West Midlands Key Route Network

Wednesfield to Wednesbury



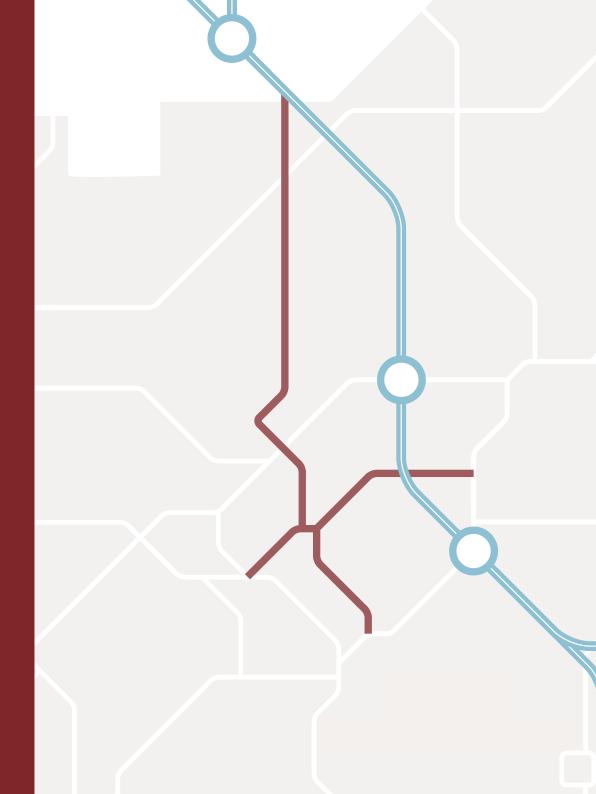
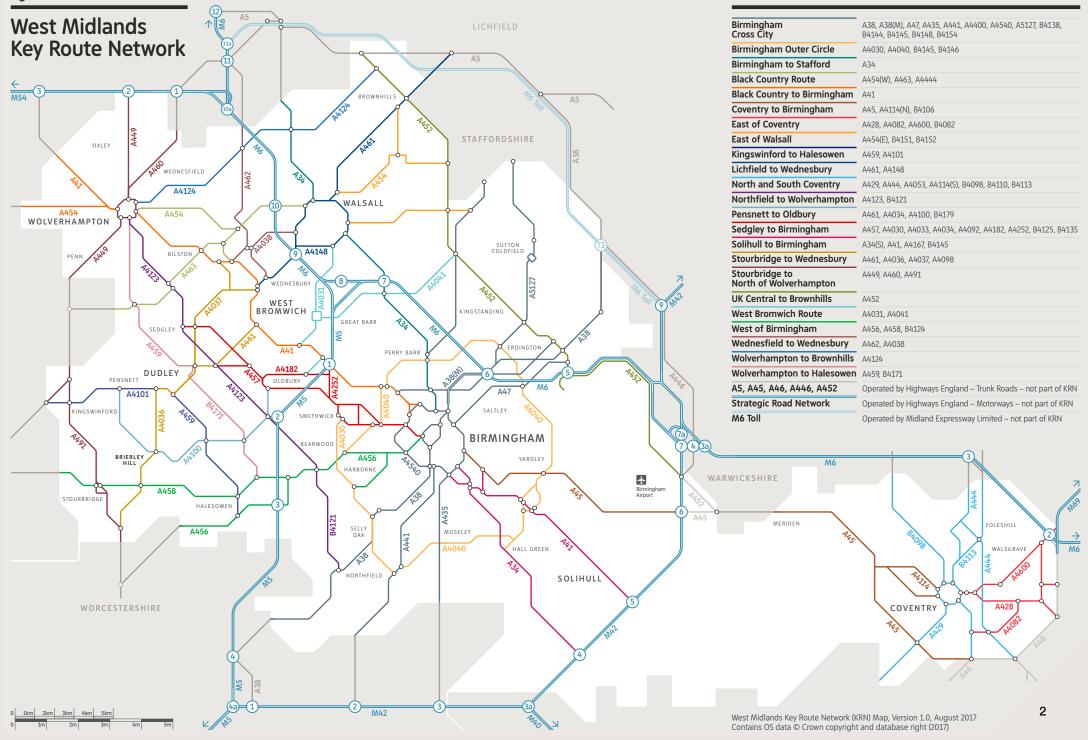


