



MOVEMENT FOR GROWTH:

2026 Delivery Plan for Transport



Birmingham
New Street Station

Contents

	Foreword	1
1.	Introducing the Challenge	2
2.	Our 2026 Delivery Plan	3
3.	Towards an Agreed 10 Year Programme	5
4.	On Track – A Rail Based Renaissance	6
5.	Driving Growth – the Strategic Road & Key Route Networks	9
6.	HS2 Connectivity and Growth	12
7.	A Gateway to the Air	13
8.	The Bus Alliance and Beyond	13
9.	Metro, SPRINT and Very-Light Rail – Rapid Transit for the West Midlands	16
	Metro	16
	Very Light Rail	18
	SPRINT	18
10.	Demand Responsive Services	20
11.	Cycling	20
12.	Walking	22
13.	Network Resilience	22
14.	The Movement of Freight	24
15.	A Foundation of Technology and Evidence	24
	Connected and Autonomous Vehicles:	24
16.	Data Driven – Evidence Led:	24
17.	Powered Two Wheelers	26
18.	SMART Payment Systems	27
	“Mobility as a Service”	27
19.	Mobility and Social Inclusion	28
20.	Mobility for Health and for a Clean Environment	29
21.	Improving Air Quality	29
22.	Co-ordinated Delivery in Corridors	31
23.	Monitoring and Evaluation	31
24.	Programme Overview	35
	Transport Delivery Corridors (with major land use sites)	38
	Birmingham and Solihull Infrastructure Planning Development Pressure Assumptions	39
	Coventry Infrastructure Planning Development Pressure Assumptions	40
	The Black Country Infrastructure Planning Development Pressure Assumptions	41



Councillor

Roger Lawrence

Lead Member for Transport
West Midlands Combined
Authority

Foreword

This Delivery Plan sets out the solid progress we are making in achieving our long term transport strategy “Movement for Growth”

This high level programme of capital schemes is the first delivery plan of our long term strategy. Working with our local authority partners, we have set out our transport investment plans based on two overarching principles:

- Ensuring all parts of the West Midlands are “plugged-in” to the two High Speed Rail Stations in the West Midlands, and the significant growth and development that is already happening at their locations.
- Steering transport investment into priority corridors for new jobs and homes, providing a joined up land use/transport planning approach to support the aims of the Combined Authority’s Strategic Economic Plan.

Alongside the larger schemes in this programme there will be network wide improvements across the West

Midlands. These will be made up of smaller scale minor works and maintenance measures: important aspects of our overall approach to upgrading our transport system.

The Delivery Plan reflects the Mayor’s manifesto commitments and, as part of the “Funding for Growth” initiative, we will work to identify additional funding to bring forward longer term schemes in its programme. This includes ways to secure funding to deliver the commitment to raise investment in cycling.

Public consultation has helped shape and strengthen this delivery plan. It is the first of an annual series of documents, as schemes are built, and projects are brought forward to be worked up further. It supports the wider aims to improve the quality of life of all West Midlanders and sets out the transformation of our transport system to help achieve this.

I commend this delivery plan to you.

1. Introducing the Challenge

- 1.1. The West Midlands Combined Authority (WMCA) has set out an ambitious plan for growth in its Strategic Economic Plan and has established a 20 year vision for the transport system needed to support this. The Movement for Growth strategic transport plan (MfG) articulates this vision and provides a high level policy framework and overall long term approach for improving the transport system serving the West Midlands.
- 1.2. This document, our first joint Delivery Plan and supporting Annexes, provides a clear view of what transport initiatives and schemes the WMCA will deliver by 2026 in line with Movement for Growth. The measures are designed to unlock economic growth opportunities and support wider initiatives to improve the social well-being and lives of residents. Progress will be reviewed annually.
- 1.3. The scale of the challenge is significant. In the next 20 years across the WMCA constituent authority area population growth will increase by 444,000. The CA's Strategic Economic Plan aims to create 500,000 new jobs in the wider CA area by 2030. 1.2m additional journeys every day will need to be accommodated in the West Midlands by 2035 (in addition to the 8m daily journeys already accommodated by our transport system).
- 1.4. Movement for Growth's long term strategy will see a shift in emphasis of travel in line with thriving, prosperous, attractive, large European city regions, where car use is typically 35 – 45 % of all journeys, compared to 63% in the West Midlands.
- 1.5. The area is in receipt of many new powers and freedoms as part of a radical devolution agenda. This is underpinned by moves to redress decades of under investment in the national tier of infrastructure which directly serves and runs through the West Midlands - £24bn of HS2 Phase 1 construction; £1.8bn of Highways England investment in its current five year investment plan (Road Investment Strategy 1); and £550m in Network Rail's 5 year investment plan in our 'classic' railway network. (Control Period 5).
- 1.6. Delivering this national scale investment alongside the local transport investment required to support growth (that is currently strong and will be further stimulated by the new infrastructure) will require a level of inter-agency cooperation that has rarely been seen before. New ways of collaborative working (covering our staff, contracting and planning of works) will be central to our thinking. At the forefront of this will be partnerships with our Universities and industry, and the use of new technologies to create the most effective communication with all those travelling and investing in our area.

