

# West Midlands Key Route Network

West Bromwich Route



Transport for  
**West Midlands**

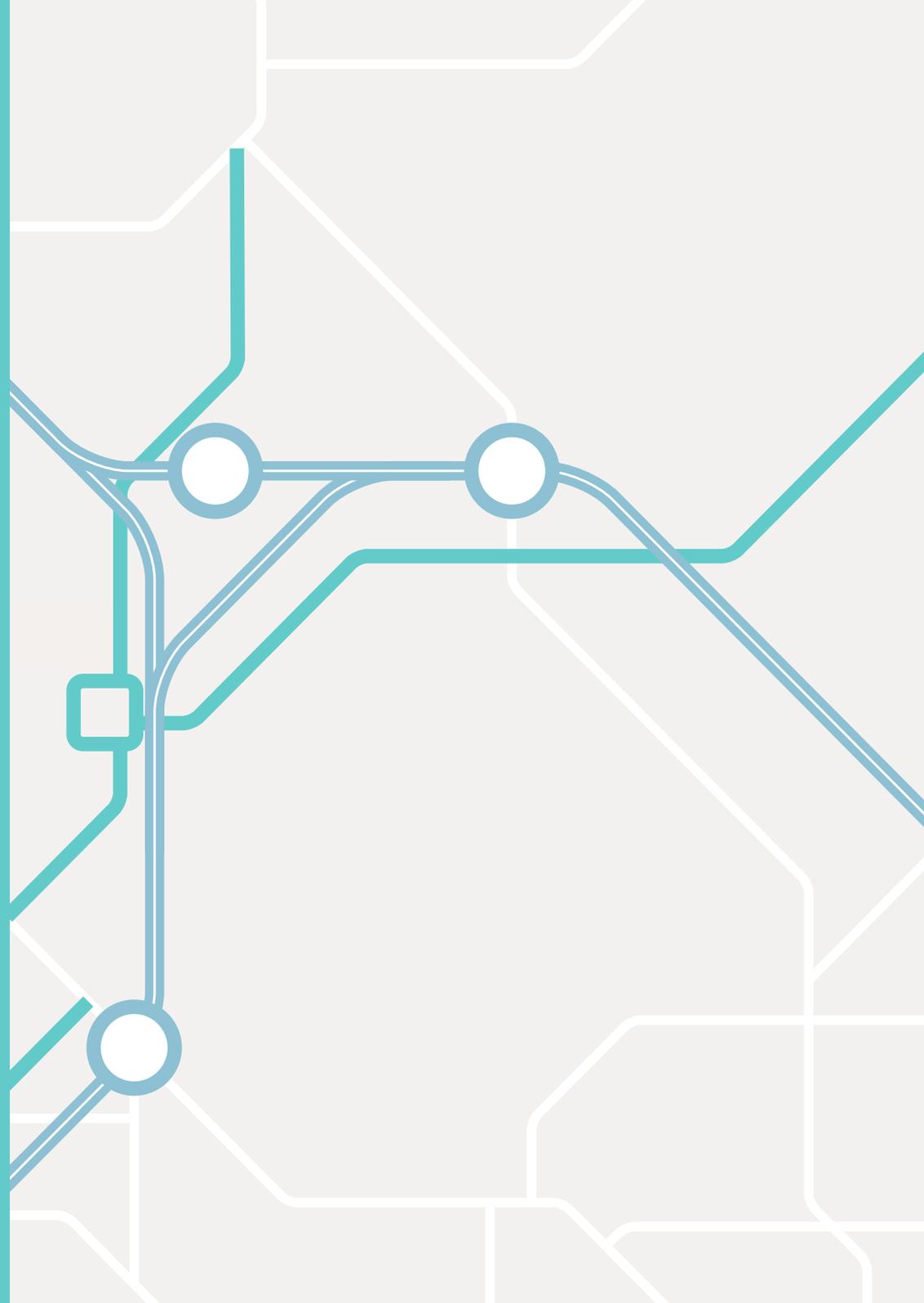
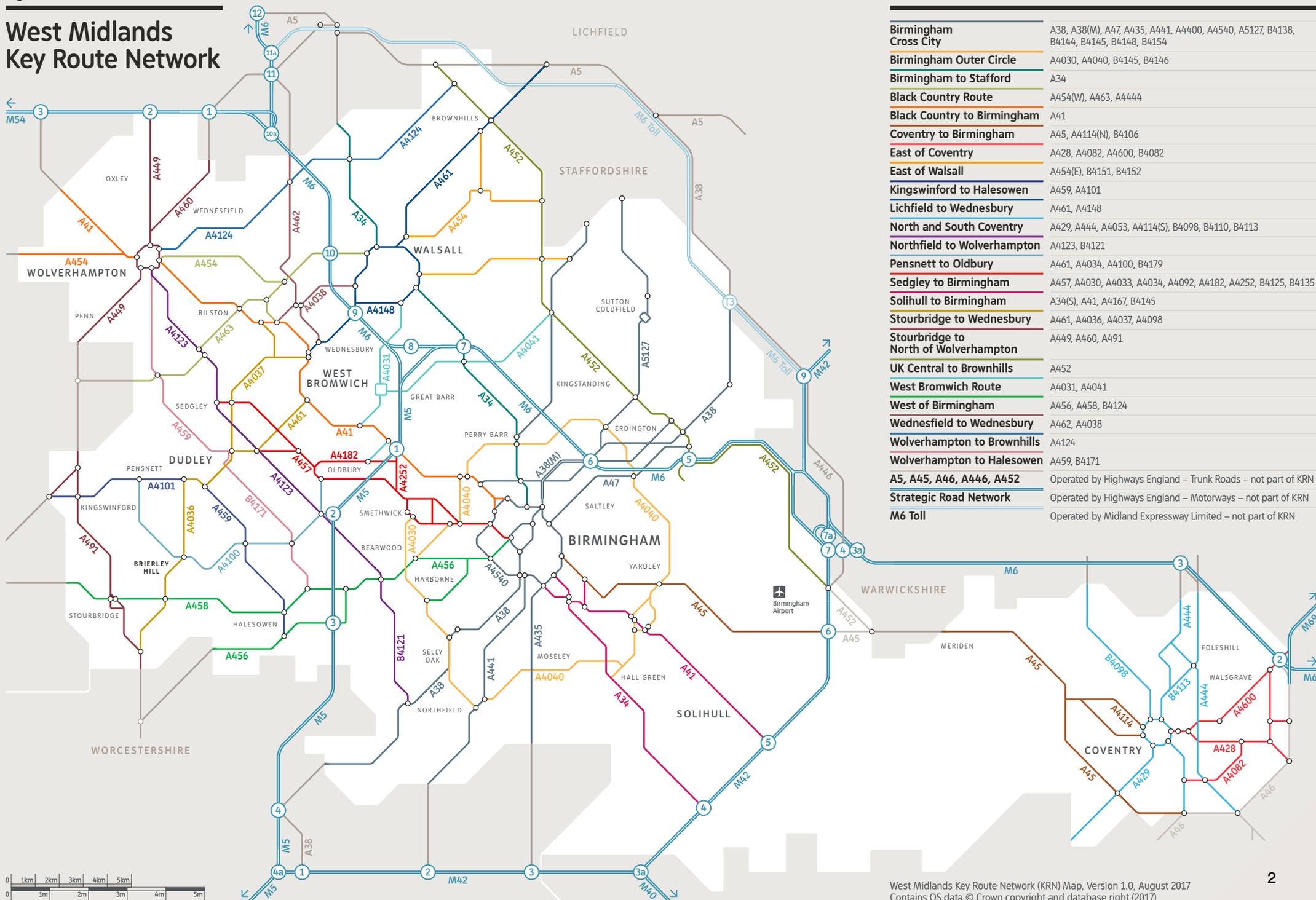


