out in Table 3 above and totals £6.677m. As indicated, this is complemented by other specific sources of funding.

## 6. Other implications

### 6.1 How will this contribute to achievement of the council's Plan?

The programme will help to address Council Plan objectives such as poor air quality, climate change by encouraging more sustainable forms of transport such as walking, cycling and public transport promoting the City Councils 'Age Friendly' aspirations

Schemes such as Public Realm works and the significant maintenance programme will help to address the Plan priority of making streets and open spaces more attractive and enjoyable places to be as well as the SCS transport priority of encouraging more walking and cycling.

### 6.2 How is risk being managed?

For each programme/scheme, there are nominated project sponsors and managers who will be held accountable for delivery. The governance arrangement will be for the capital programme to be overseen by a board comprising the Director (Transport and Highways), service manager (project sponsor) and financial officers. The project managers collectively form the capital programme team which will ensure that the programme is delivered on time, to budget and to an appropriate standard. The findings and recommendations of the board will be reported to the responsible cabinet member/s via established briefing and reporting mechanisms as appropriate. In addition summary updates are provided to Cabinet as part of the quarterly budgetary control process.

To manage physical risks, the Construction and Design Management (CDM) process is also used for all appropriate schemes (larger schemes which meet certain criteria) to ensure that risks are designed out and that construction takes place by an approved contractor in a safe way.



**6.3 What is the impact on the organisation?**

The programme will be delivered using existing resources where possible.

**6.4 Equalities / EIA**

An equality impact assessment was carried out during the formulation of the West Midlands Strategic Transport Plan.

**6.5 Implications for (or impact on) the environment**

The programme will have a beneficial impact on the environment as many schemes are designed to encourage sustainable forms of travel such as walking, cycling and public transport, as well as schemes to reduce congestion and improve the public realm.

**6.6 Implications for partner organisations?**

The implementation of the programme will have a positive impact on businesses and the general population of the City through improvements to road maintenance and the wider transport network. The Coventry and Warwickshire Local Enterprise Partnership (LEP) has identified transport as a high priority to support economic growth.

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## Description of Maintenance and Integrated Transport Schemes

### Highways Maintenance Block

As a result of the programme of permanent repairs and preventative maintenance undertaken over the last eight financial years, the deterioration of the road network has continued to reduce significantly and its resilience to the effects of winter weather is greatly improved.

The maintenance treatment programmes, as shown in table 4, are aimed at continuing the significant improvement to the classified and unclassified network. The opportunity will also be taken to link the implementation of road maintenance and integrated transport projects together to lower costs and minimise disruption.

This year we will continue with the successful footway slurry seal programmes, to complement the footway reconstruction programme. Slurry seal maximises value for money and introduces a theme of preventative maintenance into the programme.

It is important to note that exact limits for the extended footway programme are not provided in this report, due to volume of extra preparation work. A summary of the treatments proposed for use over the 2018/19 financial year are listed in Appendix 2.

As discussed in the report there is also an extra £2.3M provided by Whitefriars Housing Group for footways and highway network improvements this year.

### Footway (Pavement) Treatments

**Footway Reconstruction:** A scheme of work which will often include excavation of kerb lines, relaying or renewing of kerbs, replacement of slabs or tarmac and supporting layers. This restores the treated area to 'as new' condition. Some footways can be 'overlaid', this is where a further layer of tarmac is laid over the top of the existing surface, adding strength to the footway. In the coming year we will be introducing a new treatment option which uses thinner construction thicknesses. This option will only be used at suitable locations i.e. where pavements tend not to be driven on or are protected by legal orders.

**Footway Slurry Seal:** A process where a 'slurry' containing bitumen is spread across the existing tarmac. The process is thin, up to 10mm, so there are no problems meeting existing levels. This process is used on sites where early signs of deterioration are evident and hence is an excellent preventative maintenance treatment.

Footway treatments vary in cost from around £5.50/m<sup>2</sup> for slurry seal up to £93/m<sup>2</sup> for full reconstruction. Reconstruction is very labour intensive and involves lots of hand work, which results in higher costs relative to carriageway works.