Figure 1



The Wednesfield to Wednesbury route is an 9 mile/14km section of the West Midlands Key Route Network (KRN) that serves the communities of:

- Wednesfield
- Wednesbury
- Darlaston
- Moxley
- Walsall; and
- Willenhall

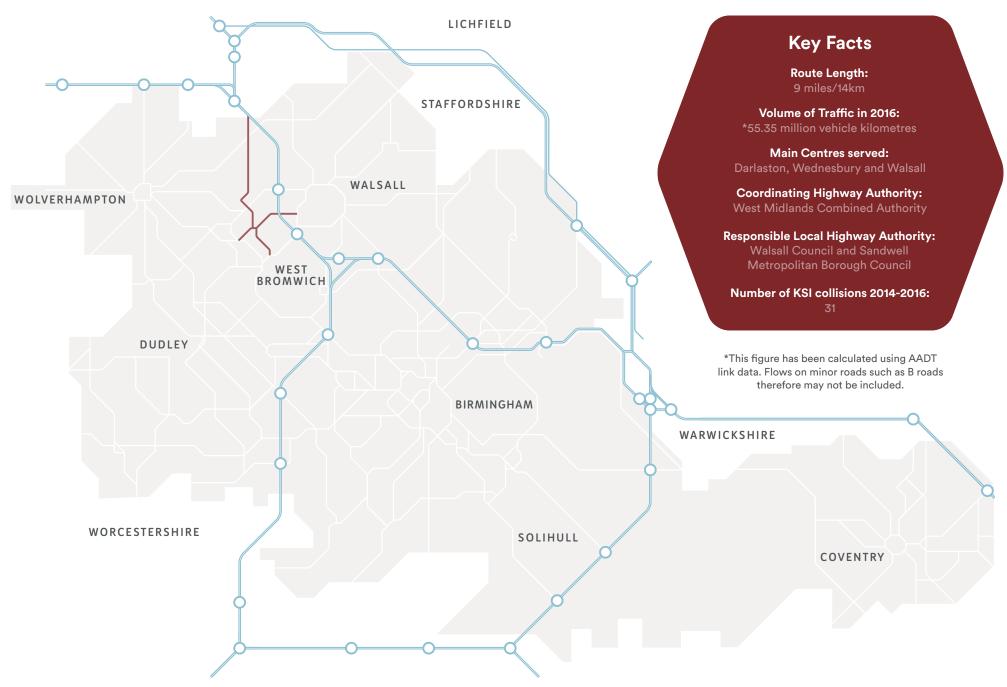
The route provides a direct connection from the North to the Black Country providing access to retail and industrial activity. Sites along this route include: Kings Hill Business Park, Wednesbury Trading Estate and Kenway Retail Park (Willenhall) amongst other industrial sites. The route is formed of the A462 (connecting Wednesbury and Wednesfield) and the A4038 (connecting Moxley and Walsall) the two roads crossing at Darlaston. The A462 is a predominantly urban route that heads into the Black Country from the North, East of Wolverhampton. This route originates at the A461 in Wednesbury and is a single lane non-primary route that passes through Darlaston, where it meets the A4038, and then through to Willenhall, where it passes under the A454 Black Country Route. This single carriageway continues North passing the A4124 junction and later travels over the M6/M54 junction before going on to M6 junction 11.