Figure 1

# West Midlands Key Route Network



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



# ROUTE DESCRIPTION

The West Bromwich Route is a 10 mile/16km section of the West Midlands Key Route Network (KRN) that serves the communities of:

- West Bromwich;
- Walsall and;
- Streetly

The route provides a key connection between the Black Country towns of Walsall, West Bromwich and Smethwick, along with Great Barr and Streetly to the North of Birmingham. This route is used for accessing retail sites in Walsall and West Bromwich (at West Bromwich's New Square Shopping Centre footfall has increased by 3.5 million in three years) and for commuting to and from industrial areas of the Black Country.

This route is formed of the A4031 (connecting the A4148 Broadway [Walsall Ring Road] to the A41) and A4041 (connecting the A4031 to A452).

The A4031 originates at the A4148 (Walsall Ring Road) and heads South along the West Bromwich Road (predominantly residential). As the Walsall Road moves South under three motorway bridges (carrying the M6 and two M5 slip roads) from Walsall to Sandwell it becomes a dual carriageway. The A4031 becomes primarily dual carriageway and in a residential setting from its junction with the A4041 and continues South along All Saints Way, passing Sandwell General Hospital and entering West Bromwich. At this point the A4031 meets the grade-separated A41.

The A4041 connects West Bromwich to Streetly and is a dual carriageway for its entirety. The A4041 heads east from junction with the A4031 at Dartmouth Golf Club through Sandwell Valley and over the M5. With movement East along the route it then reaches junction with the A34 (Scott Arms Junction) and shortly after passes under the M6 at Great Barr. The A4041 then meets the B4154 (Beacon Road) junction, followed by the B4149 (Kings Road) and Aldridge Road. The route then terminates at a roundabout on the A452 (Chester Road).

The route connects to the Strategic Route Network (SRN) at M6 Junction 7 via a short link on the A34 from Scott Arms. The M6 connects the Midlands to the wider motorway network, giving access to London and other regions in England.

The West Bromwich route also has numerous connections with other KRN routes:

- Black Country to Birmingham Route (A41)
- Lichfield to Wednesbury Route (A4148)
- Birmingham to Stafford (A34 [N])
- UK Central to Brownhills (A452)
- Sedgley to Birmingham (A4182)

These routes provide connectivity to Birmingham, Walsall, Wolverhampton, Brownhills and Staffordshire.

