

Cabinet

7 March 2017

**Name of Cabinet Member:**

Cabinet Member for City Services – Councillor Innes

**Director approving the report:**

Executive Director - Place

**Ward(s) affected:**

All

**Title:**

2017/18 Transportation and Highway Maintenance Capital Programme

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**Is this a key decision?**

Yes

Following on from the success of the capital programme delivered in previous years, this report sets out a large programme of £15.6m for transportation and highway maintenance schemes which will affect all wards across the City, and in many cases seeks approval to construct/ implement them.

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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. All sources of funding are considered including the West Midlands Strategic Transport Plan, Corporate Capital Resources, Section 106 monies and other specific grants. This approach will ensure that opportunities for 'joining up' schemes to get the best value for money can be identified.

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 road condition surveys.
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, traffic management schemes and Public Realm works, which where possible will be linked to maintenance projects to maximise savings and the efficiency of implementation.

4. Provide a programme of footway improvements funded from the Whitefriars Housing Group as part of a £3m investment which will be delivered over the next financial year.

**Recommendations:**

The Cabinet is requested to approve:

1. The 2017/18 capital programme of schemes for maintenance and integrated transport as detailed in table 4 below; and,
2. The schemes designated 'A' for construction in 2017/18 as indicated in table 4, and delegate authority to the Cabinet Member for City Services, to approve the schemes not designated 'A' in table 4.

**List of Appendices included:**

Appendix 1 – Description of all Maintenance, Integrated Transport & Challenge Fund schemes.

Appendix 2 – Breakdown of the Structural Maintenance Programme

Appendix 3 – Breakdown of the Road Maintenance Programme including verges

Appendix 4 – Proposed Safety Schemes Programme

Appendix 5 – Proposed Traffic Management Programme

Appendix 6 – Proposed Urban Traffic Management Control programme.

**Background papers:**

None

**Other Useful Papers:**

Budget Report 2017/18 (City Council)

<http://democraticservices.coventry.gov.uk/ieListDocuments.aspx?CId=130&MIId=11142&Ver=4>

**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 Full Council on 21st February 2017.

**Will this report go to Council?**

No

**Report title:  
2017/18 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 2017/18. 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 will come under the control of the West Midlands Combined Authority Elected Mayor when they take office. 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>2017/18 £000's</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	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	17,618
Highways Maintenance Block Capital**	Allocated to the WMCA but distributed straight to LA's via DfT calculated formula	14,486	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.	1,356*	2,731*	2,731*	2,731*
<b>Total</b>		<b>35,260</b>	<b>35,261</b>	<b>35,261</b>	<b>35,261</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 2017/18, based on the DfT revised needs formula is £2.458m. 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 next four years. DfT has decided that authorities within a combined authority meet the criteria for band three and on this basis, Coventry receives maximum funding.
- 2.7 In 2015 Coventry City Council was successful in two bids submitted to the Challenge Fund. These were a joint West Midlands bid based on road condition and a second bid for substantial works to the Swanswell Viaduct on the ring road. The monies received from these bids have been spent over the last two financial years and this will continue in the coming year. All funding from the Challenge Fund tranche one must be spent by the end of the 2017/18 financial year. Progress of these schemes is described in Appendix 1.
- 2.8 The total ITB allocation in 2017/18 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**

<b>Budget Heading</b>	<b>2016/17 Allocation (£m's)</b>	<b>Notes</b>
TfWM Allocation	4.382	25%
Local Authorities Allocation	13.146	£1.602m 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, Whitefriars Right to Buy Capital receipts and Section 106 funds received as part of the planning process).

**Table 3 – Coventry Capital Resources**

<b>Funding Source</b>	<b>2017/18 (£m's)</b>
Integrated Transport Block	1.602
Highways Maintenance Block	2.458
Corporate Capital Resources	2.369
<b>Subtotal of Core Funding</b>	<b>6.429</b>
Section 106	0.350
Whitefriars Housing Group contribution	3.000
Challenge Fund - West Midlands Network Renewal	0.537
Challenge Fund - Swanswell Viaduct	4.767
Additional DfT funding	0.537
National Productivity Investment Fund	TBC
<b>Total</b>	<b>15.620</b>

- 2.11 In June 2016, WMCA approved the West Midlands Strategic Transport Plan “Movement for Growth”; which sets 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 2016/17 programme, there is an emphasis on making the best use of existing infrastructure rather than creating new. Consequently, a significant 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 £1m will be used alongside a further investment from Whitefriars of £1.8m, to carry out a comprehensive programme of improvements in the Manor Farm area of the City. The works at Manor Farm will include extensive changes to pavements, roads and landscaping to enhance the major improvements to the housing stock which Whitefriars are carrying out separately. Additionally £200k from RTB will be made available for other Highways improvements across Whitefriars estates.