The A4038 is an urban route that runs across the North of the Black Country. This route starts at Moxley junction with the A41 and A4444 (providing access into Wolverhampton City Centre) and continues East to Darlaston as a dual carriageway until it meets the A462. Beyond the A462 junction, the A4038 travels into Walsall through industrial and residential areas before passing under the M6 (between junctions 9 and 10). This road terminates at the A4148 Walsall Ring Road. The route does not form any direct connection to the Strategic Road Network (SRN). However, the A462 continues northwards beyond the WMCA boundary to eventually meet with the M6 junction 11 near Shareshill in South Staffordshire

The Wednesfield to Wednesbury route has numerous connections with other KRN routes, these include:

- Lichfield to Wednesbury Route (A461/A4148)
- Black Country to Birmingham Route (A41)
- Black Country Route (A454 [W]/ A463/A4444)
- Wolverhampton to Brownhills Route (A4124)

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



Congestion, Delay, Reliability

This route represents 2% 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 7,400 vehicles, a maximum of 17,200 with an average of 11,600 AADF.

The route experiences large volumes of traffic, particularly on:

- the A462 between the A4124 Lichfield Road and the A463 Armstrong Way; and
- the A4038 between the A462 Darlaston Road and the A4148 Bescot 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
A462	Essington Road/Cannock Road, Beacon Road to Coppice Lane, New Invention	Southbound
A462	Straight Road, Drancy Avenue to Bloxwich Road North, Short Heath	Southbound
A462	High Street, Haley Street to Bentley Lane, Short Heath	Northbound
A462	Clarkes Lane, Little Island Drive to B4464 Wolverhampton Road, Willenhall	Southbound
A4038	Walsall Road/Darlaston Road, Bills Street, Darlaston, to A4148 Old Pleck Road, Pleck	Eastbound

Peak hour journey time on the sections of the route experiencing the highest delays has been found to be 150% higher than (i.e. $2\frac{1}{2}$ 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 New Cross Hospital and Wednesbury Trading Estate, Ashmore Lake and other industrial areas where businesses may supply or rely on just-in-time deliveries.

Table 2: PM Peak Congestion-Related Delays

Road	Location	Direction
A462	Cannock Road, Coppice Lane to A4124 Lichfield Road, New Invention	Northbound
A462	High Street, Haley Street to Bentley Lane, Short Heath	Northbound
A462	Clarkes Lane, B4464 Walsall Road to Ashmore Lake Way, Willenhall	Northbound
A462	Clarkes Lane, Little Island Drive to B4464 Wolverhampton Road, Willenhall	Southbound
A462	Bilston Lane, Owen Road to Clarkes Lane, Willenhall	Northbound

Average Speeds

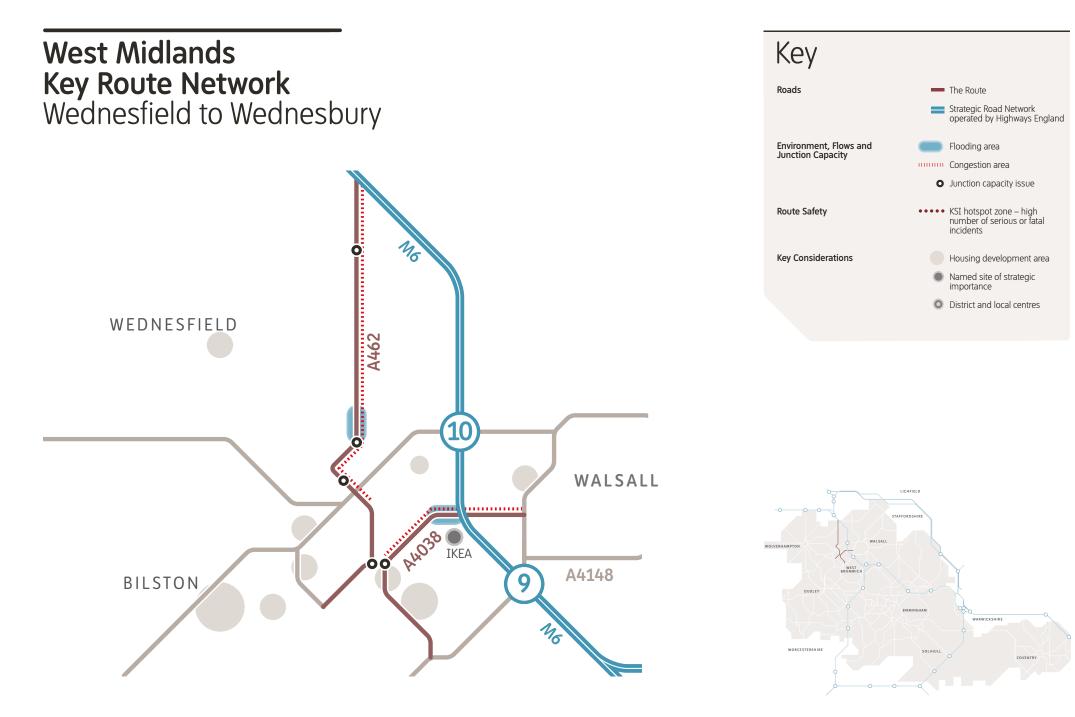
The average speed for this route in the AM peak is between 10-20 mph throughout its busiest sections. The areas approaching Walsall Town Centre and Wednesfield are particularly slow during the morning and evening peaks and speed can be as low as less than 10 mph. The particular sections on this route where average peak speeds are below 10 mph are as follows:

- A4038: St Lawrence Way to Avenue Road/Birmingham Street
- A462 Bilston Lane: Birmingham Street to B4464 Walsall Road

Junction Capacity Issues

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

- A4038 Wednesbury Road/A4148 Bescot Road
- A4038 Walsall Road/A462 Darlaston Road
- A462 Trouse Lane/A461 High Bullen
- A462 Owen Road/A463 Armstrong Way
- A462 Cannock Road/A4124 Lichfield Road



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

- 61 collisions, involving 118 vehicles
- Main contributory factor: Failed to look properly (pedestrian) (15% of all collisions)
 - o The Killed and Seriously Injured (KSI) ratio for this group is 11% with 17% of all slight collisions being attributed to this group.
- Main contributory factors
 - o Failed to look properly (driver) (11% of all collisions)
 - o Poor turn or manoeuvre (8% of all collisions)

Casualties

- Total casualties: 72
- Killed and Seriously Injured: 14

(19% of all casualties, down 2% when compared to 2015 figure of 7 of 34)

- o Killed: 0 (0% of all casualties, no variation from 2015)
- o Seriously injured: 14 (19% of all casualties, down by 2%)
- Slights: 58 (81% of all casualties)

Casualty Types

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

- Pedestrians: 15 (a reduction of 17% compared to 2015)
- Powered Two wheel vehicles: 12 (a reduction of 4% compared to 2015)
- Pedal cyclists: 9 (an increase of 0.7% compared to 2015)
- Car occupants: 36 (an increase of 21% compared to 2015

KSI Clusters

There are a series of KSI clusters along the A4038 Walsall Road between the A41 and the A4148. This section is mainly urban single carriageway in a built-up residential area.

There is limited provision for cycling along most of the A462 section of this route. There are advisory lanes on carriageway and shared footpaths along the Midland Road/Owen Road sections. The remaining section in Walsall does not have any provision for cycling.

Along Darlaston Road in the Walsall bound direction, there is a shared use footpath but residential parking poses issues for access.

There is also limited provision for cycling in the Sandwell section of the route.



Although there are a number of bus services operating on the A462 section of this route, these are discontinuous and infrequent in nature and it is not well served. By contrast the A4038 section of the route is well served by a number of high frequency bus services operating every 10-20 minutes. These services provide access to Walsall Town Centre, the local centre at Darlaston, retail facilities including IKEA, leisure destinations, employment sites and the surrounding communities.

The average bus speed along this route is 14.7mph (data taken from the 79 bus route).

The average total number of daily bus trips is 19,829.

The bus services on the A4038 are identified as part of the Core Bus Network in the West Midlands Strategic Transport Plan – Movement for Growth but not identified for Sprint investment. The A462 does not feature in the core bus network.

There are no existing rail services along this route. The Walsall to Wolverhampton freight line passes through the corridor and the West Midlands Strategic Transport Plan – Movement for Growth proposes reintroducing passenger rail services with new stations at Willenhall and Darlaston.

