

West Midlands Key Route Network

North and South Coventry



Transport for
West Midlands

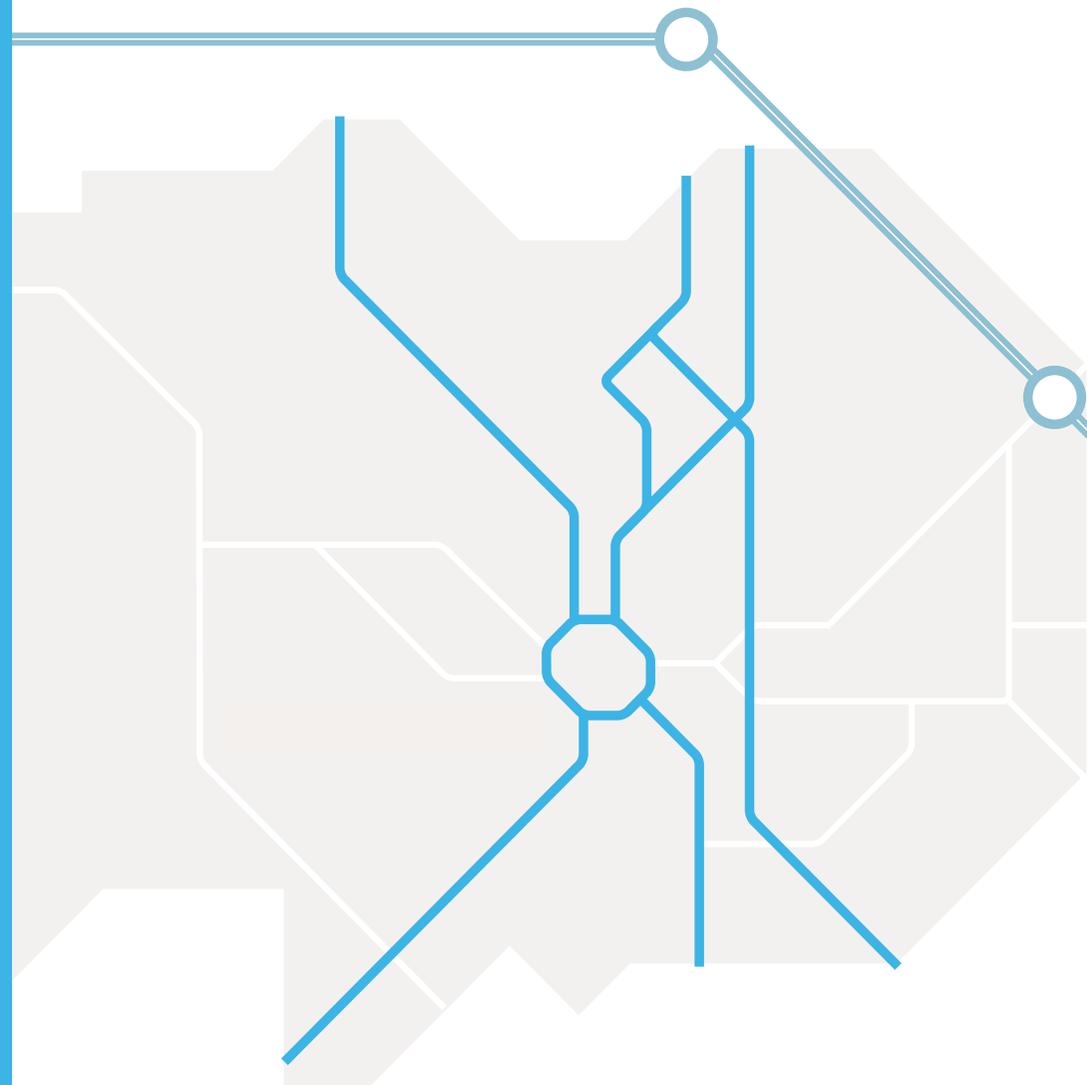
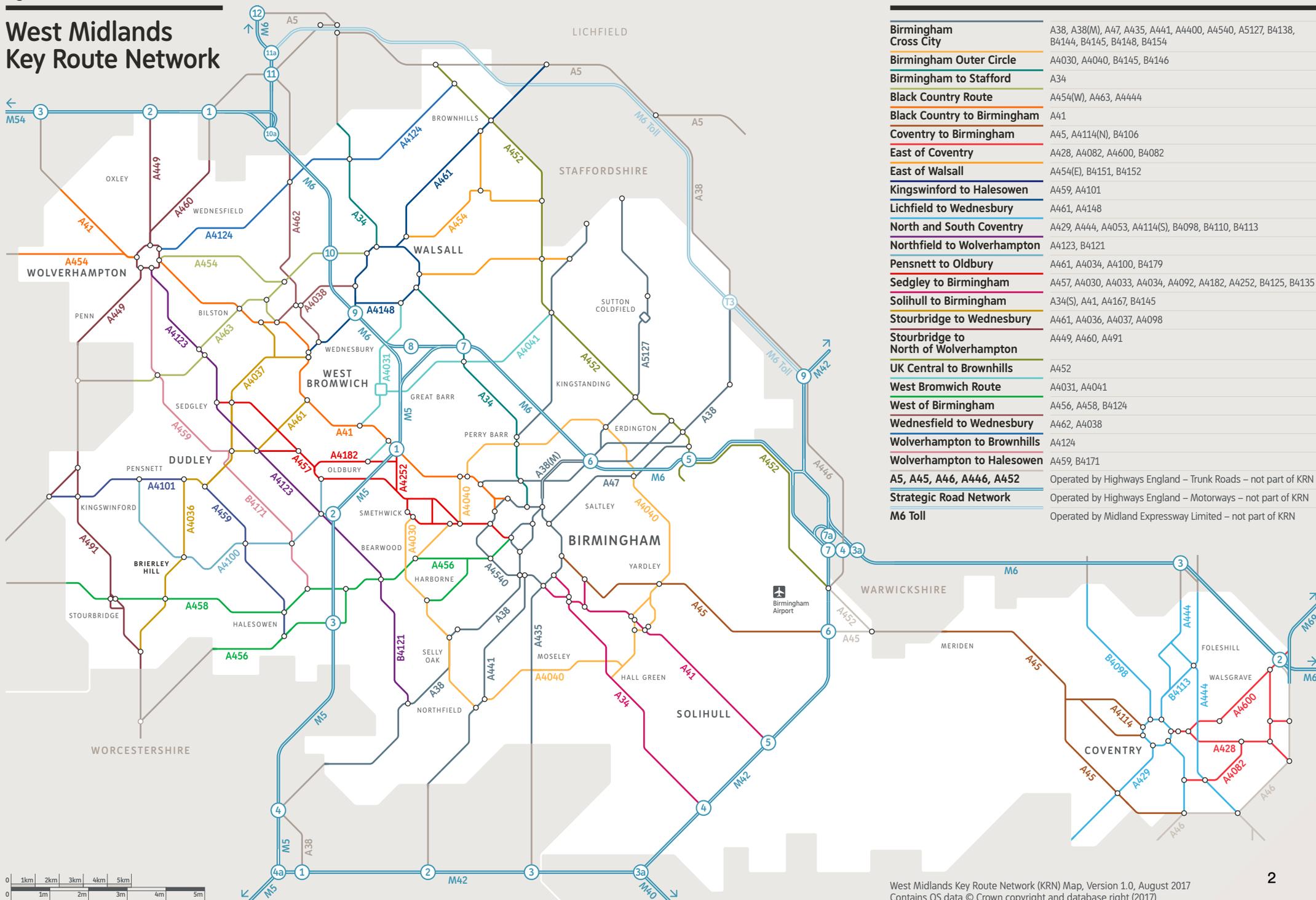