- 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 2017/18. 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 Increased pressure on budgets means we need to take a more targeted approach to road safety. In previous years, we have allocated an amount of the ITB budget to install schemes in areas where residents, pedestrians and /or road users perceive risk, but where the criteria for a local safety scheme was not met. This year, we will introduce moveable vehicle activated signs which can be rotated around sites of concern and in addition, we will collaborate with local police and work with residents to encourage the use of community speed-watch to monitor the speed of vehicles. 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.
- 2.19 In the 2016 autumn statement HM government announced a new National Productivity Investment Fund to be spent on innovation and infrastructure over the next 5 years. The funding, for local highway and other local transport improvements, aims to reduce congestion at key locations, upgrade or improve the maintenance of local highway assets, improve access to employment, housing and to develop economic and job creation opportunities. In 2017/18 the amount allocated to the West Midlands is £5.788m this will be distributed to the local authorities, the exact amounts to be announced shortly.
- 2.20 Approval is sought for those schemes and scheme programmes (as detailed in the appendices) marked with an A in Table 4.

#### Externally funded projects

- 2.21 External funding is being sought wherever possible to support the programme. The Connecting Coventry – Strategic Transport Investment Programme Cabinet Report, January 2017 outlines a £620m programme of transport infrastructure improvements, to maximise the economic potential of the city and take full advantage of developments, such as High Speed Rail (HS2) and strategic cross boundary transport schemes that support Coventry's growth aspirations. The principal objectives of this include; improving road resilience, ensuring connectivity by road and rail to HS2, access to jobs at UK Central, linking key developments including Friargate and Jaguar Landrover and a step change in the quality of public transport through the development of very light rail.

- 2.22 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. Further funding is also sought through the CWLEP for Local Growth Deal 3 for additional public realm improvements, following the award of £2m in 2016/17 for a package of enhancements, including Greyfriars Lane and the area adjacent to Cathedral Lanes.
- 2.23 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. Ongoing works include looking at the merging of transport, digital communications and sensing technologies to provide improved mobility for people and freight.
- 2.24 The funding for the 2017/18 Intelligent Mobility programme is supported by funds secured from Growth Deal, Europe and national UK funding competitions (such as those run through InnovateUK). These funds can only be used to deliver innovation and intelligent mobility projects. In addition to successful bids in 2015/16, a further £150k has recently been awarded by the DfT to deliver the first city wide deployment of real time parking guidance sensors, which will inform motorists where empty spaces are located throughout the available 400 on-street pay and display and disabled bays across the city centre.
- 2.25 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.