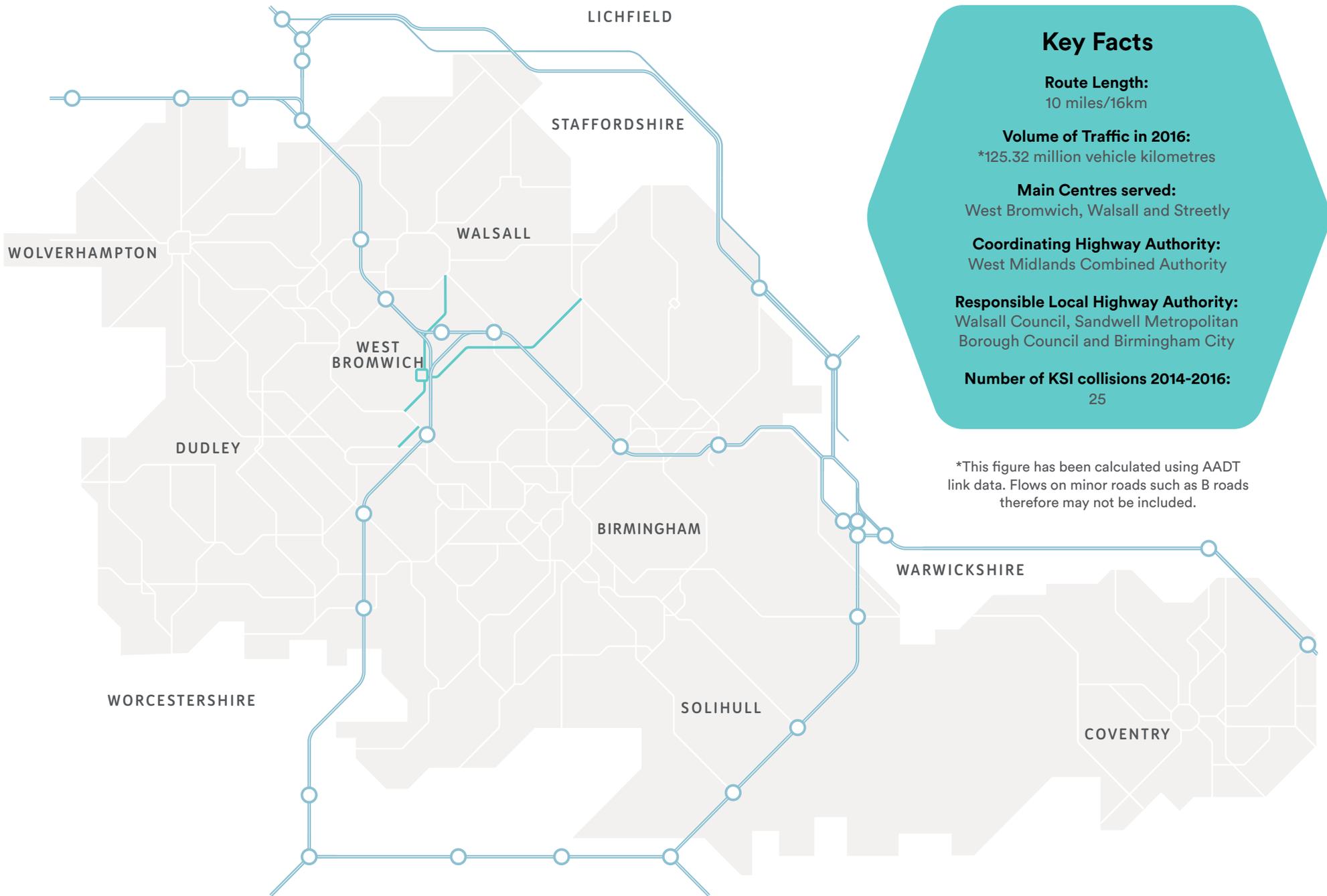


Figure 2

<sup>1</sup>This figure has been calculated using AADF link data. Flows on minor roads such as B roads therefore may not be included.

### Congestion, Delay, Reliability

This route represents 3% of the total length of the West Midlands Key Route Network. According to the latest data available from 2016, this route had a minimum annual average daily flow (AADF) of 9,200 vehicles, a maximum of 33,700 with an average of 17,000 AADF.

The route experiences large volumes of traffic, particularly on:

- The A4031 between its junctions with the A41 The Expressway and Hall Green Road;
- The A4031 between its junctions with Greenside Way and Broadway; and
- The A4041, Queslett Road, between its junctions with the A34 and Aldridge Road.

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
A4031	All Saints Way, Beaconsfield Street to Heath Lane, West Bromwich	Northbound
A4041/ A4031	Newton Road/All Saints Way, Lay-by Café to Sandwell General Hospital Access, West Bromwich	Southbound
A4041	Newton Road, approach to Hamstead Road, Newton	Eastbound
A4041	Newton Road, approach to Hamstead Road, Newton	Westbound
A4041	Newton Road, Pages Lane to A34 Birmingham Road, Scott Arms	Eastbound
A4041	Queslett Road, B4149 Kings Road, Queslett, to A34 Walsall Road, Scott Arms	Westbound
A4031	Walsall Road, Marsh Lane to Hall Green Road, Stone Cross	Northbound
A4031	Walsall Road/West Bromwich Road, Greenside Way to A4148 Broadway West, Palfrey	Northbound
A4031	West Bromwich Road, A4148 Broadway West to Walstead Road, The Delves	Southbound

Peak hour journey time on the sections of the route experiencing the highest delays has been found to be 150% higher than (i.e. 2½ times) the equivalent free flow time, which is based on the average journey time between 22:00 – 06:00.