2. Our 2026 Delivery Plan

- 2.1. Our first delivery phase of the long term Movement for Growth strategic transport plan is based on two over-arching principles:
- a) Ensuring all parts of the West Midlands are “plugged-in” to the two High Speed Rail Stations, and the significant growth and development that is already happening at their locations.
 - b) Steering transport investment into priority corridors for new jobs and homes, providing a joined up land use/transport planning approach to support the aims of the Strategic Economic Plan.
- 2.2. Through this approach, we will see strong progress in delivery of Movement for Growth’s key transport priorities. Some of the headline committed schemes and projects for the next delivery period are shown in Table 1, including schemes in construction or recently opened.

TABLE 1 MOVEMENT FOR GROWTH KEY PRIORITIES AND COMMITTED SCHEMES AND PROJECTS

MfG Key Transport Priorities for the National and Regional Tier

New smart motorway sections - M6 Junctions 13 – 15, M40/M42 Interchange, development work on upgrading the remainder of the Birmingham Box to Smart Motorway standard (Birmingham Box Phase 4)

Better Use of M6Toll – Ongoing dialogue with central Government over potential ways to secure wider use of the M6 Toll

M54 – M6-M6Toll Link Road – Highways England committed scheme, subject to other contributions

Improved Motorway Junctions on the Motorway Box M6, M5, M42, M40, including major improvements at M42 Junction 6 – M6 Junction 10, M42 Junction 6, development work on upgrades to junctions on the Birmingham Box (Birmingham Box Phase 4)

Making Better Use of the A46 – A46 Coventry Junction Upgrades – Binley and Walsgrave roundabouts, A45-A46 Tollbar End, A46 link

Camp Hill Rail Chords, to increase Central Birmingham Rail Capacity - Key part of the £5m Midlands Connect, Midlands Rail Hub evaluation study and Bordesley Chords is a £200m scheme, as part of the HS2 Connectivity Package

Water Orton corridor rail freight capacity enhancements – A key part of the £5m Midlands Connect, Midlands Rail Hub evaluation study

Further electrification of key national and regional rail links – Barnt Green to Bromsgrove and Walsall to Rugeley

Improved Connections to, and within, the UK Central Hub Area – M42 Junction 6, HS2 Connectivity Package and related schemes: Metro East Birmingham to Solihull, SPRINT Hall Green to Interchange via Solihull, SPRINT – A45 – Airport, Interchange Hub, A45 Corridor Enhancement (Connectivity to UK Central, Birmingham Airport and HS2 Coventry and Warwickshire LEP scheme)

MfG Key Transport Priorities for the Metropolitan Tier

HS2 Connectivity Programme – HS2 Connectivity Package of 23 schemes, plus Metro Wednesbury to Brierley Hill and East Birmingham to Solihull. As well as already committed city centre metro extensions and agreed SPRINT programme.

Metropolitan Main Road Network ('Key Route Network') Pinchpoint Junction Improvements –

A4101 Pensnett Strategic Access Improvement Scheme, Ashted Circus, A38 Minworth Roundabout, Selly Oak Triangle, Iron Lane, Station Road, and Flaxley Road, Stechford, Longbridge Connectivity, Birmingham ring road improvements

Priority Links in the Metropolitan Cycle Network

– Birmingham Cycle Revolution (A38) and (A34), incorporation of high quality segregated cycle route provision in future Black Country corridor improvements, future phases of Cycle Coventry network strategic links and Solihull Connected strategic cycle links

MfG Key Transport Priorities for the Local Tier

Improved asset management of minor roads

– Local highway maintenance programmes in line with highway authorities Highway Asset Management Plans (HAMPs)

Local Cycle Network Development –

Cycle Coventry network further phases, Birmingham Cycle Revolution, Solihull Connected schemes, Black Country Sustainable Transport projects

Key Walking Routes –

Improvements for walking as integral elements of schemes for city, town and suburban district centres, including proposals for Wolverhampton, Walsall, Sutton Coldfield and Solihull