Transportation & Maintenance Capital Programme 2017/18

Table 4

	<b>Maintenance</b>	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	Approval
		Corporate Capital Resources	Integrated Transport Block	Highways Maintenance Block	Section 106	Whitefriars RTB	Challenge Fund	Additional DFT Funding	TOTAL	
1	Planing and Patching	378	0	0	0	0	0	198	576	A
2	Resurfacing	665	0	927	0	0	0	0	1592	A
3	Surface Treatments	340	0	351	0	0	0	0	691	A
4	Footway Improvement Schemes	700	0	300	0	3000	0	0	4000	A
5	Verges	0	0	100	0	0	0	0	100	A
6	Vehicle Safety Fence	0	0	50	0	0	0	0	50	A
7	Structures	0	0	340	0	0	0	0	340	A
8	Drainage Surveys / Maintenance	0	0	390	0	0	0	0	390	A
9	DfT Incentive Fund*	0	0	0	0	0	0	189	189	-
10	Swanswell Viaduct	184	0	0	0	0	4767	0	4951	A
11	West Midlands Renewal	102	0	0	0	0	537	0	639	A
	<b>Sub Total</b>	<b>2369</b>	<b>0</b>	<b>2458</b>	<b>0</b>	<b>3000</b>	<b>5304</b>	<b>387</b>	<b>13518</b>	
	<b>Integrated Transport</b>									
12	UTMC	0	250	0	0	0	0	0	250	A
13	Safety Schemes	0	160	0	0	0	0	0	160	A
14	Vulnerable Users	0	116	0	0	0	0	0	116	A
15	Scheme Development	0	240	0	0	0	0	0	240	-
16	Traffic Management	0	430	0	196	0	0	0	626	A
17	Contribution to Wider Programme	0	406	0	0	0	0	0	406	-
18	National Productivity Investment Fund	0	0	0	0	0	0	TBC	0	-
19	Real time parking sensors (DfT)	0	0	0	0	0	0	150	0	-
	<b>Other Schemes</b>									
20	Skipworth Road	0	0	0	154	0	0	0	154	-
	<b>Sub Total</b>	<b>0</b>	<b>1602</b>	<b>0</b>	<b>350</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>2102</b>	<b>-</b>
	<b>Grand Total</b>	<b>2369</b>	<b>1602</b>	<b>2458</b>	<b>350</b>	<b>3000</b>	<b>5304</b>	<b>537</b>	<b>15620</b>	<b>-</b>

\*Subject to TfWM decision pending



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

- 3.1 The West Midlands Strategic Transport Plan 'Movement for Growth' replaces 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 2017/18 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 2018.

### **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 £6.429m is set out in Table 3 and this was approved by Cabinet on 21st February 2017. This programme is supplemented by additional Section 106 funding and 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 prevent 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 £6.429m. As indicated this is complemented by other specific sources of funding from contribution under planning agreements under Section 106 of the Town and Country Planning Act 1990. Funding from planning obligations may only be used in accordance with the terms of the relevant agreement/undertaking under which the developer funding was provided.

## **6. Other implications**

### **6.1 How will this contribute to achievement of the council's key objectives / corporate priorities (corporate plan/scorecard) / organisational blueprint / LAA (or Coventry SCS)?**

The programme will help to address Sustainable Community Strategy (SCS) 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 SCS 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 Assistant Director (Transportation 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 seven financial years, the deterioration of the road network has continued to reduce significantly and it's 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 2017/18 financial year are listed in appendix 3. As discussed in the report there is also an extra £3.0M 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.

**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 level problems. 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 £7/m<sup>2</sup> for slurry seal up to £90/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 £30.00 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 seventh 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 £4.50 per square metre and Micro Asphalt is typically £8.50 per square metre, compared to over £30.00 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.

#### 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. Details of the programme are set out in Appendix 2.

### Challenge Fund

#### **Swanswell Viaduct Maintenance Scheme**

In 2015 the Council was successful in securing £5.5m of DfT challenge funding towards maintenance of the Swanswell Viaduct. In total £6.05million will be spent by March 2018 to meet DfT conditions.

The Swanswell scheme involves the structural refurbishment of elements on the Swanswell Viaduct between Junctions 2 and 4 of the Coventry Ring Road.

Significant investigation and preparatory work has taken place over the last two years. The main construction work will begin in May for ten months.

#### **West Midlands Network Renewal Challenge Fund**

This joint West Midlands bid based on road condition is about to start its third and final year of spend. Collaborative work by the 7 authorities across the region achieved a successful bid and Coventry City Council will have received £1.765m in total. Approximately £0.6m is scheduled to be spent in 2017/18 and will add to the improvements to carriageways assets already achieved with this funding. The fund has mainly been spent on carriageway resurfacing, along with some surface treatments.

## **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 4.

### 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 5.

### 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 6.

### 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 Age Friendly Group aims 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, Serious Games International Ltd, TfWM, Vodafone, Huawei and various European cities.

Details of the various projects are in the table below.