Figure 1

West Midlands Key Route Network



Birmingham Cross City	A38, A38(M), A47, A435, A441, A4400, A4540, A5127, B4138, B4144, B4145, B4148, B4154
Birmingham Outer Circle	A4030, A4040, B4145, B4146
Birmingham to Stafford	A34
Black Country Route	A454(W), A463, A4444
Black Country to Birmingham	A41
Coventry to Birmingham	A45, A4114(N), B4106
East of Coventry	A428, A4082, A4600, B4082
East of Walsall	A454(E), B4151, B4152
Kingswinford to Halesowen	A459, A4101
Lichfield to Wednesbury	A461, A4148
North and South Coventry	A429, A444, A4053, A4114(S), B4098, B4110, B4113
Northfield to Wolverhampton	A4123, B4121
Pensnett to Oldbury	A461, A4034, A4100, B4179
Sedgley to Birmingham	A457, A4030, A4033, A4034, A4092, A4182, A4252, B4125, B4135
Solihull to Birmingham	A34(S), A41, A4167, B4145
Stourbridge to Wednesbury	A461, A4036, A4037, A4098
Stourbridge to North of Wolverhampton	A449, A460, A491
UK Central to Brownhills	A452
West Bromwich Route	A4031, A4041
West of Birmingham	A456, A458, B4124
Wednesfield to Wednesbury	A462, A4038
Wolverhampton to Brownhills	A4124
Wolverhampton to Halesowen	A459, B4171
A5, A45, A46, A446, A452	Operated by Highways England – Trunk Roads – not part of KRN
Strategic Road Network	Operated by Highways England – Motorways – not part of KRN
M6 Toll	Operated by Midland Expressway Limited – not part of KRN



The North and South Coventry route is a 22 mile/36km strategic section of the West Midlands Key Route Network (KRN), providing North to South regional connectivity, across Coventry and into the County of Warwickshire. This route is important for commuters, leisure and for supporting supply chains access to key industries.

Across the region the route provides an important strategic link to the East Midlands, particularly for traffic between Coventry and Warwickshire and for connectivity to the A45, A46 and the M6. The section of the route which falls between the Coventry boundary and the M6 at junction 3 is managed by Warwickshire County Council.

The North and South Coventry route is formed of the A429, A444, A4053, A4114, B4098, B4110, B4113, and B4118.

Within Coventry, this route provides access to the Ricoh Arena which is an important leisure destination for Coventry and the wider region. It further enables direct access to retail within the city centre and the Coventry Ring Road (A4053). It also forms crucial connections with two other routes on the KRN, these are:-

Coventry to Birmingham

- A4053 Coventry Ring Road/A4114 Holyhead Road junction
- A4053 Coventry Ring Road/B4101 Butts Road junction

East of Coventry

- A4053 Coventry Ring Road/A4600 Sky Blue Way junction
- A444/A4082 London Road junction

The route is a mix of single and dual carriageways throughout but there are important sections of dual carriageway particularly the Coventry Ring Road (A4053) and the A444, which links directly to the M6 and into Warwickshire. The A444 section of the route to the north of Coventry City Centre is bordered by industrial, leisure and retail businesses. The characteristics of the A444 changes south of the Arena Retail Park, where the route passes through communities continuing south to where it meets the B4110, which provides direct access to the A46.

The B4113 and B4118 serve mostly residential areas to the north of Coventry. The A4053 Coventry Ring Road serves a dense urban centre providing access to retail, employment,

education and communities. The south-western area of Coventry is served by the A429 Kenilworth Road, which is a tree lined sub-urban carriageway serving residential communities and providing access to Warwick University. The route has the following connections to the Strategic Road Network (SRN) operated by Highways England.

- A444 to M6 Junction 3
- B4113 to M6 Junction 3
- A444 to the A46 Stonebridge Highway at the Stivichall Interchange
- B4110 to the A46 Stonebridge Highway and the A45 London Road at Tollbar End

The connections to the M6 provide long distance connectivity to London and the regions via the wider motorway network. The A46 provides connections to the M69 which links directly to the East Midlands.