## Carriageway (Road) Treatments

**Carriageway Planing and Patching:** This method of repair is best suited to those roads where there are larger (greater than 10 square metres) areas of deterioration, often at junctions and turning heads or where there are problems with old utility reinstatements. The process entails removing the top 40mm (or whatever is appropriate) and inlaying new material. Typical cost is £32.00 per square metre. This treatment has the added advantage of forming part of the preparation process for future preventative maintenance surface treatment schemes. Roads which have been planed and patched are very suitable for surface dressing or micro asphalt the following year. The sites listed for the Plane and Patch programme do not represent a full commitment to the budget allocated. This is because there is a reactive element to this operation, which provides the flexibility of carrying out large permanent repairs to roads which may deteriorate quickly for any reason.

**Carriageway Resurfacing:** This treatment is split into two types, inlay and overlay. Best value is achieved with overlay and, where possible, this is the preferred approach.

**Inlay:** This is an inherently expensive approach and will be used only where absolutely necessary, usually where there has been a structural failure in the base layers. It is recognised that there are a few locations where a deeper repair is essential. The costs of this approach can be over £38.50 per square metre.

**Overlay:** For roads where the deterioration is confined to the upper layers of the carriageway, a good solution is to overlay. Similarly to footway overlay an extra layer of tarmac is laid over the existing surface. To maintain kerb height it is usually necessary to plane out adjacent to the carriageway edges. The advantage of this approach is that it increases the thickness of tarmac, thereby strengthening the carriageway and reducing the amount of material that has to be taken away. Henley Road is an example of a recent overlay scheme. For carriageways in poor repair, pre-patching is necessary. Typical costs are £32.00 per square metre.

**Surface Treatments:** All of the above processes extend the life of a carriageway by a number of years and this life can be extended further by the application of surface dressing (tar and chips) or other thin layer systems such as a Micro Asphalt. The importance of this surfacing is that it waterproofs the road surface and prevents the ingress of water. In winter, water significantly contributes to deterioration. On freezing, water expands and can cause weaker surfaces to break up. Surface treatments help to prevent this process occurring.

This year will be the eighth year of the preventative maintenance programme, which has been very successful. The value of this approach can be seen from the fact that surface dressing costs of around £5.20 per square metre and Micro Asphalt is typically £11.00 per square metre, compared to over £32.00 per square metre for resurfacing.

### Drainage Surveys/Maintenance

Capital maintenance schemes for drainage includes the renewal of piped systems including new gullies and connections to the main sewer and also can involve the laying of new highway drains. These works address capacity or damage issues which are usually evidenced by flooding on or adjacent to the Highway. The Council's annual CCTV programme surveys the Highway drainage network and helps to build our asset register.

### Flood Relief Schemes

The purpose of these schemes is to reduce the risk of flooding in known high risk areas. Such works are usually carried out in conjunction with the Environmental Agency (EA). Flood relief measures usually entail construction of storage areas on private land, e.g. ponds, swales and ditches. Other measures include impeding flows by constructing walls or pipes, or natural slowing using a technique known as natural flood management, where fallen trees and other natural obstacles are used to slow flows.

### Verges

This programme allows for the protection of verges, typically through the use of bollards in accordance with the adopted verge policy. It may also include provision of lay-bys or simply re soiling existing verges, if new protective measures are in place. Use of grass-grid type materials continues to be successful. These systems allow vehicle over-run whilst maintaining a green verge like appearance to the street scene.

### Vehicle Safety Fences

This allocation is used to maintain existing safety fences (Vehicle Restraint Systems) on the network and can include bridge parapets. The budget allows for the testing and replacement of lengths of fencing to meet modern standards.