A particular impact of the congestion is to create problems with access to Tame Bridge Parkway Station, Sandwell General Hospital and West Bromwich, Oldbury, Sandwell and Shady Lane industrial areas where businesses may supply or rely on just-in-time deliveries.

**Table 2: PM Peak Congestion-Related Delays**

Road	Location	Direction
A4031	A41 Link Road, The Expressway to High Street, West Bromwich	Northbound
A4041/ A4031	Newton Road/All Saints Way, Lay-by Café to Sandwell General Hospital Access, West Bromwich	Southbound
A4041	Newton Road, approach to Hamstead Road, Newton	Eastbound
A4041	Newton Road, approach to Hamstead Road, Newton	Westbound
A4041	Newton Road, Monksfield Avenue to A34 Birmingham Road, Scott Arms	Eastbound
A4041	Queslett Road, Whitecrest to A34 Walsall Road, Scott Arms	Westbound
A4031	Walsall Road, Lyndhurst Road to Hall Green Road, Stone Cross	Northbound
A4031	Walsall Road/West Bromwich Road, Greenside Way to A4148 Broadway West, Palfrey	Northbound
A4031	West Bromwich Road, A4148 Broadway West to Walstead Road, The Delves	Southbound

## Average Speeds

The average speed for this route in the AM peak is between 10-20 mph throughout its busiest sections. The areas approaching Sandwell Hospital, Walsall Ring Road and Great Barr are particularly slow during the peak periods. The worst performing sections where average speeds are below 10 mph are as follows:

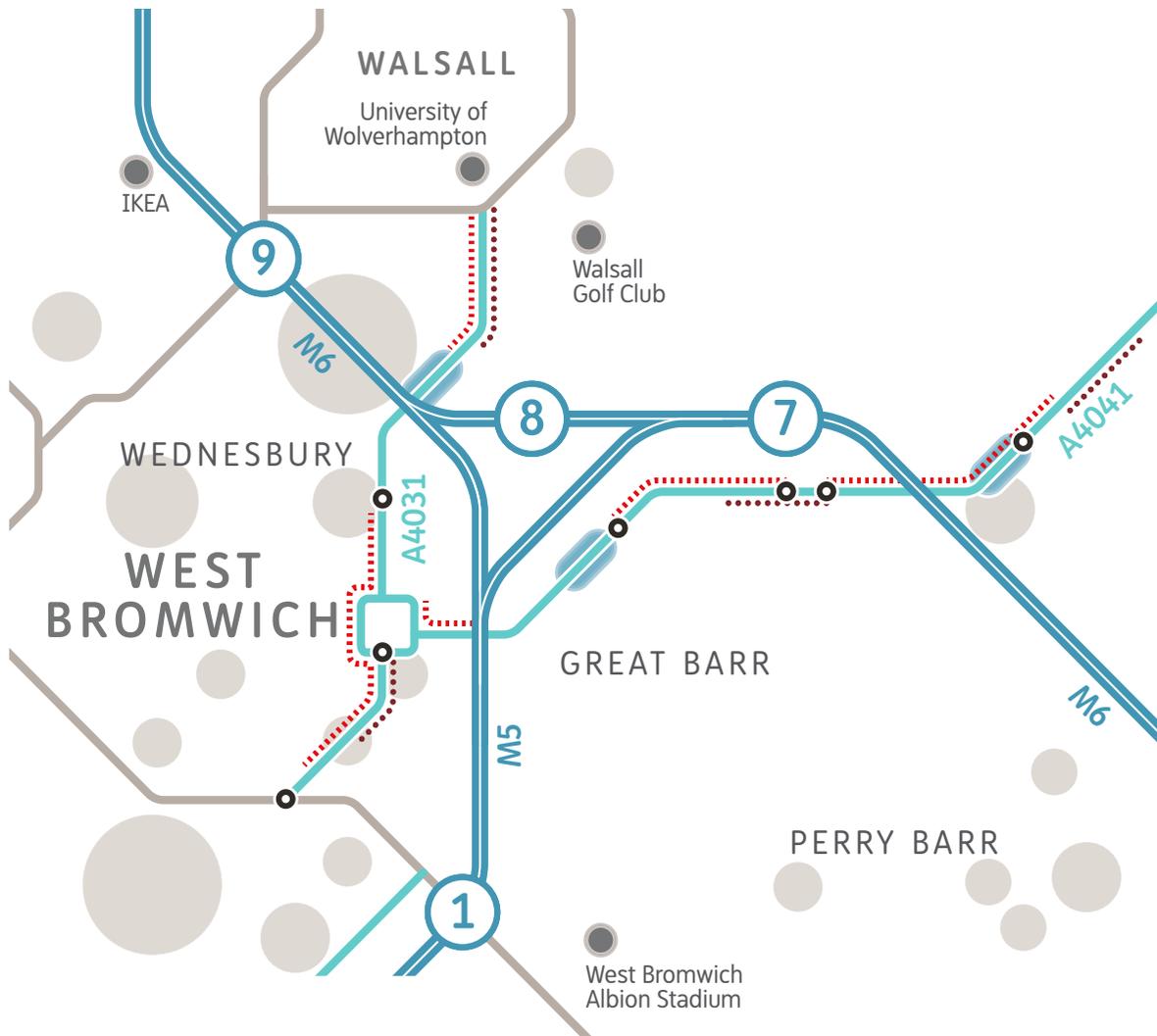
- A4031: Walstead Road to Broadway
- A4041: Aldridge Road/Beacon Road to A34