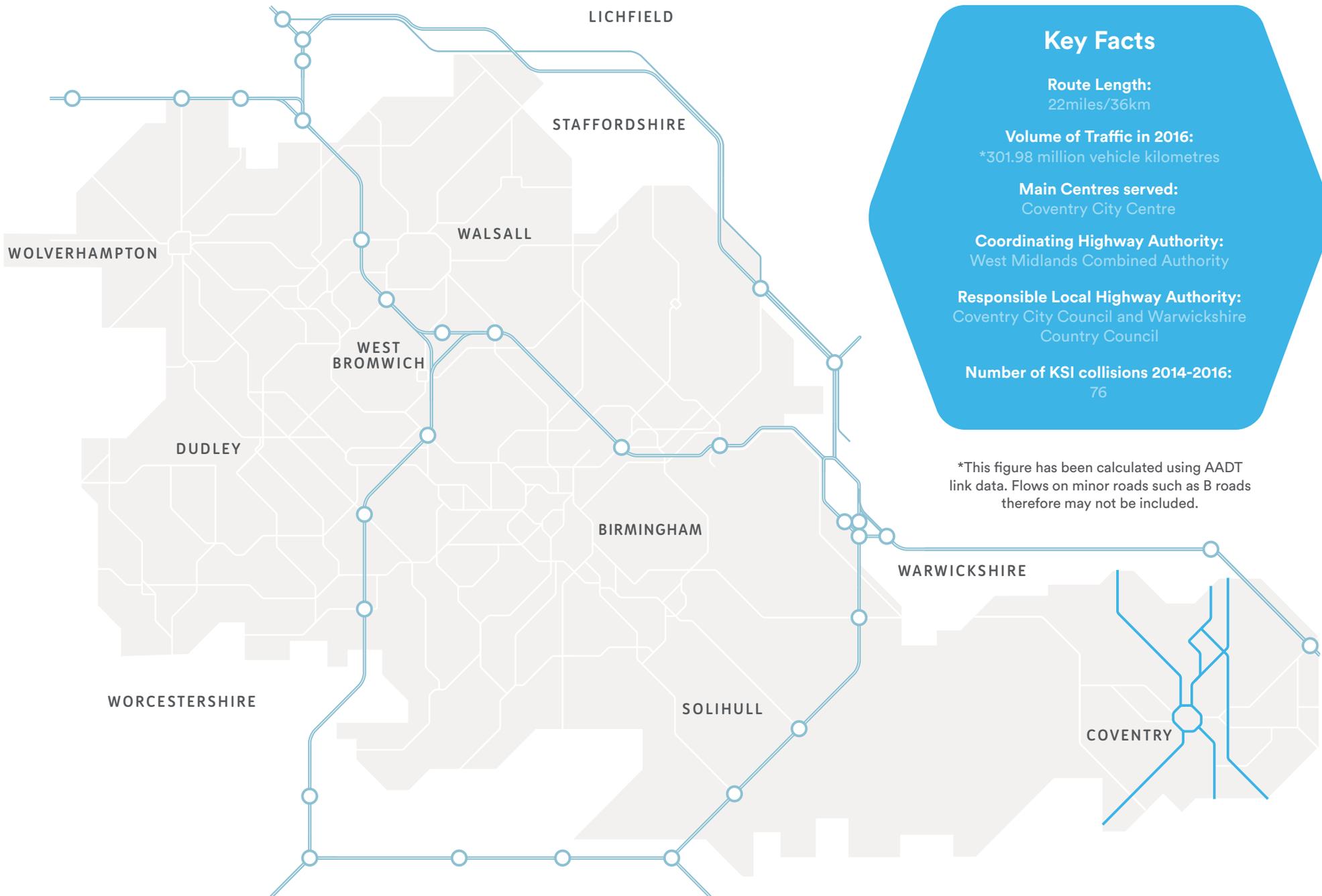


Figure 2

Congestion, Delay, Reliability

This route represents 6% of the total length of the West Midlands Key Route Network. According to the latest available data from 2016, the route had a minimum annual average daily flow (AADF) of 6,200 vehicles, a maximum of 59,600 with an average of 38,100 AADF.

The route experiences large volumes of traffic, particularly on the:

- full length of the B4113;
- B4013 Foleshill road to A428 Binley Road section of the A444;
- full length of the B4118; and
- Blake Avenue to A4053 Ring Road St Nicholas section of the B4098

The locations of the most significant congestion-related delays (60 sec/km) are set out in Tables 1 and 2.

Table 1: AM Peak Congestion Related Delays

Road	Location	Direction
A429	Warwick Road/Kenilworth Road, Central Six Retail Park access to A45 Kenpas Highway	Outbound from City
A429	Kenilworth Road, Beechwood Avenue to B4107 Earlsdon Avenue South, Earlsdon	Inbound to City
B4098	Radford Road, Beake Avenue to A4053 Ringway St Nicholas	Inbound to City
B4098	Tamworth Road, approach to B4076 Long Lane	Inbound to City
B4118	Lockhurst Lane, Durbar Avenue to B4113 Foleshill Road, Great Heath	Inbound to City
B4113	Longford Road/Foleshill Road, Oakmoor Road to A444, Foleshill	Inbound to City
B4113	Foleshill Road, A444 to B4082 Old Church Road, Foleshill	Outbound from City
B4113	Foleshill Road, Webster Street to Cash's Lane, Great Heath	Inbound to City
A444	Waterman Road to B4109 Stoney Stanton Road	Northbound
A444	Approach to A428 Binley Road	Southbound
B4110	Humber Road, approach to A428 Binley Road	Northbound
B4110	London Road, A4082 Allard Way to A46 Tollbar End	Southbound
A444	Leaf Lane to A4082 London Road, Cheylesmore	Inbound to City

Peak hour journey time on the route has been compared with the equivalent free flow time, which is based on the average journey time between 22:00 and 06:00. On this route the journey time in the AM Peak is mostly 100% higher than (i.e. twice) the free flow time.

A particular impact of the congestion is to create problems with access to Coventry Station, to Jaguar Land Rover at Whitley which relies on just-in-time deliveries and to the industrial estates at Bedworth (including Brose automotive supplier), Holbrooks (including Meggitt Aircraft Braking Systems and Cad Cam automotive), Lockhurst Lane, Central City Industrial Estate (including Lear Corporation Automotive Seating and Electrical), and Seven Stars Industrial Estate which may provide or rely on just-in-time deliveries.