### Structures

We will continue to provide a programme of capital maintenance across the city's 308 structures which comprise road bridges, culverts, footbridges, retaining walls, sign gantries, and subways. Schemes cover a wide range of maintenance works, including strengthening, waterproofing, repair of structural elements, and replacement of movement joints. The programme also includes detailed structural inspections and assessments of substandard structures. It should be noted that all locations are subject to detailed investigation and possible delays caused by engineering difficulties/consultation issues. Further funding is required for the completion and delivery of the 17/18 schemes following detailed scheme investigation and development. Details of the programme are set out in Appendix 2.

### Swanswell Viaduct

The £6m phase 1 works will be completed by spring 2018. The viaduct, the largest structure on the ring road, is now 50 years old and in need of major maintenance. The works include provision of a new edge beam and vehicle safety rails, deck waterproofing and a new road surface. Further funding is being sought for further phases of refurbishment.

## **Integrated Transport Block**

### Safety Schemes

This allocation will be used in the development and implementation of road safety schemes in areas where there is a high incidence of recorded personal injury collisions (at least six in three years). In addition the allocation will be used to carry out route based road safety studies and schemes with specific focus on locations with a disproportionate numbers of vulnerable road user casualties including pedestrians, cyclists and motorcyclists. Details of proposed programme are set out in Appendix 3.

### Vulnerable Users

This allocation, which complements the safety schemes programme, will be used to carry out improvements for our most vulnerable road users including cyclists and pedestrians of all ages, such as 20mph speed limits/zones where appropriate. As part of the initiative to make Coventry an 'Age Friendly City,' it will also fund pedestrian dropped kerbs, on-street advisory disabled bays and access protection markings. A contribution will be used to support the recording of the Rights of Way network and its maintenance.

### Traffic Management

This budget will be used to carry out changes to the public highway to reduce congestion and make more efficient use of existing road space and improve safety. Examples include Traffic Regulation Orders, residents parking schemes, signing and lining changes and other minor engineering works. Details of the proposed programme are set out in Appendix 4.

### Urban Traffic Management Control (UTMC)

This allocation will be used to improve signalling at sites across the city. Areas of work will include improvements such as the introduction of pedestrian phases or crossing points to help address some road safety issues across the city. This budget also allows for improvements to the communication system on the highway network, such as, integrating existing and new wireless communication and adding new traffic cameras to manage congested routes. Details of the programme are set out in Appendix 5.

## Intelligent Mobility and Innovation

The objective is to continue to bring together Intelligent Transport Systems and various sources of travel information, to provide the most efficient highway operation and improve the ease of use of accurate travel information for the public. These projects have significant future benefits for improving the impact of transport on air quality and the ability of people to travel more freely.

The Intelligent Mobility programme continues to engage industry partners, universities and local authorities to deliver a Smart City, inclusive of all user groups and modes of transport. Engagement with Transport for West Midlands and local user groups including an Air Quality Alliance and Transport Data Initiative aim to encourage the adoption of emerging technology that will benefit cities and support residents to travel with ease.

This programme is entirely funded by a number of complementary European and Government grant funding streams. Partners include Horiba-MIRA, JLR, Warwick Manufacturing Group, Coventry University, Siemens, Visteon, RDM, TfWM, Vodafone, Huawei and various European cities.

Details of the current projects are in the table below.

UK Autodrive	An Innovate UK funded project in which the Council will receive funding to facilitate and host trials of connected and autonomous vehicles within the city, working with major industry partners and Milton Keynes. The project started in November 2015 and will run for 3 years. Following successful track demonstrations in 2016 and 2017, and on-street demonstrations in Autumn 2017, the final rounds of demonstrations are planned for Autumn 2018.
UK CITE	A collaborative Innovate UK funded project working with Highways England and industry to establish a globally unique Connected and Autonomous Vehicle real-world test environment and facility utilising urban roads, A-roads, and Smart Motorways. The project started in June 2016, running for 2.5 years.
SUITS	A European funded project to evaluate interventions that will improve Coventry's resilience and ability to deliver on reducing congestion, pollution and the development of inclusive transport measures impacting the quality of life for urban dwellers and commuters. For 4 years from December 2016.