Area Wide residential road 20 mph speed limits -

Birmingham 20 mph zones phases A and B

Smarter Choice Initiatives – ongoing marketing and promotion initiatives

Local Bus Network Improvements – a wide variety of measures from the West Midlands Bus Alliance, covering infrastructure to assist bus reliability and speed, new vehicle investment, enhanced swiftcard ticketing, reduced fares for younger people and improved information to help the ease of understanding the bus network

MfG Key Transport Priorities for the Smart Mobility Tier

Measures to improve traffic management – National Productivity Investment Fund (NPIF)

Key Route Network Improvements, A45 freight vehicle technology trial

Development of a Personal Mobility Platform that supports an integrated journey planning, navigation and payment system across all modes

– Mobility as a Service pilot

A new road safety strategy – Production of a West Midlands Road Safety Charter and new highway authority road safety strategies: Birmingham, Solihull

Connected and Autonomous Vehicles – The development of real world test environments to support automotive industry investment and existing lab based and controlled environment facilities; as well as clear exploitation plans and schemes for applied CAV technology including parking, last mile and freight and logistics

3. Towards an Agreed 10 Year Programme

- 3.1. The plan currently contains details of nearly 200 schemes and initiatives representing some £7.3bn worth of infrastructure and technology investment in our transport system that are required to make our vision a reality. The plan spans work at all levels of the system – from HS2, through to key pan-Midlands strategic initiatives promoted in partnership with Midlands Connect and down to the more local investment in our highways, Metro system, bus infrastructure and major technology enhancements.
- 3.2. To structure our programme we have split activity into 3 possible categories:
 - a) Committed schemes which are fully funded or mostly funded (subject to assurance framework compliance and approvals)
 - b) Pool of potential but predominantly unfunded schemes for 0 – 10 years, with some degree of scheme development already undertaken
 - c) Longer term projects and scheme proposals for 0 – 20 years requiring studies and feasibility
- 3.3. Many of the funded, committed schemes are the 23 schemes in the HS2 Connectivity Package, plus the 2 related Metro extensions. There are also approximately 15 committed LEP funded, LGF and developer funded schemes. This is based on a snapshot in early March 2017 and will change with funding announcements.
- 3.4. Scheme promoters will add to the programme of funded, committed schemes from the pool of unfunded schemes by pursuing the relevant funding source requirements (WMCA Investment Programme, Local Growth Fund etc). Progress towards this will be reviewed on an Annual basis.
- 3.5. This first version of the plan simply captures all delivery proposals. This will help drive a comprehensive assessment of the network resilience challenges and other growth pressures. These in-turn can then inform any necessary future change control as schemes transition from feasibility / study stage to potential schemes to committed.
- 3.6. This document provides a high-level summary of the plan, which is supported by a comprehensive family of subsidiary documents covering key topics and 16 broad corridor based delivery programmes, which are targeted on our immediate growth areas.
- 3.7. Birmingham City Centre is at the fulcrum of many of the corridors and also houses a number of critical regional and national transport functions. We have not therefore designated the city centre as the corridor, but will continue to work with Birmingham City Council and all stakeholders to ensure that the development of a wider city centre masterplan meets all development, social, environmental and transport needs. Through some of the work with Midlands Connect on rail, detailed later in this plan a number of high level requirements have been identified.
- 3.8. We will add to and develop the full suite of Delivery Plan documents on an on-going basis, but critically the Delivery Plan is the plan for Transport for West Midlands (TfWM) and its constituent authorities – the actions contained in it will be taken forward in full partnership and will be owned by all, bringing our resources, staff and partners together to deliver in a streamlined way which is focused on the WMCA Strategic Economic Plan outcomes.
- 3.9. TfWM will work with the Local Transport Authorities of the wider region (Herefordshire Council, Shropshire Council, Staffordshire County Council, Telford and Wrekin Council, Warwickshire County Council and Worcestershire County Council), Highways England and Network Rail to ensure joined up transport strategy and aligned schemes for the journey to work area. This area is covered by the Combined Authority's non-constituent authorities.
- 3.10. Proposals for a national Major Road Network and the work of West Midlands Rail and Midlands Connect will help achieve this.