Table 2: PM Peak Congestion-Related Delays

Road	Location	Direction
A429	Kenilworth Road, Coat of Arms Bridge Road to A45 Kenpas Highway	Outbound from City
A429	Kenilworth Road, Beechwood Avenue to B4107 Earlsdon Avenue South, Earlsdon	Inbound to City
B4098	Radford Road, A4053 Ringway St Nicholas to Lawrence Saunders Road	Outbound from City
B4118	Lockhurst Lane, B4113 Foleshill Road to Holbrook Lane, Great Heath	Outbound from City
B4113	Foleshill Road, A4053 Ringway St Nicholas to Windmill Road, Foleshill	Outbound from City
B4113	Foleshill Road, Oakmoor Road, Foleshill, to A4053 Ringway St Nicholas	Inbound to City
A444	Waterman Road to B4118 Holbrook Way, Foleshill	Northbound
A444	B4118 Holbrook Way, Foleshill, to B4109 Bell Green Road	Southbound
A444	Approach to A428 Binley Road	Southbound
B4110	London Road, A4082 Allard Way to A46 Tollbar End	Southbound
A444	Southbound Off-Slip to Stonebridge Island	Outbound from City
A444	Northbound On-Slip from Stonebridge Island, to A4082 London Road, Cheylesmore	Inbound to City

Average Speeds

The average speed in the AM Peak is less than 20 mph throughout most of the route. The eastern side of the A4053 Coventry Ring Road shows a better performance in terms of average speed (up to 40 mph), when compared to the western side (up to 30 mph). The worst performing sections where average speeds are below 10 mph are as follows:

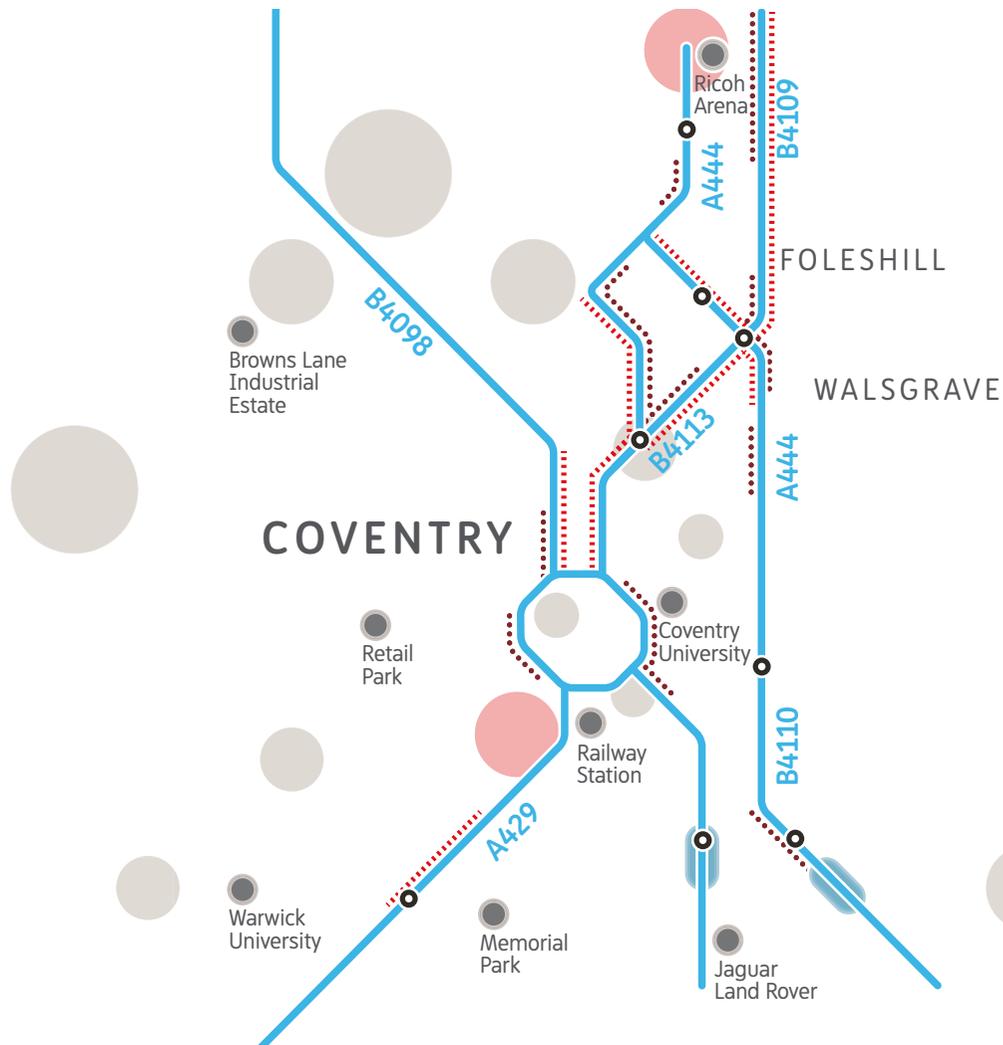
- B4098: Engleton Road to A4053
- B4113 Foleshill Road: Harnall Lane to Lockhurst Lane
- A429: Coat of Arms Bridge Rd/ Canley Ford to A45

Junction Capacity Issues

There are currently five junctions along the route where the evidence indicates there are capacity issues restricting the free flow of traffic; these are:-

- A444/B4113 Foleshill Road/Jimmy Hill Way junction
- A444/B4109 Stoney Stanton Road/Phoenix Way junction
- B4118 Lockhurst Lane/B4119 Foleshill Road junction
- A444/A4082 London Road/Allard Way junction
- A429 Kenilworth Road/A45 Kenpas Highway junction

West Midlands Key Route Network North and South Coventry



Key

Roads	The Route
Environment, Flows and Junction Capacity	Flooding area
	Congestion area
	Junction capacity issue
Route Safety	Air quality issue
	KSI hotspot zone – high number of serious or fatal incidents
Key Considerations	Housing development area
	Named site of strategic importance
	District and local centres



Figure 3

Improving Road Safety is critical to the overall vision of the West Midlands Strategic Transport Plan – Movement for Growth. The development of a new West Midlands Road Safety Strategy and Action Plan will make reference to the current West Midlands forecasts to achieve a 40% reduction in Fatalities and Serious Injury casualties by 2020, from the 2015 baseline.

