Highways Infrastructure Asset Management Plan 2025

Section 8 – Network Resilience

Coventry City Council

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Document Control

Version	Description	Date	Author	Role	Approval
1.0	Minor general updates	August 2016	DCR	Asset Management Engineer	-
1.1	Minor general updates	June 2019	DCR	Asset Management Engineer	Cabinet
2.0	Minor general updates Re-sectioning/accessibility update	May 2025	AC	Asset Management Engineer	Strategic Lead for Highway Operations & Delivery

8. Introduction

It is recognised that climate change is affecting weather patterns. In the UK, this is reflected through greater incidence of prolonged rainfall, strong winds and heatwaves which can combine with other natural events to create adverse conditions for the Councils transport network. The Met Office's 'State of the UK Climate' report (2023) has determined that:

- 2014-2023 was 2% wetter than 1991-2020
- 2014-2023 was 10% wetter than 1961-1990

Where practical, there is a need to make the Councils transport networks more resilient to such events. This is a nationally acknowledge issue primarily brought to national attention by the DfTs (Department for Transport) Transport Resilience Review (2014).

This document will cover resilience regarding extreme weather events but not snow/ice/winter service. This is covered by The Council's Winter Maintenance Policy available on The Council's website.

In recent years prolonged and heavy rainfall has caused disruption to the Coventry transport network, this included road closures and train delays. Coventry's University Hospital temporarily closed two flooded car parks, and many properties were flooded. Since 2012 there have been similar severe weather events which have had a significant impact on individual people, communities and infrastructure. The cost, damage and disruption that extreme weather can cause to homes, businesses and vital services cannot be underestimated.

The Council recognise that change is necessary and have already produced key documents that look to address climate change issues, these being the Local Flood Risk Management Strategy, and the Climate Change Strategy for Coventry. However, this section of the HIAMP will focus primarily on transport infrastructure rather than Council as a whole.

The first step in achieving this is the creation and implementation of a 'resilient network'.

8.1. What is Resilience?

Resilience in the context of this document can be described as the ability of the transport network to recover from planned or unexpected weather events and return to providing the required level of service for customers. It is about increasing the physical resilience of transport systems to extreme weather, so when extreme weather is experienced the transport network continues to function.

8.2. Coventry's Resilient Network & Methodology

Using recommendations from the Transport Resilience Review the Council have developed a resilient network. The Resilient Network (RN) has been set using primarily geographic information with the support of local knowledge. Instead of one single resilient network two subcategories have been created:

- **Primary Resilient Network (PRN)**: Primarily comprising of the routes of national importance; regionally defined Key Route Network (KRN) and the nationally defined Major Route Network (MRN)
- **Secondary Resilient Network (SRN)**: Additional routes of local importance (key gritting routes, locally important infrastructure hubs and facilities etc.)

8.2.1. Primary Resilient Network

We have obtained datasets from central government (for the MRN) and TfWM (Transport for West Midlands – for the KRN). These datasets have been referenced to our electronic GIS (Geographic Information Systems) network. This results in a PRN of:

- MRN Network maintained by Coventry: **60.3km**
- KRN Network maintained by Coventry: **56.2km** (excluding sections already covered by the MRN)
- Total Primary Resilient Network: **116.5km / 13%** of the entire Network

A list of roads within the resilient network will be listed in section 8.5. With a map to be added in a future update.

8.2.2. Secondary Resilient Network

The secondary resilient network has been defined primarily from local geographic knowledge and includes:

- Location of critical local infrastructure and operational facilities
- Emergency services facilities
- Local areas of economic significance
- Areas susceptible to surface water flooding (1/30 years), where the road is a classified road
    - Classified Roads have been used since selecting every intersecting road section this results in 646km / 887km / 73% of our road network. Setting 72% of the road network as the 'Resilient Network' defies the point of setting a resilient network.
- Key gritting routes
- Links to neighbouring (Solihull and Warwickshire) resilient networks
- Any major links connecting the above sections to the wider resilient network
- Total Secondary Resilient Network (excluding areas already covered by the PRN): **81.7km**

8.2.3. Resilient Network Summary

After definition of the above steps we are left with a total resilient network of **198.2km / 22%** of the entire network.

The Transport Resilience Review recommends prioritisation of the resilient network in terms of maintenance funding. Section 6 of the HIAMP outlines our prioritisation process for planned maintenance. The Resilient networks feed into this by:

- Priority for maintenance (where needed) on the PRN (via the hierarchy contribution)
- Priority for maintenance (where needed) on the SRN (in the form of a tie-breaker where schemes rank equally).

8.3. Regional Considerations

Coventry City Council, Solihull Metropolitan Borough Council and Warwickshire County Council have a shared service agreement for Resilience and Emergency Planning. The authorities have committed to working together on resilience matters across the sub-region and have agreed mutual aid arrangements in place. These are replicated across the sub-region to support succinct and efficient lateral communication between authorities. As of 2025 we are also participating members of the West Midlands Regional Adaptation Network (RAN).

