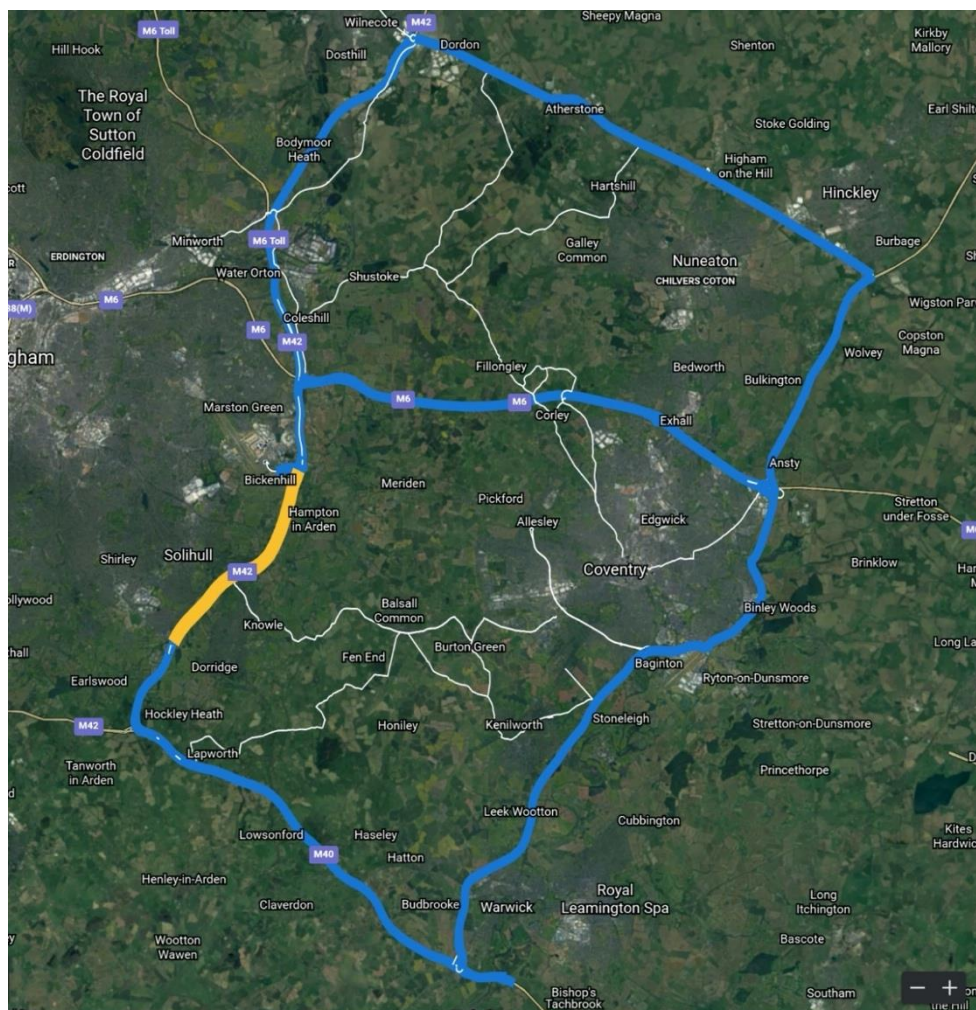


## Midlands Future Mobility Driveable Route:

### Urban, Inter-urban, Rural and Highways Route Sector Overviews

Route Name/ID:	National Highways Route. Strategic Road Network (SRN)
Location:	West Midlands Region, UK
Road Authority/Land Owner:	National Highways
Route/Sector Length:	M42, M40, M69, M6, A45, A46, A5. Total distance is approximately 80 miles / 129 Km
Suitability:	Suitable for mid-high speed connected and automated vehicles designed to operate in mixed traffic environments
Examples of other road user (not exhaustive):	Vehicle traffic e.g. passenger cars, motorcycles, light and heavy goods vehicles

Route/Sector Map:



**Route/Sector Description:**

The National Highways SRN route for mid-high speed connected and automated vehicles consists of several different roadways including motorways and A-roads. These are the: M42, M40, M69, M6, A45, A46 and A5. The roads in this route were selected due to their location and provide a variety of road configurations/geography to the end customer.

A motorway is a major road that has been specially built for fast travel over long distances. Motorways have several lanes and places where traffic enters and leaves. A-road is a major road. A-roads are narrower than motorways but are wider and straighter than typical B-roads.

The SRN route will consist of vehicle traffic e.g. passenger cars, motorcycles, light and heavy goods vehicles.

Under normal circumstances, peak movement times are expected to be 08:00-10:00 and 16:00-18:00.

**Route Complexity:**

Included within the list of roads are 3 lane, 4 lane and dual carriageways. All roads in the SRN route have at least 2 lanes per carriageway.

The M42, M40 and M69 are 3 lane carriageways. The A45, A46 and A5 are dual (2 lane) carriageways. Junctions are located approximately every 4 miles along these sections.

The road junctions on the route are:

- M6 Junctions: 2 - 4
- M42 Junctions: 3a – 7a
- M40 Junctions: 15 to 16
- M69 Junctions: 1

The motorway speed limits are the national speed limit (70mph).

The M42 (J3a to 7) features a smart motorway. A smart motorway is a section of a motorway that uses traffic management methods to increase capacity and reduce congestion in particularly busy areas. These methods include using the hard shoulder as a running lane (dynamic) and using variable speed limits to control the flow of traffic in addition to Red X signs. A Red X sign indicates that a lane is closed to traffic. Drivers must stay out of that lane as there may be an incident or people working ahead.

More information on how to drive on motorways can be found here:

<https://highwaysengland.co.uk/road-safety/driving-on-motorways/>

**Connectivity and Key Infrastructure:**

Customers are able to request CCTV access across the majority of these sections to validate their testing.

ITS-G5/ LTE can also be provided as a service if required. The 11 ITS-G5 units are located within M42 Junctions 4 – 6 (as highlighted in orange on the map on page 1). ITS-G5 is protocol stack for supporting vehicle-to-vehicle communications in an ad hoc network based on IEEE 802.11-2012 and ANSI/IEEE Std 802.2. ITS stands for intelligent transport systems; G5 is derived from the frequency band (5.9GHz) upon which it was designed to operate.

There is adequate 4G/5G coverage across the route.

**Comments/Further Information:**

The Met Office regional climate information for the West Midlands can be found [here](#).