During the 2016 calendar year, we noted the following key statistics on this route:

Collisions

- 144 collisions, involving 290 vehicles
- Main contributory factor: Failed to look properly (pedestrian) (27% of all collisions)
 - The Killed and Seriously Injured (KSI) ratio for this group is 13% with 100% of all fatalities being attributed to this group.
- Main contributory factors
 - Failed to judge other persons path or speed (8% of all collisions)
 - Poor turn or manoeuvre (7% of all collisions)

Casualties

- Total casualties: 193
- Killed and Seriously Injured: 29 (13% of all casualties, down 2% when compared to 2015 figure of 19 of 202)
 - Killed: 1 (0.5% of all casualties, down by 1%)
 - Seriously injured: 28 (12% of all casualties, down by 0.4%)
- Slight: 161 (87% of all casualties)

Casualty Types

We noted the following key statistics in relation to casualties falling into specific groups:

- Pedestrians: 20 (an increase of 5% compared to 2015)
- Powered Two wheel vehicles: 32 (a reduction of 2% compared to 2015)
- Pedal cyclists: 22 (an increase of 2% compared to 2015)
- Car occupants: 116 (a reduction of 4% compared to 2015)

KSI Clusters

There are KSI clusters which also include a fatal accident on both the B4110 and B4113 (both these locations are single carriageway roads in built up areas), as well as on the A444 (an urban dual carriageway).

There is another KSI cluster on the B4113 Foleshill Road, which is in a built up area, with shops and on-street parking.

The A429 Kenilworth Road provides one of the only direct segregated cycle routes into the city centre in the south eastern section of Coventry. This route also includes a signed parallel route along residential areas. The only other facilities provided on this route are sections of shared use cycle paths on the B4118 Holbrook Way and the A444 Jimmy Hill Way on approach to the Ricoh Arena.

Throughout the remainder of the route there are no cycling facilities provided.

The National Cycle Routes 52 and 53 interact with this route at locations along the A429, A444, A4053 and B4113.

The Sustainable Transport Delivery Excellence Programme (STDEP) Strategic Cycle Network has identified several 'Priority Corridors' for cycling in the West Midlands. There are two corridors that run along this route:

- A4114/A444 between Coventry Ring Road and the A45 and;
- B4110 between Whitley and the A45.

The West Midlands Cycling Charter acknowledges that cycling levels are currently significantly below many other metropolitan core cities across the UK. The Charter sets a vision to raise levels of cycling across the West Midlands Metropolitan area to 5% of all trips by 2023. This represents a 400% increase in cycling journeys from the 1% baseline.



The route is well served by a number of high frequency bus services operating every 5-30 minutes. These services provide access mainly into Coventry City Centre and regionally into Warwickshire for the purposes of access to Coventry, Nuneaton, Bedworth, Kenilworth, University of Warwick, Coventry University, Ricoh Arena, George Eliot Hospital, JLR Whitley, other retail, education, leisure and employment locations.

The average bus speed along this route is 8.8mph (data taken from the 20/20A/20E bus route). The average total number of daily bus trips is 22,238 (excluding routes 12X, 18A, 21, X68/X69, 78,78A and 87).

The roads on this route are identified as part of the Core Bus Network in the West Midlands Strategic Transport Plan - Movement for Growth and some for Sprint investment but not as part of the HS2 Connectivity Package.

Bus lanes were implemented as part of Bus Showcase investment and Coventry Primelines. In January 2017 some bus lanes were suspended in a 9 month trial including;

- Foleshill Road – at Old Church Road in both directions
- Holbrook Lane outbound between Burnaby Road and Holbrook Lane
- London Road outbound at St James Lane

Table 3: Main Bus Routes

Road(s) Served	Frequency	Route No.
B4119 Coventry - Exhall	Every 5 mins	20/20A/20E
B4119/B4118 Coventry - Holbrooks	Every 15 mins	4
B4119 Coventry - Longford	Every 10 mins	48/X48
B4119/B4118 Coventry – Holbrooks	Every 12 mins	
A4082 Whitley - Willenhall	Every 30 mins	60/60A
A429 Coventry – Gibbet Hill	Every 15 mins	X17
A4114/A444 Coventry – Stivichall Interchange	Every 20 mins	18/X18
A429 Coventry – Gibbet Hill	Every 15 mins	12X
A429 Coventry – Cannon Park	Every 30 mins	18A
A4082 Whitley - Willenhall	Every 10 mins	21
A4114/A444 Coventry – Stivichall Interchange	Every 60 mins	X68/X69
B4119 Arena Park – Longford	Every 60 mins	78/78A
A429 Coventry – Stivichall Common	Every 60 mins	87

*Note- All daily averages have been obtained by analysing 15 days data (Mon-Fri) during the month of March 2017.

Bus lanes between the University of Warwick and Coventry City centre remain, as do long bus lanes on Foleshill Road south of Old Church Road, Lockhurst Lane, London Road at the A444 junction.

In terms of rail, the Coventry to Nuneaton rail line falls within the northern section of the corridor and has recently seen investment in new stations at Coventry Arena and Bermuda Park (Business Park). Further investment is committed to provide a Bay Platform at Coventry and to increase the frequency of the service to half hourly. The rail line in the southern part of the route is served by an hourly Cross Country service between Birmingham, Coventry and Leamington Spa. A committed scheme is to provide a station at Kenilworth and a shuttle service linking it to Coventry and Leamington Spa. The Strategic Transport Plan also identifies a new station at Coventry South to serve a large housing area at Finham, but is not in the HS2 Connectivity Package.

Of these stations the following have park and ride facilities:

- Coventry
- Bedworth
- Nuneaton

At present there are no plans to extend the Midland Metro in Coventry, though there are ongoing investigations into Ultra-Light Rail in the City.