8.4. Other Supporting/Relevant Documents

This document supports other Council documents and visa versa, particularly in regards to climate change and flood risk, these documents are:

- Coventry City Council Climate Change Strategy
- Coventry City Council Flood Risk Management Strategy
- Coventry City Council Winter Maintenance Policy

8.5. Resilient Network – List

This section will list all roads forming Coventry's resilient network.

8.5.1. Primary Resilient Network

All named roads in the Primary Resilient Network (of the stated classification) have their full lengths included.

ROAD	WARD	ROAD CLASS	LENGTH (m)
BIRMINGHAM ROAD	BAB	A	6428
KERESLEY ROAD	BAB	B	1778
TAMWORTH ROAD	BAB	B	2829
BRANDON ROAD	BIN	A	801
LONDON ROAD	BIN	B	499
LONDON ROAD	CHE	A	3224
LONDON ROAD	CHE	B	1479
STIVICHALL BYPASS	CHE	A	4536
FLETCHAMSTEAD HIGHWAY	EAR	A	6705
KENILWORTH ROAD	EAR	A	1739
FOLESHILL ROAD	FOL	B	3313
LOCKHURST LANE	FOL	B	1046
HINCKLEY ROAD	HEN	A	3224
HOLBROOK LANE	HOL	B	372
HOLBROOK WAY	HOL	B	702
JIMMY HILL WAY	HOL	A	1558
ALLARD WAY	LWS	A	1129
BINLEY ROAD	LWS	A	2407
WALSGRAVE ROAD	LWS	A	757
HOLBROOK LANE	RAD	B	220
RADFORD ROAD	RAD	B	2167
BUTTS ROAD	SHE	B	733
HOLYHEAD ROAD	SHE	A	3104
SPON END	SHE	B	145
BINLEY ROAD	STM	A	363
HOLYHEAD ROAD	STM	A	174
LONDON ROAD	STM	A	1072
RADFORD ROAD	STM	B	171
RINGWAY ST NICHOLAS	STM	A	1292
RINGWAY ST PATRICKS	STM	A	1626
RINGWAY WHITEFRIARS	STM	A	1893
SKY BLUE WAY	STM	A	1411
WALSGRAVE ROAD	STM	A	433
JIMMY HILL WAY	UPS	A	827
WALSGRAVE ROAD	UPS	A	859
KENILWORTH ROAD	WAI	A	2777
KENPAS HIGHWAY	WAI	A	1823
STONEBRIDGE HIGHWAY	WAI	A	2051
DUNCHURCH HIGHWAY	WOO	A	605
BRANDON ROAD	WYK	A	917
BRINKLOW ROAD	WYK	B	994
CLIFFORD BRIDGE ROAD	WYK	B	2657

8.5.2. Secondary Resilient Network

Some parts of the secondary resilient network do not cover the entire named road, this can be due to a variety of factors such as spur sections or dead ends etc.

ROAD	WARD	ROAD CLASS	RESILIENT LENGTH (m)	% OF NAMED ROAD
BEAKE AVENUE	BAB	C	844	100%
BENNETTS ROAD	BAB	C	1318	100%
BENNETTS ROAD NORTH	BAB	C	586	100%
BENNETTS ROAD SOUTH	BAB	C	1240	100%
BIRMINGHAM ROAD	BAB	B	891	100%
BURNABY ROAD	BAB	C	181	100%
COUNDON WEDGE DRIVE	BAB	B	2457	100%
KERESLEY GREEN ROAD	BAB	C	197	100%
LONG LANE	BAB	U	691	100%
PICKFORD GRANGE LANE	BAB	U	637	100%
PICKFORD GREEN LANE	BAB	U	1021	69%
THE SCOTCHILL	BAB	C	425	100%
DAVENTRY ROAD	CHE	C	1622	92%
HUMPHREY BURTON'S ROAD	CHE	U	393	89%
LEAF LANE	CHE	U	442	21%
MICHAELMAS ROAD	CHE	U	265	100%
QUINTON ROAD	CHE	C	660	100%
STONEY ROAD	CHE	U	313	100%
BROAD LANE	EAR	C	953	100%
EARLSDON AVENUE NORTH	EAR	B	246	100%
EARLSDON AVENUE SOUTH	EAR	B	815	100%
FLETCHAMSTEAD HIGHWAY	EAR	A	6705	100%
HERALD AVENUE	EAR	B	1020	100%
LEAMINGTON ROAD	EAR	B	1459	100%
TILE HILL LANE	EAR	B	888	94%
VANGUARD AVENUE	EAR	B	102	100%
BROAD STREET	FOL	B	589	100%
EAGLE STREET	FOL	B	167	100%
HOWARD STREET	FOL	B	213	100%
OLD CHURCH ROAD	FOL	B	242	100%
SPRINGFIELD ROAD	FOL	B	212	100%
STONEY STANTON ROAD	FOL	B	2532	100%
DEEDMORE ROAD	HEN	C	1372	100%
HENLEY ROAD	HEN	B	1838	100%
SHILTON LANE	HEN	C	1030	100%
WOODWAY LANE	HEN	B	473	100%
BEAKE AVENUE	HOL	C	369	100%
BURNABY ROAD	HOL	C	1107	100%
HOLBROOK LANE	HOL	C	1236	100%
NUNTS LANE	HOL	C	268	100%
PARKVILLE HIGHWAY	HOL	C	618	100%
WHEELWRIGHT LANE	HOL	C	660	100%