## Junction Capacity Issues

There are currently eight junctions along the route where the evidence suggests there are capacity issues restricting the free flow of traffic in peak hours; these are:-

- A4182 Kenrick Way/A4031 Trinity Way
- A41 The Expressway/All Saints Way
- A4031 All Saints Way/Heath Lane
- A4031 Walsall Road/Hall Green Road
- A4031 West Bromwich Road/A4148 Broadway
- A4041 Newton Road/Forge Lane
- A4041 Newton Road/A34 Walsall Road (Scott Arms Junction)
- A4041 Queslett Road/Aldridge Road

# West Midlands Key Route Network West Bromwich Route



## Key

<b>Roads</b>	The Route
	Strategic Road Network operated by Highways England
<b>Environment, Flows and Junction Capacity</b>	Flooding area
	Congestion area
	Junction capacity issue
<b>Route Safety</b>	KSI hotspot zone – high number of serious or fatal incidents
<b>Key Considerations</b>	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

- 41 collisions, involving 79 vehicles
- Main contributory factor: Failed to look properly (pedestrian) (34% of all collisions)
  - The Killed and Seriously Injured (KSI) ratio for this group is one of the highest for this route at 29% with 50% of all serious collisions being attributed to this group.
- Main contributory factors
  - Travelling too fast for conditions (10% of all collisions)
  - Failed to judge other persons path or speed (5% of all collisions)

## Casualties

- Total casualties: 55
- Killed and Seriously Injured: 8  
(15% of all casualties, up 2% when compared to 2015 figure of 9 of 72)
  - Killed: 0 (0% of all casualties, down by 1%)
  - Seriously injured: 8 (15% of all casualties, up by 2%)
- Slight: 47 (86% of all casualties)

## Casualty Types

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

- Pedestrians: 6 (a reduction of 0.2% compared to 2015)
- Powered Two wheel vehicles: 7 (an increase of 7% compared to 2015)
- Pedal cyclists: 4 (an increase of 2% compared to 2015)
- Car occupants: 38 (a reduction of 9% compared to 2015)

## KSI Clusters

There are a number of KSI collision clusters on the A4031 and A4041, with both routes having experienced a fatal collision. The largest cluster is on the A4031 along All Saints Way, which is an urban dual carriageway with a mix of commercial and residential premises.

# CYCLING

There is limited provision along the A4031 in Sandwell or the A4041 in Walsall to support safe movement of cycling. A 20mph service road can be promoted as alternate route. This route is an intra-regional route through Walsall/Sandwell/Birmingham.



The A4031 section of the route is very well served with a high frequency bus service between West Bromwich and Walsall operating every 6 minutes and supplemented by further services between Walsall and Tame Bridge. These services link the West Bromwich and Walsall town centres, serve Sandwell General Hospital and provide access to retail facilities, leisure destinations, employment sites and the surrounding communities. The A4041 section of the route is less well served with no provision at all on the section between Great Barr and Pheasey.

The average bus speed along this route is 20.1mph (data taken from the 5 bus route).

The average total number of daily bus trips is 38,276.

There are some bus priorities, in the middle of the corridor between West Bromwich and Walsall, introduced in the bus showcase projects.

This route is identified in the Core Bus Network in the West Midlands Strategic Transport Plan – Movement for Growth but not identified for Sprint investment.

There are no mainline rail services along this route but there are connections with the Snow Hill to Kidderminster and New Street to Wolverhampton services at Smethwick Galton Bridge station to the south and with the Chase Line services at Tame Bridge Parkway and Walsall to the North. These give access to Birmingham and Wolverhampton City Centres, London and the Regions.

**Table 3: Main Bus Routes**

Road(s) Served	Frequency	Route No.
A4031 West Bromwich - Walsall	Every 6 mins	4/4H/4M
A4031/A4041 West Bromwich - Pheasey	Every 10 mins	5
A4041 Pheasey – Sutton Oak	Every 20 mins	997
A4031 West Bromwich – Tame Bridge	Every 15 mins	45
A4031 West Bromwich – Stone Cross	Every 12 mins	40
A4031/A4041 West Bromwich - Newton	Every 15 mins	46
A4031/A4041 West Bromwich - Newton	Every 20 mins	16W
A4031 West Bromwich – Tame Bridge	Every 30 mins	41
A4041 Newton – Perry Beeches	Every 60 mins	424/424E

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

The following stations have park and ride facilities available:

- Kidderminster
- Hagley
- Stourbridge Town
- Stourbridge Junction
- Lye
- Cradley Heath
- Old Hill
- Rowley Regis
- Langleigh Green
- Smethwick Galton Bridge
- The Hawthorns
- Tame Bridge Parkway
- Bescot Stadium

The West Midlands Strategic Transport Plan – Movement for Growth identified a new station at Streetly on the Sutton Park line which will be served by services from Walsall via Aldridge. However, the service is only extended as far as Aldridge in the HS2 Connectivity Package.