The AADF data for 2016 has been used to analyse HGV flows on each respective route. The majority of this route is of little significance to freight, with the A45 instead being utilised by HGVs. The average flow of Heavy Goods Vehicles using the route on a daily basis was 619, which represents 2% of all vehicular traffic.

However, the northern section of the ring road around Coventry City Centre (A4053) and the A444 south to the A45 does experience flows of >1,000 HGVs per day. This section of the route passes Jaguar Land Rover, a company which operates on a just-in-time delivery system. The route connects with the M6 at junction 3. The M6 is of national significance; in total, between the Midlands and North West in 2014, approx. 45.5m tonnes of goods were transported (MDST data); a significant amount of which travels on the M6. Coventry Airport is also close to the route, where a number of cargo airlines operate from this airport.



Resilience

The route contains parallel strategic North South roads. There is a considerable degree of resilience contained within the Coventry networks for radial journeys. However, certain critical sections can cause grid-lock, including on the motorway network, particularly at Rowley's Green (affecting M6 junction 3), which is affected by events at the Ricoh Arena, and where the roads converge approaching Coventry Ring Road.

Intermodal network resilience is poor as the North South rail corridor has low frequency services and few stations. New stations have been built at Coventry Arena and Bermuda Park, and the West Midlands Strategic Transport Plan – Movement for Growth proposed to increase the frequency of services to half hourly and to construct stations at Kenilworth and Coventry South. The stations need to be provided with parking capacity to improve intermodal network resilience.

Given the existing capacity constraints in the peaks in the Coventry network, a restriction on any of the roads will have considerable adverse implications for journey times on the remainder of this route and surrounding routes.

Diversion Route

In conjunction with the East of Coventry KRN route, the A444 section of this route is used as an Emergency Diversion Route (EDR) by Highways England when there are closures or incidents between junctions 2 and 3 of the M6 motorway. Also in conjunction with the East of Coventry KRN route, the southern section of the B4110 is used as an EDR when there are closures or incidents on the A46 trunk road between Tollbar End and Binley.

Likewise, the A444 section of the route is used as an EDR when there are closures or incidents on the A46 trunk road between Binley and M6 junction 2, once again in conjunction with the East of Coventry KRN route.

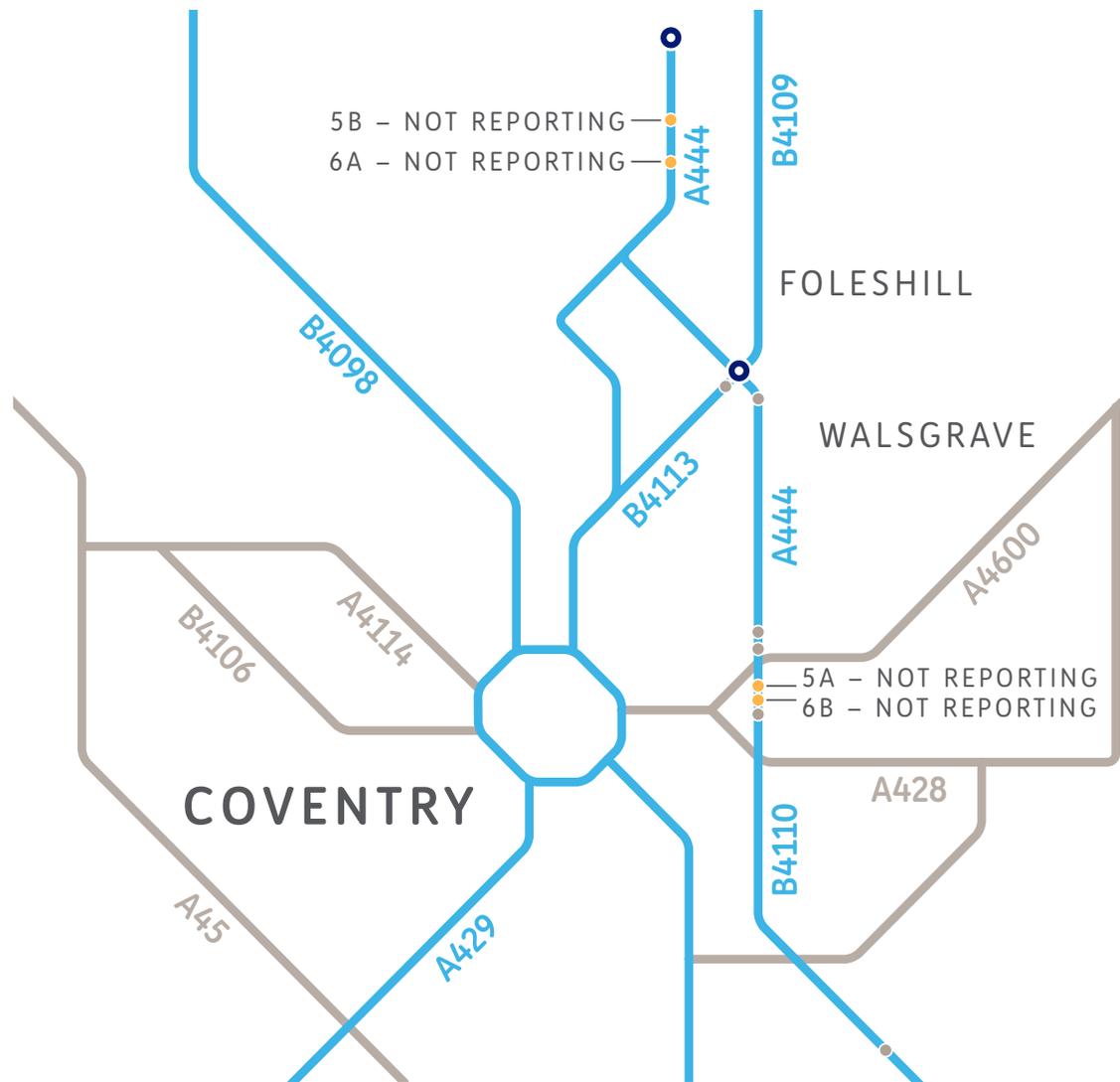
The southern sections of the A444 and B4110 are used as an EDR when there are closures or incidents on the A46 trunk road between Stivichall and Tollbar End. This has major access implications for the Jaguar Land Rover plant at Whitley.