Hope	A collaborative European funded project receiving an extension until Summer 2017 to test an innovative journey planning tool across the West Midlands that supports low carbon impact journeys using rail and bus multi-modal options.
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 demonstrations in Autumn 2016, the next set of demonstrations are planned for Spring 2017.
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.
iVMS/Dynamic Routing	A collaborative project funded by CW LEP Growth Deal which will deliver immediate traffic management efficiencies as well as develop new technologies to improve vehicle routing and network resilience. Started in December 2015 and running for approximately 2.5 years.
Catch!	A collaborative Innovate UK funded project in which the Council will receive funding to coordinate between various UK cities and recruit users of a travel App which will improve highway network management information. Started in January 2016 and running for 2 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.



2017/18 Highway Structures Schemes

Appendix 2

Road Name	Structure	Scope of works	Ward
A4053 Ringway Rudge Junction 7	Rudge / Meadow Street Culvert	Culvert strengthening.	St Michaels / Sherbourne
Butt Lane	Cul de Sac Bridges (3 N°)	Bridge replacement(s).	Bablake
Farcroft Avenue / Goldthorne Close	Farcroft Culvert / Goldthorne Culvert	Bridge replacement / strengthening.	Woodlands
A600 Walsgrave Road	Walsgrave Road Bridge	Painting & bird netting installation.	St Michaels / Upper Stoke
B4109 Stoney Stanton Road	Priestley's Canal Bridge	Brickwork repairs.	Foleshill / St Michaels
Cash's Lane	Cash's Canal Bridge	Brickwork repairs.	Radford / Foleshill
A4053 Ringway St Patricks	Manor Road Footbridge	Waterproofing / resurfacing.	St Michaels
Coundon Road	Coundon Road level crossing retaining wall	Install vehicle incursion measures.	Sherbourne / Radford
Holbrook Way	3 Spires Bridge	Bridge joint replacement.	Holbrook / Foleshill

**2017/18 Carriageway Resurfacing**

<b>Road Name</b>	<b>From</b>	<b>To</b>	<b>Ward</b>
Santos Close	Full Length		Binley & Willenhall
Montalt Road	Full Length		Cheylesmore
Deedmore Road	Dutton Road	Ringwood Highway	Henley
Winding House Lane	Hen Lane	Burbages Lane	Holbrook
Bede Road	Full Length		Radford
Cranford Road	Full Length		Sherbourne
Woodclose Avenue	Full Length		Sherbourne
Far Gosford Street	Vecqueray Street	Sky Blue Way	St Michaels
Druid Road	Full Length		Lower Stoke
Bransford Avenue	De Montfort Way North	De Montfort Way South	Wainbody
Fir Tree Avenue	Beech Tree Avenue	Elm Tree Avenue	Westwood
Broadmere Rise	Broad Lane	End	Westwood
Tile Hill Lane	Vanguard Avenue	Herald Way	Earlsdon
Whoberley Avenue	Full Length		Whoberley

**2017/18 Carriageway Micro Asphalt Schemes**

<b>Road Name</b>	<b>From</b>	<b>To</b>	<b>Ward</b>
Chesterton Road	Full Length		Bablake
Long Close Avenue	The Wardens Avenue	Barnfield Avenue	Bablake
The Wardens Avenue	Full Length		Bablake
Potton Close	Full Length		Binley & Willenhall
Woodfield Road	Full Length		Earlsdon
Oliver Street	Full Length		Foleshill
Farndale Avenue	Lauderdale Avenue	Glaisdale Avenue	Holbrook
Glaisdale Avenue	Full Length		Holbrook
Carey Street	Weavers Walk	Bell Green Road	Longford
Sapphire Gate	Bromleigh Drive	Lord Lytton Avenue	Lower Stoke
Wordsworth Road	Emerson Road	Browning Road	Lower Stoke
Sherbourne Crescent	Full Length		Sherbourne
Hartlepool Road	Full Length		St Michaels
Redcar Road	Full Length		St Michaels
Stockton Road	Full Length		St Michaels
Heycroft	Full Length		Wainbody
Highwaymans Croft	Full Length		Wainbody
Riverford Croft	Full Length		Wainbody
The Galliards	Full Length		Wainbody
Tynward Close	Full Length		Wainbody
Wade Avenue	Mantilla Drive	Dewsbury Avenue	Wainbody
Kirby Road	Hearsall Lane	Melbourne Road	Whoberley
Pangfield Park	Torbay Road	Allesley Hall Drive	Whoberley