**Carriageway Plane and Patch Schemes**

<b>Road Name</b>	<b>From</b>	<b>To</b>	<b>Ward</b>
Butt Lane	148	160	Bablake
Bablake Close	Thurlestone Road	End	Bablake
Princethorpe Way	Oxendon Way	Bruntingthorpe	Binley & Willenhall
Fawley Close	Full Length	Full Length	Binley & Willenhall
Quinton Park	Daventry Road	Black Prince Avenue	Cheylesmore
Queen Philippa Street	Arundel Road	End	Cheylesmore
Endemere Road	Kingfield Road	Lockhurst Lane	Foleshill
Sandown Avenue	Full length	Full length	Foleshill
Osprey Close	Full Length	Full Length	Henley
Chaceley Close	No 1	No 7	Henley
Shilton Lane	Dutton Road	45 Shilton Lane	Henley
Hedde Grove	Shuttle Street	Weavers Walk	Longford
Dame Agnes Grove	Frevill Road	Miles Meadow	Longford
Frevill Road	Carey Street	Dame Agnes Grove	Longford
Radford Road	Various Locations	Various Locations	Radford
St Nicholas Street	Various Locations	Various Locations	Radford
Newington Close	Kingsbury Road	Ruskin Close	Sherbourne
Rowington Close	Newington Close	End	Sherbourne
Wycliffe Road West	Alfall Road	Clovelly Road	Upper Stoke
Deegan Close	Swancroft Road	End	Upper Stoke
Torpoint Close	Parry Road	End	Upper Stoke
Blackberry Lane	Various Locations	Various Locations	Upper Stoke
Sewall Highway	Tiverton Road	Bell Green Road	Upper Stoke / Wyken/Longford
Hexworthy Avenue	Dewsbury Avenue	Finnemore Close	Wainbody
Finham Grove	Full Length	Full Length	Wainbody
Wansfell Close	Full Length	Full Length	Westwood
Willow Grove	Full Length	Full Length	Westwood
Tile Hill Lane	Jobs Lane Junction	Jobs Lane Junction	Westwood
Boar Croft	Full Length	Full Length	Woodlands
Lambourne Close	Full Length	Full Length	Woodlands
The Glade	Broad Lane	End	Woodlands
Farcroft Avenue	Full Length	Full Length	Woodlands
Rodway Drive	Full Length	Full Length	Woodlands
Ansty Road	Various Locations	Various Locations	Wyken/Upper Stoke/Lower Stoke
Winsford Avenue	Various Locations	Various Locations	Whoberley



### Carriageway Resurfacing

Road Name	From	To	Ward
Guilborough Road	Full length	Full length	Binley & Willenhall
Progress Way	Full Length	Full Length	Binley & Willenhall
Delaware Road	Full length	Full length	Earlsdon
John Wigley Way & The Stampings	Full length	Full length	Foleshill
Eden Street	Full length	Full length	Foleshill
A444- Jimmy Hill Way	Tesco junction	Tesco junction	Foleshill/Longford/Holbrook
North View	Full Length	Full Length	Henley
Woodway Lane	Stoneywood Road	Wigston Road	Henley
Sandy lane	Number 36	Lydgate Road	Radford
Lydgate Road	Chetton Avenue	Middlemarch Road	Radford
Middlemarch Road	Lydgate Road	Cheveral Avenue	Radford
Cheveral Avenue	Middlemarch Road	No 6 Cheveral Avenue	Radford
Sewall highway Service Road	Full length	Full length	Upper Stoke
Mantilla Drive	Baginton Road	Chideock Hill	Wainbody
Clifford Bridge Road Roundabout	Tesco junction	Tesco junction	Wyken
Clifford Bridge Road Roundabout	Sowe Valley Link	Sowe Valley Link	Wyken
Clifford Bridge Road Roundabout	Tesco junction	Sowe Valley Link	Wyken
Sewall Highway-Roundabout	Tiverton Road	Wyken Grange Road	Wyken/Upper Stoke
Sewall Highway-Roundabout	Torcross Avenue	Avon Street	Wyken/Upper Stoke