Flooding

Flooding on this route impacts on the overall performance, safety of road users and affects the lives of those living in the vicinity. The evidence gathered indicates that there are some areas on this route that pose flood risk. These include:

- A444 Phoenix Way is exposed to a high level of fluvial flood risk (greater than a 1 in 30 chance of occurring in any year) upstream of the confluence of the culverted Hall Brook and the River Sowe.
- B4110 London Road is exposed to a high level of fluvial flood risk (greater than a 1 in 30 chance of occurring in any year) where the River Sowe passes underneath at Willenhall Bridge. The predicted flooding covers only the footway and a small section of the carriageway.
- B4113 Longford Road is exposed to a high level of fluvial flood risk (greater than a 1 in 30 chance of occurring in any year) where the River Sowe passes underneath at Longford Bridge. The predicted flooding covers only a small section of the carriageway.

West Midlands Key Route Network North and South Coventry



Key

Roads

- The Route

Asset Location & Conditions
(where known & information available)

- CCTV
- Automatic Number Plate Recognition (ANPR) / Journey Time Monitoring System (JTMS) locations
- Traffic Camera locations
- Bluetooth Detection reporting into Stratos

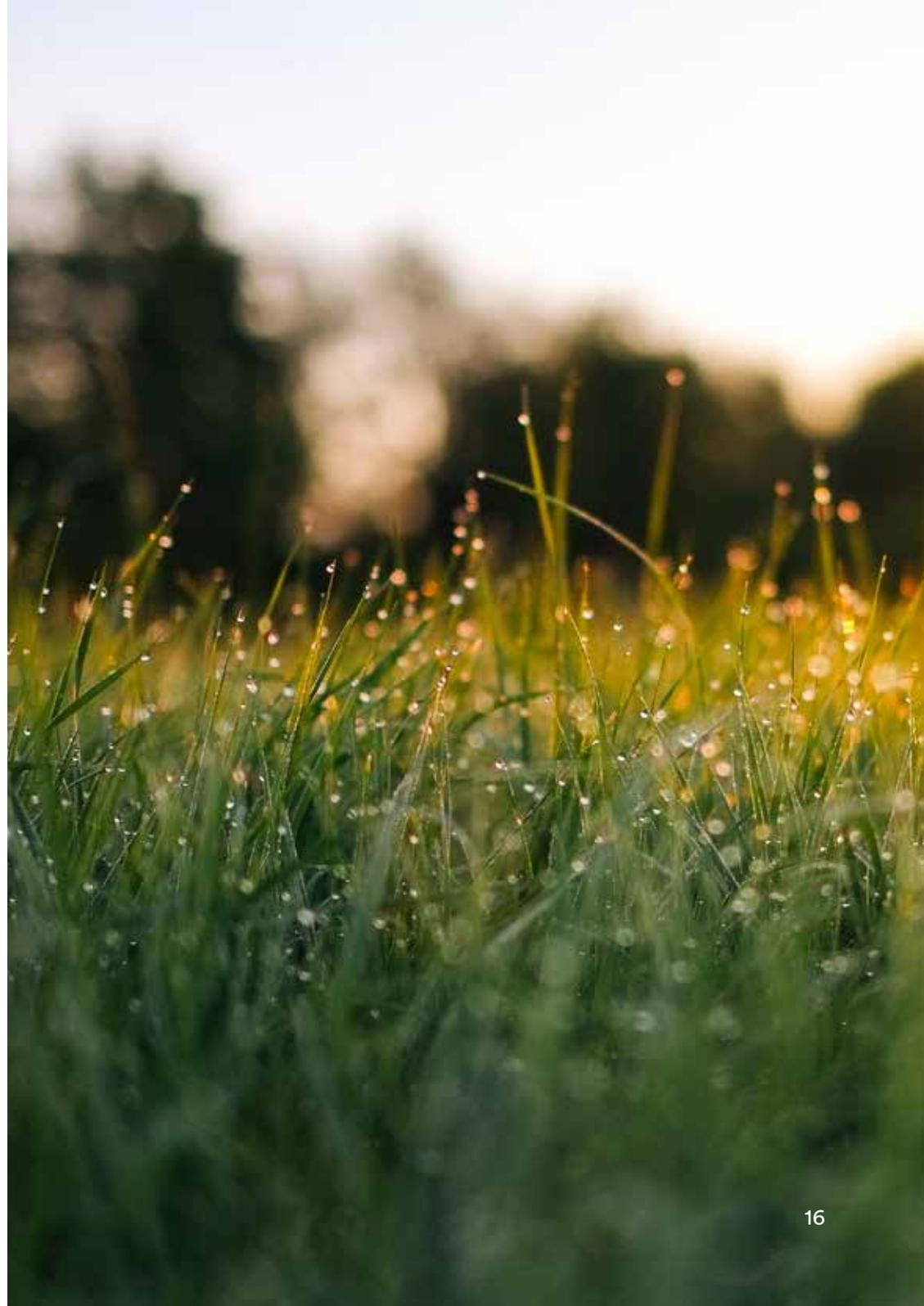


Figure 4

There are inequalities in health between the local authorities within the West Midlands – at local authority level the lowest healthy life expectancy at birth for men is 56.4 years, and the highest is 63.8 years. Amongst women the lowest is 59 years and highest 67.9 years. Similarly there are inequalities in healthy life expectancies within each local authority. Closing this gap in health inequalities and increasing the healthy life expectancy by 2030 is an objective of the WMCA's Strategic Economic Plan.

This route runs through some relatively deprived areas which are marked by life expectancies lower than the national average. The A444 passes through some areas with high levels of childhood obesity. Closer to the City Centre, residents living around the route are younger than the WMCA average in general. In addition the route falls within Coventry City's Air Quality Management Area (AQMA), declared for Nitrogen Oxide (NO₂).