Appledore Drive	Full Length		Woodlands
Barnstaple Close	Full Length		Woodlands
Abbeydale Close	Full Length		Wyken
Bridgeacre Gardens	Full Length		Wyken
Caludon Park Avenue	Full Length		Wyken
Colebrook Close	Full Length		Wyken
Fieldside Lane	Full Length		Wyken
Glebefarm Grove	Full Length		Wyken

**2017/18 Carriageway Surface Dressing Schemes**

<b>Road Name</b>	<b>From</b>	<b>To</b>	<b>Ward</b>
Pikers Lane	Wall Hill Road	Bridle Brook Lane	Bablake
Poole Road	Full Length		Bablake / Radford
Streamside Close	Full Length		Bablake
Thistley Field East	Full Length		Bablake
Thistley Field North	Full Length		Bablake
Thistley Field South	Full Length		Bablake
Thistley Field West	Full Length		Bablake
Watery Lane	Boundary at Wall Hill Road	Clay Lane	Bablake
Gregory Hood Road	Full Length		Cheylesmore
Livingstone Road	Full Length		Foleshill
Holbrook Lane	Full Length		Holbrook
Frankland Road	Full Length		Longford
Astley Avenue	Full Length		Foleshill
Lindley Road	Full Length		Lower Stoke
Cedars Avenue	Max Road	Evenlode Crescent	Sherbourne
Westbury Road	Grayswood Avenue	Dulverton Avenue	Sherbourne
Cawthorne Close	Full Length		St Michaels
Orwell Road	Full Length		St Michaels
Upper York Street	Full Length		St Michaels
Welland Road	Full Length		St Michaels
Westminster Road	Full Length		St Michaels
Cleveland Road	Full Length		Upper Stoke
Gaza Close	Jobs Lane	End	Westwood
Standard Avenue	Eastcotes	A45 Fletchamstead Highway	Westwood
Westcotes	Standard Avenue	Torrington Avenue	Westwood
Earlsdon Avenue North	Westwood Road	Hearsall Lane	Whoberley
Fife Road	Full Length		Whoberley
Kingsland Avenue	Full Length		Whoberley
Rembrandt Close	Full Length		Whoberley
Portree Avenue	Full Length		Wyken
Wimborne Drive	Full Length		Wyken

**2017/18 Carriageway Plane and Patch Schemes**

<b>Road Name</b>	<b>Terminals From To</b>	<b>Ward</b>
Burnaby Road	Various areas of patching	Bablake / Radford / Holbrook
Remembrance Road	Various areas of patching	Binley & Willenhall
Exminster Road	Various areas of patching	Cheylesmore / Earlsdon
Seymour Close	Various areas of patching	Cheylesmore
Warwick Road	Various areas of patching	Cheylesmore / Earlsdon / St Michaels
Paxmead Close	Various areas of patching	Holbrook
Lancia Close	Various areas of patching	Longford
Enfield Road	Various areas of patching	Lower Stoke
Loudon Avenue	Various areas of patching	Radford
Holyhead Road	Various areas of patching	Sherbourne / Bablake
Newnham Road	Various areas of patching	St Michaels
Trentham Road	Various areas of patching	St Michaels
Cove Place	Various areas of patching	Upper Stoke
Lichen Green	Various areas of patching	Wainbody
St Martins Road	Various areas of patching	Wainbody
Tanners Lane	Various areas of patching	Westwood
Marlow Close	Various areas of patching	Whoberley
Pyt Park	Various areas of patching	Whoberley
Broad Lane	Various areas of patching	Woodlands / Westwood / Earlsdon / Whoberley
Ettington Road	Various areas of patching	Woodlands
Staverton Close	Various areas of patching	Woodlands
William Bree Road	Various areas of patching	Woodlands
Carver Close	Various areas of patching	Wyken