There are no plans to extend Midland Metro services in the corridor.

Table 3: Main Bus Routes

Road(s) Served	Frequency	Route No.
A4038/A462 Darlaston - Wednesbury	Every 20 mins	79
A462 New Invention - Pool Hayes	Every 30 mins	41
A4038 Pleck - Moxley	Every 20 mins	34
A462 Coppice Farm - New invention	Every 30 mins	69
A4038 Pleck - Moxley	Every 20 mins	37
A4038 Pleck - Moxley	Every 20 mins	39
A4038 Pleck - Moxley	Every 10 mins	334
A462 New Invention - Shepwell Green	Every 30 mins	326
A462 Essington - New Invention	Every 60 mins	71/71A
A462 Shepwell Green - Darlaston	Every 60 mins	303

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

The AADF data for 2016 has been used to analyse HGV flows on each respective route. The average number of HGVs using this route per day is 340, which constitutes 3% of all vehicles. The A462 from Walsall Road to A4124 Lichfield Road experiences 500-750 HGV flows per day. There are numerous industrial estates to the south of the route such as Bescot Industrial Estate, Woods Bank, Wednesbury Trading Estate and the Trade Centre UK.

The route runs through Darlaston, where a number of sites have been identified for development on both sides of the M6 as part of the Black Country Enterprise Zone led by the Black Country Local Enterprise Partnership (LEP). The development sites aim 'to provide a custom and practice supply chain locality for just in time delivery of critical engineering intensive components for the advanced engineering sector' (Black Country LEP Website). Therefore this route may become more significant for freight in the near future.



Resilience

The route has parallel strategic roads in the form of the M6, A460 and A34. There is a considerable degree of resilience contained within the Black Country network. However, there is a lack of intermodal network resilience due to the lack of rail based transport on the route.

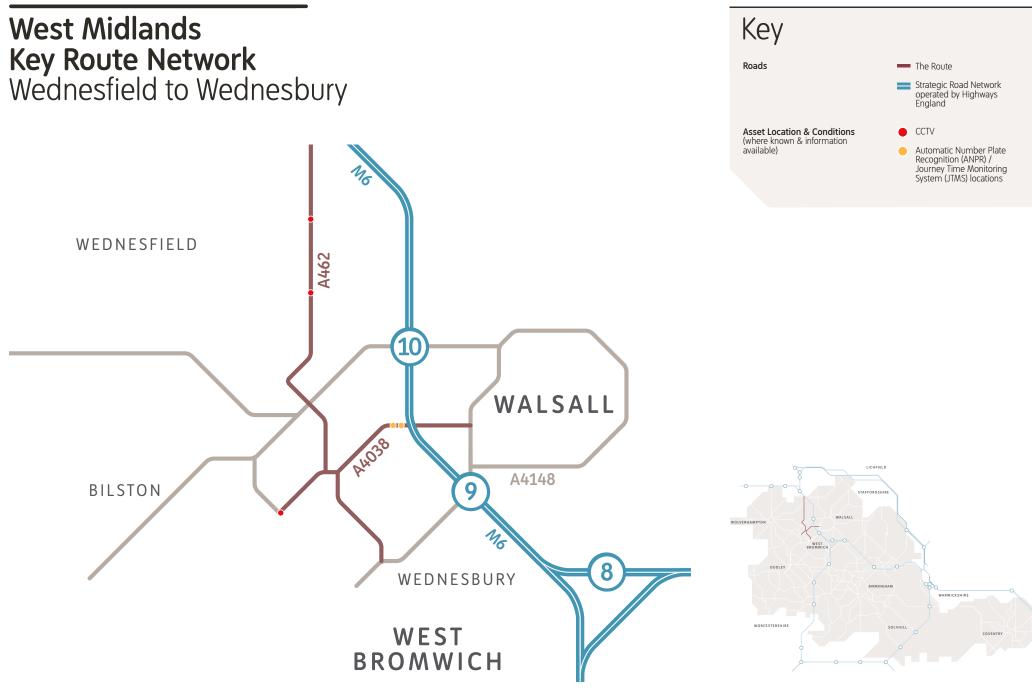
Given the existing capacity constraints in the peaks in the Black Country network, a restriction on any of the roads will have adverse implications for journey times on the remainder of this route and surrounding routes.