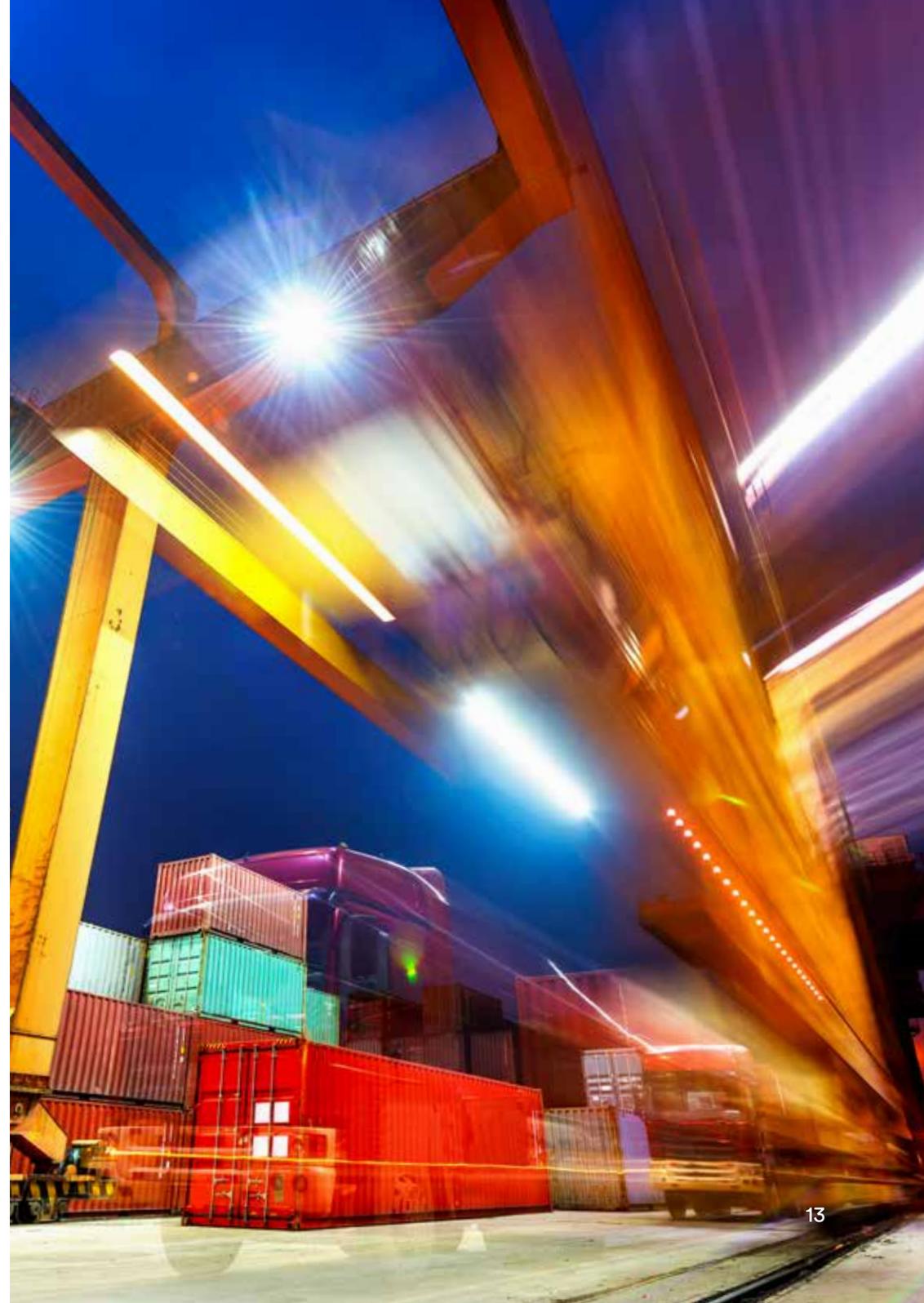
The Midland Metro Line 1 service between Birmingham and Wolverhampton crosses the route at West Bromwich with stops at Lodge Road, West Bromwich Central (where it connects with Bus Services) and Trinity Way. There are no plans to extend Metro services on this route.



# FREIGHT AND LOGISTICS

The AADF data for 2016 has been used to analyse HGV flows on each respective route. The average number of Heavy Goods Vehicles using the route on a daily basis was 316, which represents 2% of all vehicular traffic.

The route predominantly serves as a local route, and is of little significance to freight apart from the movement of goods to retail sites.



## Resilience

The route has parallel strategic roads in the form of the M5/M6, A461, A41/A34 and A453. There is a considerable degree of resilience contained within the Black Country and Birmingham networks. However, certain critical sections can cause gridlock, including the motorway network, particularly at M5 Junction 1 and M6 Junction 7. Also, the route contains the heavily congested Scott Arms junction which hinders access between Sutton Coldfield and West Bromwich, access to the M6 at Junction 7, and movements between Birmingham and Walsall.