### Surface Treatment - Carriageway Micro Asphalt

Road Name	From	To	Ward
Cardale Croft	Full Length	Full Length	Binley & Willenhall
Boston Place	Full Length	Full Length	Foleshill
Emery Close	Full Length	Full Length	Henley
Ainsdale Close	Full Length	Full Length	Longford
Swinburne Avenue	Full Length	Full Length	Lower Stoke
Troughton Crescent	No 4	Humberstone Road	Sherbourne
Alma Street	Full Length	Full Length	St Michaels
Goring Road	Full Length	Full Length	Upper Stoke
Barnack Avenue	Full Length	Full Length	Wainbody
Finnemore Close	Full Length	Full Length	Wainbody
Stonehaven Drive	Full Length	Full Length	Wainbody
Broadmere Rise	Full Length	Full Length	Westwood
Ireton Close	Full Length	Full Length	Westwood
Maureen Close	Full Length	Full Length	Westwood
Stowe Place	Full Length	Full Length	Westwood
Winceby Place	Full Length	Full Length	Westwood

Broadmere Rise	Full Length	Full Length	Westwood
Lyndale Road	Glendower Avenue	Wildcroft Road	Whoberley
Howlette Road	Full Length	Full Length	Woodlands
Manderley Close	Full Length	Full Length	Woodlands
Nova Croft	Full Length	Full Length	Woodlands

### Surface Treatment - Carriageway Surface Dressing Schemes

Road Name	From	To	Ward
Bridle Brook Lane	Full Length	Full Length	Bablake
Cottesbrook Close	Full Length	Full Length	Binley & Willenhall
Leaf Lane / Abbey Road	JLR Roundabout	Leisure Centre	Cheylesmore
A444 - Jimmy Hill Way	Stoney Stanton Road	Foleshill Road	Foleshill
Henley Road	Woodway Lane	Luscombe Road	Henley
Lindley Road	Full Length	Full Length	Lower Stoke
Harris Road	Full Length	Full Length	Lower Stoke
Brympton Road	Full Length	Full Length	Lower Stoke
Trentham Road/Newnham Road	Full Length	Full Length	St Michaels
Lansdowne Street	Full Length	Full Length	St Michaels
Brunel Close	Full Length	Full Length	St Michaels
Oldfield Road	Full Length	Full Length	Whoberley
Utrillo Close	Full Length	Full Length	Whoberley
Albany Road	Broomfield Road	Earlsdon Avenue South	Whoberley/Earlsdon
A45- Outbound	Parkhill Drive	Pickford Green Lane	Woodlands/Bablake
Oakford Drive	Full Length	Full Length	Woodlands
Wareham Green	Full Length	Full Length	Wyken
Blandford Drive	Full Length	Full Length	Wyken
Swanage Green	Full Length	Full Length	Wyken
Shillingstone Close	Full Length	Full Length	Wyken
Ansty Road	Clifford Bridge Road	Wyken Croft	Wyken
Clifford Bridge Road	Brinklow Road	Sowe Valley Link	Wyken

### Footway Improvement Schemes - Reconstruction / Overlay Schemes

Road Name	From	To	Ward
Cameron Close	See note below the table	See note below the table	Bablake
Greens Road	See note below the table	See note below the table	Bablake
Norman Place Road	See note below the table	See note below the table	Bablake
Tamworth Road	See note below the table	See note below the table	Bablake
Oxendon Way	See note below the table	See note below the table	Binley & Willenhall
Yarningale Road	See note below the table	See note below the table	Binley & Willenhall
Stretton Avenue	See note below the table	See note below the table	Binley & Willenhall
Dillotford Avenue	See note below the table	See note below the table	Cheylesmore/Earlsdon
Deedmore Road	See note below the table	See note below the table	Henley