Diversion Route

Whilst not a signed diversion route, the A462 connects north to the M6 at Junction 11 and consequently it is used as an alternative access to M6 north when the section of the M6 south of junction 11 is congested or when there are delays on the Black Country Route leading to M6 Junction 10.

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 two areas on this route that pose a flooding risk, on the A462 and A4038 respectively.

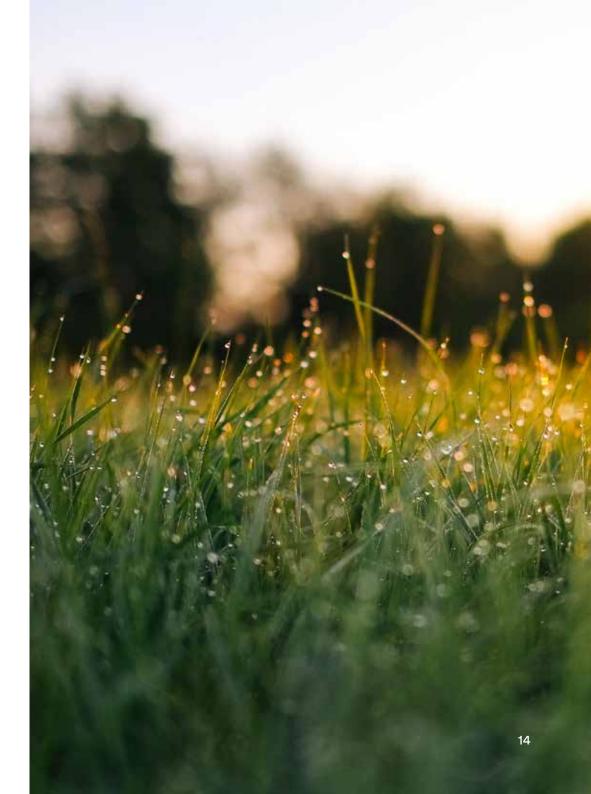


There are inequalities in health between the local authorities within the West Midlands – at local authority level the lowest healthy life expectancy at birth for men is 56.4 years, and the highest is 63.8 years. Amongst women the lowest is 59 years and highest 67.9 years. Similarly there are inequalities 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.

Both male and female healthy life expectancies are in the lowest 25% of areas within the WMCA, along the A4036 in between Darlaston and the Lichfield to Wednesbury route, and are considerably lower than the national average of 83. There are communities with higher childhood obesity; particularly communities close to the junction of the A462 and A4036.

The route falls within Walsall and Sandwell Air Quality Management Areas (AQMAs), both of which are 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.



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 across this route is in a good and safe condition. Over the past five years there has been a systematic planned programme of capital maintenance carried out on the A462.

Footway Condition

The footway across the Wednesfield to Wednesbury route is in a generally poor but safe condition. Some sections have been part of a systematic planned programme of capital maintenance.

Structures

There are no highway structures on the A462 of the Wednesfield to Wednesbury route.

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



Development proposals directly affecting this route

Housing

• No significant proposals

Employment

- Keyway Retail Park 700 jobs (2025-30)
- Willenhall Sewerage Works 1,400 jobs (2025-30)

Development proposals indirectly affecting this route

Housing

• Portway Road 375 dwellings (2020-25)

Employment

- Wider Wednesbury Area 160 jobs (2017–20)
- Darlaston Enterprise Zone 7,000 jobs (2017–20)
- Former Moxley Tip 500 Jobs (2017-20)
- Wider Wednesbury Area 1,600 jobs (2020–25)
- Darlaston Enterprise Zone 800 jobs (2020-25)
- Former Moxley Tip 500 Jobs (2020-25)
- Wider Wednesbury Area 1,600 jobs (2025–30)
- Former Moxley Tip 500 Jobs (2025-30)

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