### **2017/18 Footway Reconstruction / Overlay Schemes**

<b>Road Name</b>	<b>Terminals From To</b>	<b>Ward</b>
Brown's Lane	See note at bottom of the page	Bablake
Norman Place Road	See note at bottom of the page	Bablake
Sadler Road	See note at bottom of the page	Bablake / Radford
Tamworth Road	See note at bottom of the page	Bablake
Oxendon Way	See note at bottom of the page	Binley & Willenhall
Earlsdon Avenue North	See note at bottom of the page	Earlsdon / Whoberley
Regina Crescent	See note at bottom of the page	Henley
Whitmore Park Road	See note at bottom of the page	Holbrook
Meadow Road	See note at bottom of the page	Holbrook
Alderman's Green Road	See note at bottom of the page	Longford / Henley
Mill Race Lane	See note at bottom of the page	Longford
Craners Road Area	See note at bottom of the page	St Michaels
Hartlepool Road Area	See note at bottom of the page	St Michaels
Beanfield Avenue	See note at bottom of the page	Wainbody
Chestnut Tree Avenue	See note at bottom of the page	Westwood
Pine Tree Avenue	See note at bottom of the page	Westwood
Overdale Road	See note at bottom of the page	Whoberley
Chadwick Close	See note at bottom of the page	Woodlands
Nod Rise	See note at bottom of the page	Woodlands
Hipswell Highway	See note at bottom of the page	Wyken / Lower Stoke

### **2017/18 Footway Slurry Seal Schemes**

<b>Road Name</b>	<b>Terminals From To</b>	<b>Ward</b>
Brown's Lane	See note at bottom of the page	Bablake
Ashcroft Close	See note at bottom of the page	Henley
Boyd Close	See note at bottom of the page	Henley
Brookshaw Way / Holmecroft	See note at bottom of the page	Henley
Caspian Way (linked to Boyd Close)	See note at bottom of the page	Henley
Chaceley Close / Mapperley Close	See note at bottom of the page	Henley
Denshaw Croft	See note at bottom of the page	Henley
Downton Close	See note at bottom of the page	Henley
Edgefield Road	See note at bottom of the page	Henley
Edingale Road	See note at bottom of the page	Henley
Hemingford Road	See note at bottom of the page	Henley
Jonathan Road	See note at bottom of the page	Henley
Julian Close	See note at bottom of the page	Henley
Leven Way	See note at bottom of the page	Henley
Lymore Croft	See note at bottom of the page	Henley
Solent Drive	See note at bottom of the page	Henley
Squires Croft	See note at bottom of the page	Henley

Stonefield Close	See note at bottom of the page	Henley
Alderman's Green Road	See note at bottom of the page	Longford / Henley
Alliance Way	See note at bottom of the page	Upper Stoke
Aldrin Way	See note at bottom of the page	Wainbody
Blackthorn Close	See note at bottom of the page	Wainbody
Brill Close	See note at bottom of the page	Wainbody
Chancellors Close	See note at bottom of the page	Wainbody
Cloud Green	See note at bottom of the page	Wainbody
Collins Grove	See note at bottom of the page	Wainbody
Evesham Walk	See note at bottom of the page	Wainbody
Highwaymans Croft	See note at bottom of the page	Wainbody
Leam Green	See note at bottom of the page	Wainbody
Lichen Green	See note at bottom of the page	Wainbody
Lunar Close	See note at bottom of the page	Wainbody
Old Mill Avenue	See note at bottom of the page	Wainbody
Poolside Gardens	See note at bottom of the page	Wainbody
Stare Green	See note at bottom of the page	Wainbody
Tocil Croft	See note at bottom of the page	Wainbody
Edgehill Place	See note at bottom of the page	Westwood
Ireton Close	See note at bottom of the page	Westwood
Stowe Place	See note at bottom of the page	Westwood
Tanyard Close	See note at bottom of the page	Westwood
Winceby Place	See note at bottom of the page	Westwood
Upper Eastern Green Lane	See note at bottom of the page	Woodlands
Ansty Road	See note at bottom of the page	Lower Stoke / Upper Stoke / Wyken / Henley

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

### **Proposed 2017/18 Verge Programme**

<b>Location</b>	<b>Proposed Action</b>
General	Repair and protection
<b>Previously Approved</b>	
A45 (3 laybys)	Use recycled materials to repair
A4600 – Ansty Road (448 - Caludon Park Ave)	Installation of bollards to prevent parking
Cheveral Avenue (941-51)	Use recycled materials to repair
Watery Lane (15 to Hall Brook Lane)	Use recycled materials to repair worst sections
<b>Tier 2 Roads</b>	
Charter Avenue (between Bradney Green & Mitchell Ave)	Combination of use of grass grids, recycled materials and bollards. These works will be undertaken in phases due to large extent.