Regina Crescent	See note below the table	See note below the table	Henley
Meadow Road	See note below the table	See note below the table	Holbrook
Whitmore Park Road	See note below the table	See note below the table	Holbrook
Hen Lane	See note below the table	See note below the table	Holbrook
Aldermans Green Road	See note below the table	See note below the table	Longford
Berkswell Road	See note below the table	See note below the table	Longford
Grayswood Avenue	See note below the table	See note below the table	Sherbourne
Holyhead Road	See note below the table	See note below the table	Sherbourne/Bablake
Beanfield Avenue	See note below the table	See note below the table	Wainbody
Pine Tree Avenue	See note below the table	See note below the table	Westwood
Overdale Road	See note below the table	See note below the table	Whoberley
Winsford Avenue	See note below the table	See note below the table	Whoberley
Chadwick Close	See note below the table	See note below the table	Woodlands
Alspath Lane	See note below the table	See note below the table	Woodlands
Hipswell Highway	See note below the table	See note below the table	Wyken/Lower Stoke

**Note:** Schemes may not be the entire length of the named street/Road

#### **Footway Improvement Schemes - Slurry Sealing**

Road Name	From	To	Ward
Browns Lane	Marystow Close	Ripon Close	Bablake
Marystow Close	Full Length	Full Length	Bablake
Ascot Close	Full Length	Full Length	Binley & Willenhall
Capulet Close	Full Length	Full Length	Binley & Willenhall
Chapel Farm Close	Full Length	Full Length	Binley & Willenhall
Dogberry Close	Full Length	Full Length	Binley & Willenhall
Dunsmore Avenue	Full Length	Full Length	Binley & Willenhall
Fawley Close	Full Length	Full Length	Binley & Willenhall
Gunton Avenue	Full Length	Full Length	Binley & Willenhall
Joe Obrien Close	Full Length	Full Length	Binley & Willenhall
Oratory Drive	Full Length	Full Length	Binley & Willenhall
Stretton Avenue	Chace Avenue	Dunsmore Avenue	Binley & Willenhall
Windridge Close	Full Length	Full Length	Binley & Willenhall
Beckfoot Drive	Full Length	Full Length	Henley
Calmere Close	Full Length	Full Length	Henley
Caspian Way	Full Length	Full Length	Henley
Chelwood Grove	Full Length	Full Length	Henley
Deanston Croft	Full Length	Full Length	Henley
Gillians Walk	Full Length	Full Length	Henley
Merryfields Way	Full Length	Full Length	Henley
Norman Avenue	Full Length	Full Length	Henley
Peacock Avenue	Full Length	Full Length	Henley
Wigston Road	Full Length	Full Length	Henley

Shakespeare Street	North Street	Dane Road	Upper Stoke
Bransford Avenue	Full Length	Full Length	Wainbody
De Montfort Way	End/Chancellors Close	Lynchgate Road Roundabout	Wainbody
Devereux Close	Full Length	Full Length	Westwood
Ensign Close	Full Length	Full Length	Westwood
Goodman Way	Full Length	Full Length	Westwood
Patricia Close	Full Length	Full Length	Westwood
Lower Eastern Green Lane	Upper Eastern Green Lane	Park Hill Drive	Woodlands

### Highway Structures Schemes

Road Name	Structure	Scope of works	Ward
A4053 Ringway Rudge Junction 7	Rudge / Meadow Street Culvert	Culvert strengthening.	St Michaels/ Sherbourne
Farcroft Avenue / Goldthorne Close	Farcroft Culvert / Goldthorne Culvert	Bridge replacement / strengthening.	Woodlands
B4109 Stoney Stanton Road	Priestley's Canal Bridge	Brickwork repairs.	Foleshill/St Michaels
Cash's Lane	Cash's Canal Bridge	Brickwork repairs.	Radford/Foleshill
Coundon Road	Coundon Road level crossing retaining wall	Install vehicle incursion measures.	Sherbourne/Radford

### Drainage Schemes

Road Name	From	To	Ward
Earlsdon Avenue (South)	Entrance to City Arms Pub.	75-77 Earlsdon Avenue South.	Earlsdon
Medina Road	15/17 Medina Road	30/36 Medina Road.	Foleshill
Shilton Lane	46 Shilton Lane	50 Shilton Lane	Henley
Caludon Road	No115 Caludon Road	No119 Caludon Road	Upper Stoke