WINDING HOUSE LANE	HOL	U	343	64%
ALDERMANS GREEN ROAD	LON	B	1608	100%
BELL GREEN ROAD	LON	B	787	100%
CLASSIC DRIVE	LON	U	442	64%
HALL GREEN ROAD	LON	B	710	100%
HENLEY ROAD	LON	B	341	100%
IBSTOCK ROAD	LON	U	117	65%
OLD CHURCH ROAD	LON	B	1341	100%
PARROTTS GROVE	LON	B	297	100%
HIPSWELL HIGHWAY	LWS	C	486	100%
BEAKE AVENUE	RAD	C	1307	100%
ENGLETON ROAD	RAD	B	331	100%
MOSELEY AVENUE	RAD	B	499	100%
RADFORD ROAD	RAD	B	2167	100%
FOUR POUNDS AVENUE	SHE	B	1467	100%
MOSELEY AVENUE	SHE	B	479	100%
BIRD STREET	STM	B	133	100%
BURGES	STM	B	91	100%
CORPORATION STREET	STM	B	871	100%
COX STREET	STM	B	299	100%
COX STREET	STM	C	360	100%
CROSS CHEAPING	STM	B	66	100%
EARL STREET	STM	B	144	100%
FAIRFAX STREET	STM	B	680	100%
FAR GOSFORD STREET	STM	U	491	69%
GOSFORD STREET	STM	C	542	100%
GOSFORD STREET	STM	U	26	100%
GREYFRIARS ROAD	STM	B	326	100%
HALES STREET	STM	B	327	100%
HARNALL LANE EAST	STM	B	932	100%
HIGH STREET	STM	B	128	100%
IRONMONGER ROW	STM	B	53	100%
JORDAN WELL	STM	B	132	100%
LITTLE PARK STREET	STM	B	277	100%
NEW UNION STREET	STM	B	837	100%
QUEEN VICTORIA ROAD	STM	B	227	100%
QUINTON ROAD	STM	C	356	100%
RINGWAY ST PATRICKS	STM	A	1498	92%
RINGWAY SWANSWELL	STM	A	2045	100%
RINGWAY WHITEFRIARS	STM	A	1893	100%
STONEY ROAD	STM	U	387	100%
SWAN LANE	STM	B	783	100%
SWANSWELL STREET	STM	B	243	100%
TRINITY STREET	STM	B	211	100%
WARWICK ROAD	STM	B	455	100%
WHITE STREET	STM	B	231	100%
WHITTLE ARCH	STM	B	40	100%
BELL GREEN ROAD	UPS	B	487	100%
SEWALL HIGHWAY	UPS	C	2023	100%
HOWES LANE	WAI	B	1196	90%
KENILWORTH ROAD	WAI	A	2777	100%
LEAMINGTON ROAD	WAI	B	375	100%
SIR HENRY PARKES ROAD	WAI	C	131	100%

ST MARTINS ROAD	WAI	B	1178	100%
BANNER LANE	WES	U	913	68%
BROAD LANE	WES	C	1039	100%
CHARTER AVENUE	WES	C	3924	100%
CROMWELL LANE	WES	C	953	100%
FLETCHAMSTEAD HIGHWAY	WES	A	41	100%
SIR HENRY PARKES ROAD	WES	C	317	100%
STATION AVENUE	WES	C	435	100%
TANNERS LANE	WES	B	621	100%
TILE HILL LANE	WES	B	2517	100%
TORRINGTON AVENUE	WES	C	2620	100%
EARLSDON AVENUE NORTH	WHO	B	421	100%
HEARSALL COMMON	WHO	B	399	87%
HEARSALL LANE	WHO	B	565	100%
QUEENSLAND AVENUE	WHO	B	389	100%
TILE HILL LANE	WHO	B	629	100%
BANNER LANE	WOO	U	518	100%
BROAD LANE	WOO	C	2276	100%
HOCKLEY LANE	WOO	U	539	100%
BRINKLOW ROAD	WYK	B	994	100%
HIPSWELL HIGHWAY	WYK	C	973	100%
SEWALL HIGHWAY	WYK	C	427	100%