There is a lack of intermodal network resilience as a result of a lack of rail based transport in the route. The West Midlands Strategic Transport Plan – Movement for Growth proposes to reintroduce train services between Stourbridge and Walsall, and from Walsall to Sutton Coldfield via Aldridge and Streetly which will provide a level of intermodal resilience (via interchange to Midland Metro at Wednesbury) assuming sufficient station parking provision.

Given the existing capacity constraints in the peaks in the Black Country and Birmingham highway 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

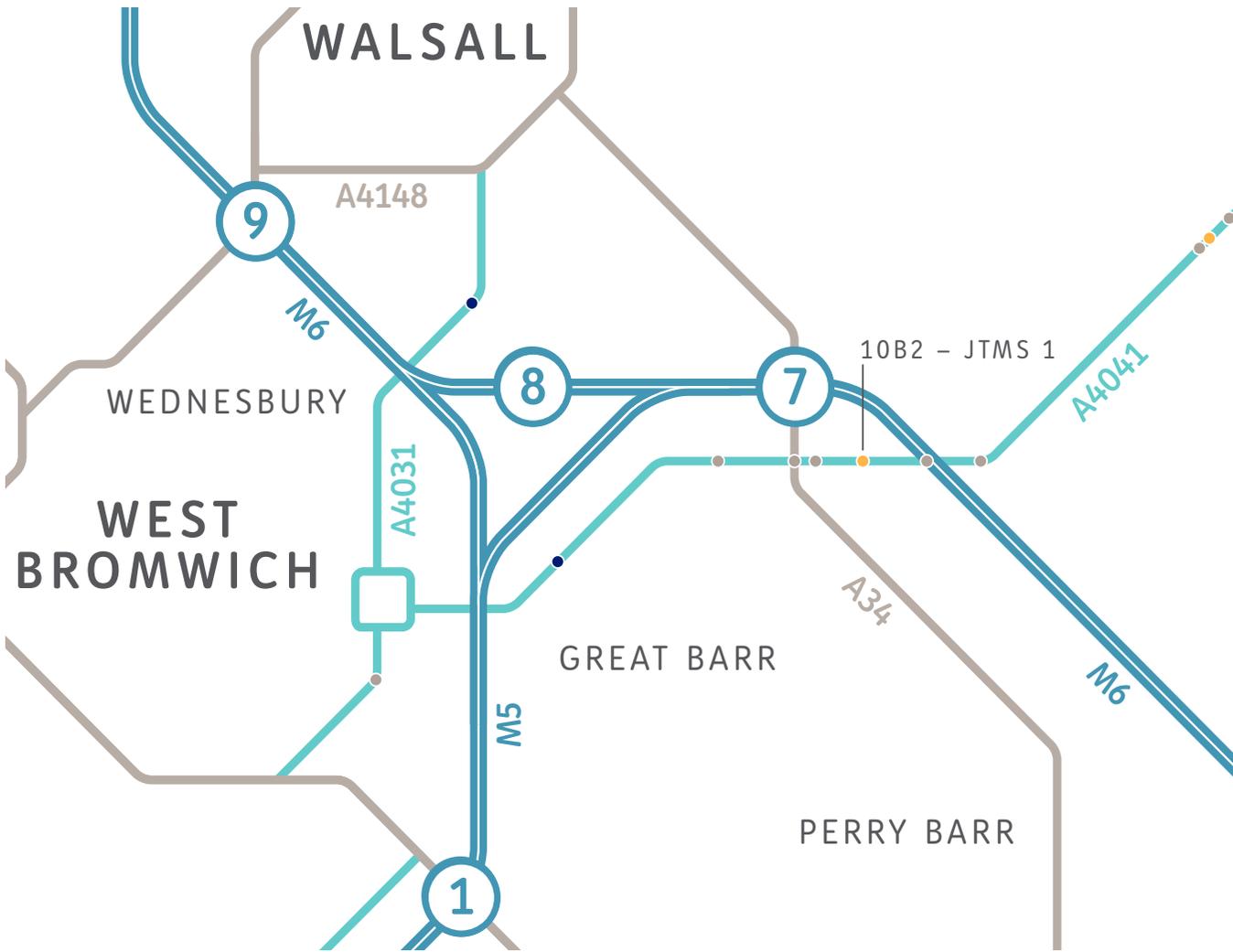
In conjunction with the Black Country to Birmingham and Birmingham to Stafford KRN Routes, the A4031 All Saints Way and A4031 Newton Road are used as an Emergency Diversion Route by Highways England when there are closures or incidents at the M5/M6 Ray Hall Interchange.

## Flooding

Flooding on this route impacts on overall performance, safety of road users and affects the lives of those living in the vicinity. The evidence gathered indicates that there are three areas on this route that pose a flooding risk; they are as follows:

- A4031 where the road passes underneath the M6 (in the vicinity of Tame Bridge Parkway)
- A4041 Newton Rd (near the River Tame)
- A4041 Queslett Rd where the road passes underneath the M6.