### Proposed Verge Schemes

Location	Proposed Action
General	Repair and protection
<b>Previously Approved</b>	
Charter Avenue – No. 314 to Mitchell Avenue	Combination of use of grass grids, recycled materials and bollards. This is the final phase of the works on Charter Avenue.
<b>Tier 1 Roads</b>	
Holyhead Road – various sections	Use of bollards
<b>Tier 2 Roads</b>	
Old Church Road – No.309 to Gayer Street	Combination of use of grass grids, bollards and blacktop footway.
Quinton Road	Combination of use of grass grids, recycled materials and bollards
Langbank Avenue – eastern end	Recycled materials or grass grids
Daventry Road	Recycled materials or grass grids
St James Lane northern side, west of Yarningale Road	Combination of use of recycled materials and bollards/railings.

**Note:** All locations subject to investigation and possible delays due to engineering difficulties.

Location	Possible Action
A444/Foleshill Road roundabout	Further investigations to be undertaken
A444/Heath Crescent roundabout	Further investigations to be undertaken
A444/Stoney Stanton Road roundabout	Further investigations to be undertaken
Ansty Road	Average Speed Enforcement (ASE)
Binley Road/Allard Way/Hipswell Highway junction	Further investigations to be undertaken
Charter Avenue	Further investigations to be undertaken
Cheveral Avenue/Jubilee Crescent	Further investigations to be undertaken
Far Gosford Street	Further investigations to be undertaken
Foleshill Road (Lockhurst Lane to A444)	Further investigations to be undertaken
Hall Green Road/Aldermans Green Road/Windmill Road junction	Further investigations to be undertaken in regard to use of traffic lights
Harnall Lane East	Further investigations to be undertaken
Holbrook Lane/Holbrook Way roundabouts	Further investigations to be undertaken
Kingfield Road	Further investigations to be undertaken
Lockhurst Lane (Foleshill Road to Durbar Avenue)	Further investigations to be undertaken
London Road	Average Speed Enforcement (ASE)
Old Church Road	Further investigations to be undertaken
Radford Road/Keresley Road	Further investigations to be undertaken
Stoney Stanton Road	Further investigations to be undertaken
Swan Lane (Harnall Ln East to Red Lane)	Further investigations to be undertaken
Walsgrave Road (A444 to Longfellow Rd roundabout)	Further investigations to be undertaken

**Note:** Schemes in alphabetical order – not priority order

All locations subject to detailed investigation and possible delays caused by engineering difficulties, an element of over programming has been included to accommodate this. Any schemes which are not completed will be carried forward for prioritisation in the next financial year.

General	General low cost traffic management measures. e.g. road markings, traffic signs, bollards and congestion related remedial measures
Traffic Counts	Surveys to assess, traffic movements, speeds and volume
Traffic Regulation Orders	Advertisement and implementation of new and amended waiting restrictions
Residents' Parking Schemes	Programme of new and amendments to existing residents parking schemes
Mobile Vehicle Activated Sign (VAS) programme	To address speed concerns

**Note:** This may also include approved priority and reserve schemes which will be carried forward from 2017/18.

All locations subject to detailed investigation and possible delays caused by engineering difficulties / consultation issues

List of Schemes	Possible Action
General	Improvement to existing infrastructure
Ring Road Junction 7	Improvement to traffic signals to assist traffic and pedestrian movement
Reinstall loop detectors (various sites)	To improve existing infrastructure
Allesley Old Road/Grayswood Avenue	Upgrade and refurbishment of crossing to improve facilities for pedestrians
Signal communication (various sites)	Install mesh network for fault monitoring
Broad Lane/Jobs Lane	Upgrade and refurbishment of crossing to improve facilities for pedestrians

**Note:** All locations subject to investigation and possible delays due to engineering difficulties.