**Note:** All locations subject to investigation and possible delays caused by engineering difficulties

## 2017/18 Capital Drainage Schemes

<b>Road Name</b>	<b>From</b>	<b>To</b>	<b>Scope of works</b>	<b>Ward</b>
James Galloway Close	Rear of N° 79 James Galloway Close	Connection to surface water sewer on grassed area	Install new gully and connection to surface water sewer	Binley & Willenhall
Kingfield Road	Outside Walsgrave Construction Limited	Entrance to commercial site.	Install two new gullies and connection to surface water sewer	Foleshill
Woodway Lane	Outside N° 100 Woodway Lane	Outside N° 104 Woodway Lane	Install two new gullies and connection to surface water sewer	Henley
Ansty Road	Outside N° 176 Ansty Road	Outside N° 180 Ansty Road	Install new highway gullies and connect to highway drain	Lower Stoke
Coundon Road	(Entrance to Bablake School)	Outside School Entrance	Install new gully and connection to foul water sewer	Sherbourne
Moseley Avenue / Paxton Road	Junction to rear of N°2 Paxton Road	Junction of Moseley Avenue	Install new highway drain and connection to surface water sewer	Sherbourne
Lower Ford Street	Outside N° 29 Lower Ford Street	Outside N° 35 Lower Ford Street	Install new gullies both sides of the road	St Michaels
Park Road	Full length		Replace existing gullies and connection to foul water sewer	St Michaels
Wyken Grange Road	Wyken Grange Road	Ansty Road	Install new highway drain and gullies	Upper Stoke
Lichen Green	Outside N° 25 Lichen Green	In car park area	Install new gully and connection to surface water sewer	Wainbody
Standard Avenue / Fletchamstead Highway Slip Road	Standard Avenue	Fletchamstead Highway	Install new gully and connection to highway drain.	Westwood
Station Avenue	Outside N° 60 Station Avenue	Outside N° 80 Station Avenue	Install new gullies and connection to surface water sewer	Westwood
Westwood Heath Road	Outside N° 574 Westwood Heath Road	Outside property	Raise kerb line	Westwood

**2017/18 Safety Schemes**

<b>Location</b>	<b>Possible Action</b>
Princethorpe Way	Improvements to 20mph zone gateway signage and Vehicle Activated Sign
Grayswood Avenue	Vehicle Activated Sign
Remembrance Road	Proposed 20mph zone
London Road	Speed Awareness measures (carry forward scheme)
A444/Heath Crescent	Further investigations to be undertaken
Bell Green Road	Further investigations to be undertaken
Burnaby Road/Catesby Road	Further investigations to be undertaken
Charter Avenue	Further investigations to be undertaken
Foleshill Road	Further investigations to be undertaken
Kingfield Road	Further investigations to be undertaken
Lockhurst Lane	Further investigations to be undertaken
Radford Rd/Engleton Rd/ Beake Ave	Further investigations to be undertaken
Warwick Road/Kenilworth Road/ Leamington Road	Further investigations to be undertaken



**2017/18 Traffic Management**

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
Bus Lane Trial	Capacity improvement
Movable Vehicle Activated Sign (VAS) programme	To address speed concerns

**Notes.**

- This includes approved priority and reserve schemes which will be carried forward from 2016/17.
- All locations subject to detailed investigation and possible delays caused by engineering difficulties / consultation issues

**2017/18 UTMC Programme**

<b>Priority Activity List</b>	<b>Possible Action</b>
Binley Road/Church Lane	Improvement to traffic signals to assist traffic and pedestrian movement
Broomfield Road	Improvement to traffic signals to assist traffic and pedestrian movement
Broomfield Road/Albany Road	Install mesh network for fault monitoring
Network Improvement	Improve SCOOT and MOVA corridors

<b>Reserve List</b>	<b>Possible Action</b>
(Pedestrian crossing) Beake Avenue near Foster Road	Upgrade and refurbishment of crossing to improve facilities for pedestrians
(Pedestrian crossing) Ansty Road near Morris Avenue	Upgrade and refurbishment of crossing to improve facilities for pedestrians

**Note:** All locations subject to investigation and possible delays caused by engineering difficulties