# West Midlands Key Route Network West Bromwich Route



## Key

### Roads

- The Route
- Strategic Road Network operated by Highways England

### Asset Location & Conditions (where known & information available)

- Variable Message Signs (VMS) locations
- Automatic Number Plate Recognition (ANPR) / Journey Time Monitoring System (JTMS) locations
- Traffic Camera locations



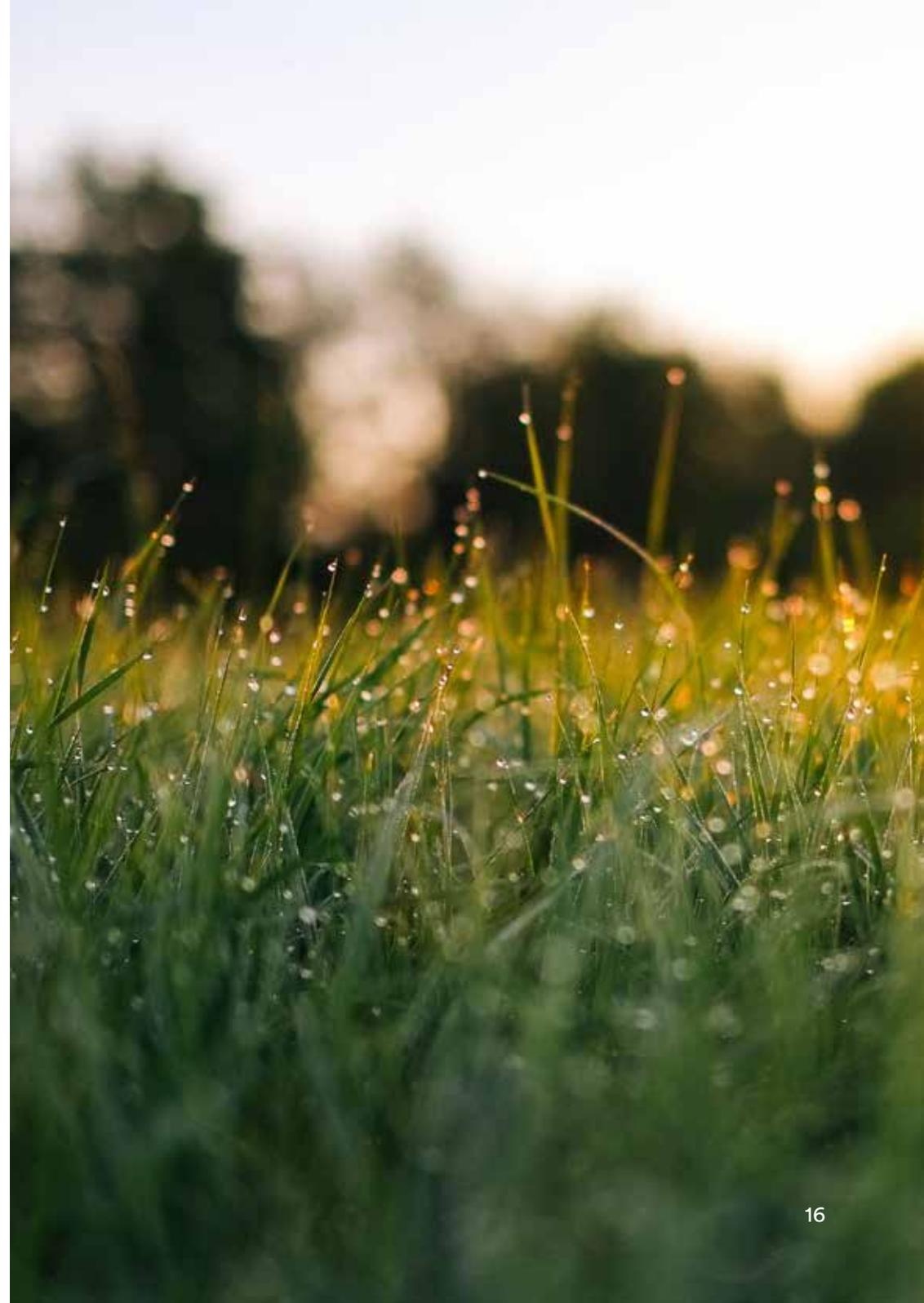
Figure 4

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.

Some communities with high levels of childhood obesity border this route, particularly on the west side of the A4031, south of the M6.

The route falls within three Air Quality Management Areas (AQMAs); Sandwell and Walsall- declared for Nitrogen Oxide (NO<sub>2</sub>), and Birmingham which is declared for both NO<sub>2</sub> and Particulate Matter (PM<sub>10</sub>).

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.



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.

## **Carriageway Condition**

The carriageway condition across the West Bromwich route is in a fair and safe condition. Over the past six years there has been a systematic planned programme of capital maintenance carried out across the route.

## **Footway Condition**

The footway condition across the West Bromwich route is in fair and safe condition. Over the past six years no planned and programmed capital maintenance has been required on the route.

## **Structures**

There are 7 highway structures identified consisting of 7 bridges on the West Bromwich route, which are systematically inspected and maintained. The overall condition of these structures is fair to good.

Refer to the Technical Annex for further details on asset condition.



## Development proposals directly affecting this route

### Housing

- No significant proposals

### Employment

- West Bromwich 11500 jobs (2017–30)

## Development proposals indirectly affecting this route

### Housing

- No significant proposals

### Employment

- Wider Wednesbury Area 4800 jobs (2017–30)
- Wider Oldbury Area 3750 jobs (2017-30)

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

- No significant proposals.

- 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>