The West Midlands has significant air quality problems. Every year there are between 2,000 and 2,400 deaths caused by air pollution. This is a huge health issue for people in the region, increasing the risk of lung disease and heart disease. There are parts of our region where considerable action such as the introduction of Clean Air Zones (CAZs) is required by Government to improve air quality.



ASSET CONDITION

Across the West Midlands the local authorities have a statutory duty to maintain its highway network in a safe condition. This also includes carrying out routine maintenance of highway assets which could include up to 12 specific groups. An Asset Management Plan is produced which aims to ensure that any future issues with the assets could be address in a proactive way.



Development proposals directly affecting this route

Housing

- Kings Hill Sustainable Urban Extension 1800 dwellings (2017-30)
- Hill Street/Upper Well Street 275 dwellings (2017-20)
- Paragon Park 1400 dwellings (2017-30)
- Keresley Sustainable Urban Extension 3100 dwellings (2017-30)
- Bishopsgate 265 dwellings (2020-25)
- Parkside 300 dwellings (2025-30)
- Tower Street 100 dwellings (2025-30)

Employment

- Whitley Business Park 5000 jobs (2017-25)
- Friargate 15000 jobs (2017-30)
- Phoenix Way 2400 jobs (2017-30)

Development proposals indirectly affecting this route

Housing

- Wider Kenilworth Area 2805 dwellings (2017-30)
- Whitmore Park 543 dwellings (2017-20)
- Red Lane 125 dwellings (2020)

Employment

- Coventry and Warwickshire Gateway 27000 jobs (2017-30)
- Ryton 4500 jobs (2017-30)
- Stoneleigh Park and Thicketthorn 6000 jobs (2017-30)
- Whitmore Park 100 jobs (2017-20)
- Wider Kenilworth Area 3000 jobs (2020-30)

Committed Transport Improvements (as outlined in Movement for Growth - 2026 Delivery Plan for Transport)

- Coventry to Leamington Enhancements:
- City Centre Place Plus
- Coventry Rail Station Masterplan (covering a mixture of measures)
- Coventry Ring Road Enhancements (Junctions 4 & 5)
- Swanswell Viaduct
- Double tracking of the Cov-Leamington line to improve the number of service using Coventry. It will allow it to be used by more services.
- Coventry VLR: University of Warwick to City Centre via Coventry Station (Phase 1)

- AADF** – Annual average daily flow
- AQMA** – Air Quality Management Areas
- DfT** – Department for Transport
- EDR** – Emergency Diversion Route
- HGV** – Heavy Goods Vehicles
- HLE** – Healthy life expectancy
- HS2** – High Speed Rail Two
- JTMS** – Journey Time Measurement Systems
- KRN** – Key Route Network
- KSI** – Killed or seriously injured
- LE** – Life expectancy
- LEP** – Local Enterprise Partnership
- LSOA** – Lower Layer Super Output Areas
- MDST** – MDS Transmodal
- MSOA** – Middle Layer Super Output Areas
- PIA** – Personal injury accidents
- SRN** – Strategic Road Network
- STDEP** – Sustainable Transport Delivery Excellence Programme
- TfWM** – Transport for the West Midlands
- TCG** – Tactical Co-ordination Group
- UKTI** – UK Trade and Investment
- UTMC** – Urban Traffic Management Control
- VMS** – Variable Message Sign
- WM** – West Midlands
- WMCA** – West Midlands Combined Authority

AADF Data:

AADF counts for A roads on each route:
<https://bit.ly/2fbapuc>

Route Safety:

Reported casualty and accident rates by urban and rural roads, road class, road user type, severity and pedestrian involvement, Great Britain, 2015.

Committed Schemes:

West Midlands Combined Authority. Movement for Growth: The West Midlands Strategic Transport plan.

West Midlands Strategic Cycle

Network:

West Midlands Combined Authority Board Report, 20 January 2017, item 4.3 - Strategic Cycle Network
<https://bit.ly/2hrrCAi>

Freight Information:

MDS Transmodal Data. Provided in Confidence for Midlands Connect Freight Study.

Enterprise Zones:

<https://bit.ly/2uZLDTe>
<https://bit.ly/2u7DCN1>

Road Haulage Companies:

UK Trade & Investment Road Haulage Industry, Midlands Hauliers. Provided in Confidence for Midlands Connect Freight Study.

National Cycle Routes, Sustrans:

<https://bit.ly/18FFBsT>

HS2 Connectivity Package:

HS2 Growth Strategy, Connectivity Programme. GBSLEP. <https://bit.ly/2woBqxp>

Average Speeds and Congestion Data:

West Midlands Strategic Highways Phase 2: Key Route Network Definition and Outline Performance. Produced by Mott Macdonald for West Midlands Integrated Transport Authority. March 2016.

Route Safety:

Department for Transport. Reported Road Casualties Great Britain, annual report: 2015.
<https://bit.ly/2hrclDb>

Air Quality Management Areas:

Department for Environment, Food and Rural Affairs, March 2017 AQMA Dataset.
<https://bit.ly/2fEduLf>

Male and Female Healthy Life

Expectancy:

Office for National Statistics. Life Expectancy (LE) and Healthy Life Expectancy (HLE) at birth for males by Middle Layer Super Output Areas (MSOAs) in England, 2009 to 2013. Published 2015. <https://bit.ly/2vwtxd1>

Childhood Obesity:

Public Health England. National Child Measurement Programme data from 2012/13 to 2014/15, aggregated by MSOA. Published 2016
<https://bit.ly/2p3ocVV>

Younger Population:

ONS: 2011 Census aggregate data. Population aged 0-17, as a percentage of total population by LSOA.

Older Population:

ONS: 2011 Census aggregate data. Population aged 65+, as a percentage of total population by LSOA.

Living with a Disability:

ONS: 2011 Census aggregate data. Households with at least one person living with a disability, as a percentage of all households by LSOA.

Unemployment:

ONS: 2011 Census aggregate data. No adults in employment in household, as a percentage of all households by LSOA.

West Midlands Cycling Charter:

<https://bit.ly/2xbg4oK>