4. On Track – A Rail Based Renaissance

- 4.1. Demand for rail travel across the TfWM area is continuing to increase. The area has seen more than a 70% increase in rail travel over the last 10 years. Rail now accounts for broadly the same number of morning peak trips into Birmingham City Centre as car use. However, the system is now approaching its limits with most services over crowded in the peak periods.
- 4.2. HS2 provides part of the answer by unlocking significant long-distance capacity and allowing greater flexibility with what we do with the existing 'classic' network. We will continue to secure investment in this in order to address capacity and provide connectivity to HS2 to exploit national level investment.
- 4.3. WMCA is a major partner in West Midlands Rail (WMR) Ltd which has, alongside the Department for Transport, overseen the letting of a new rail franchise to provide better local rail services, including better quality

facilities for passengers, more seats and longer trains.

- 4.4. West Midlands Trains was awarded this franchise and will begin operations in December 2017. This is a joint venture between Abellio, East Japan Railway Company and Mitsui and Co. Ltd. The new franchise requires at least an extra 30% more peak train capacity for Birmingham services by 2022. The new franchise will also deliver significantly improved evening and Sunday services, extra trains to Shrewsbury, Bromsgrove and Cannock and direct services from Walsall to London.
- 4.5. The partnership will also seek to influence other critical franchise specifications and the case for further electrification of the rail network to provide passenger and freight capacity benefits. Through WMR Ltd we will seek to ensure the capacity released by HS2 is used for the right balance of inter-city and local rail services. Our priorities for rail for the next 10 years are shown in Figures 1&2.



FIGURE 1 RAIL DEVELOPMENT PRIORITIES 2016 – 21: LONGER TRAINS, STATION CAPACITY

- 4.6. **Influencing future rail franchises & HS2 service specification:** Working with partners to secure capacity, connectivity and economic benefits from future rail franchises. Without a successful working relationship with the rail industry few of our other priorities can be achieved.
- 4.7. **Improved rolling stock capacity:** The ordering of new rolling stock is directly influenced by Government through franchise specifications, which has led to a national shortage. The most significant opportunity for the West Midlands to address rail capacity is through lobbying Government and working with partners to ensure these franchise specifications include commitments to additional trains and carriages. We will also continue to work with innovative initiatives like that of the VivaRail D class train units (the re-purposing of former London underground stock to work in conventional service scenarios) to deliver more seat capacity at the busiest points on the network. There is some inherent risk in any innovation activity, however, our targeted output of increased seat capacity in the system is sufficiently critical to our success that, within reason, we must pursue all potentially viable options.
- 4.8. **Other short-term network enhancements (by 2019):** We will support Network Rail's delivery of electrification of the Bromsgrove and Walsall-Rugeley lines and deliver new network capacity (platforms and track work) at Rowley Regis and Coventry Stations (including the Three Spires Loop). These will facilitate new local and regional train services.
- 4.9. **Park & Ride:** As well as new P&R stations, car parking, capacity will be increased at Longbridge, Tipton, Tile Hill and Whitlocks End. Additional cycle parking will be provided as part of our approach to park and ride expansion.
- 4.10. The new West Midlands Rail Franchise allows for a more joined up approach to park and ride provision and pricing along corridors.
- 4.11. **The Midlands Rail Hub (Plus):** We will work with Network Rail and Midlands Connect to deliver a set of enhancements to the core network capacity into and across Birmingham, which forms a fulcrum for the effective operation much of the national and pan-regional rail network. This will unlock 10 additional rail paths through the network. We will add to the core Midlands Rail Hub package of work with local enhancements to collectively deliver:
- Snow Hill Station: Reinstated platform; signalling; improved access & passenger circulation
 - Moor Street Station: New Platforms; improved access and passenger capacity; a 'One Station' environment between New Street-Moor Street-HS2 Curzon Street
 - New track capacity for the Bordesley and Camp Hill network area (including reinstated platforms at Kings Norton): Allowing services to be re-routed more efficiently and to open up Kings Norton as an interchange hub. The business case for stations at Moseley, Kings Heath and Hazelwell will also be developed, alongside further study of the potential for a station at Balsall Heath.
 - Water Orton & Kingsbury area capacity (Including 4 tracking and improved freight access for the Kingsbury terminal): This will open up passenger and freight capacity between Birmingham, Derby and Nottingham and allow new local stations with Park & Ride capability at Fort Parkway, Castle Bromwich, Galley Common and Kingsbury
- 4.12. **New capacity for UK Central, Coventry and Warwickshire (by 2026):** We will continue to lobby for and support Network Rail's delivery of track doubling between Leamington and Coventry (Milverton to Gibbet Hill) and associated electrification. This will enable new local and long distance services to serve Coventry, Birmingham Airport, the UK Central Hub and HS2 Interchange. This will also release capacity for more services on the Leamington-Solihull-Birmingham line.

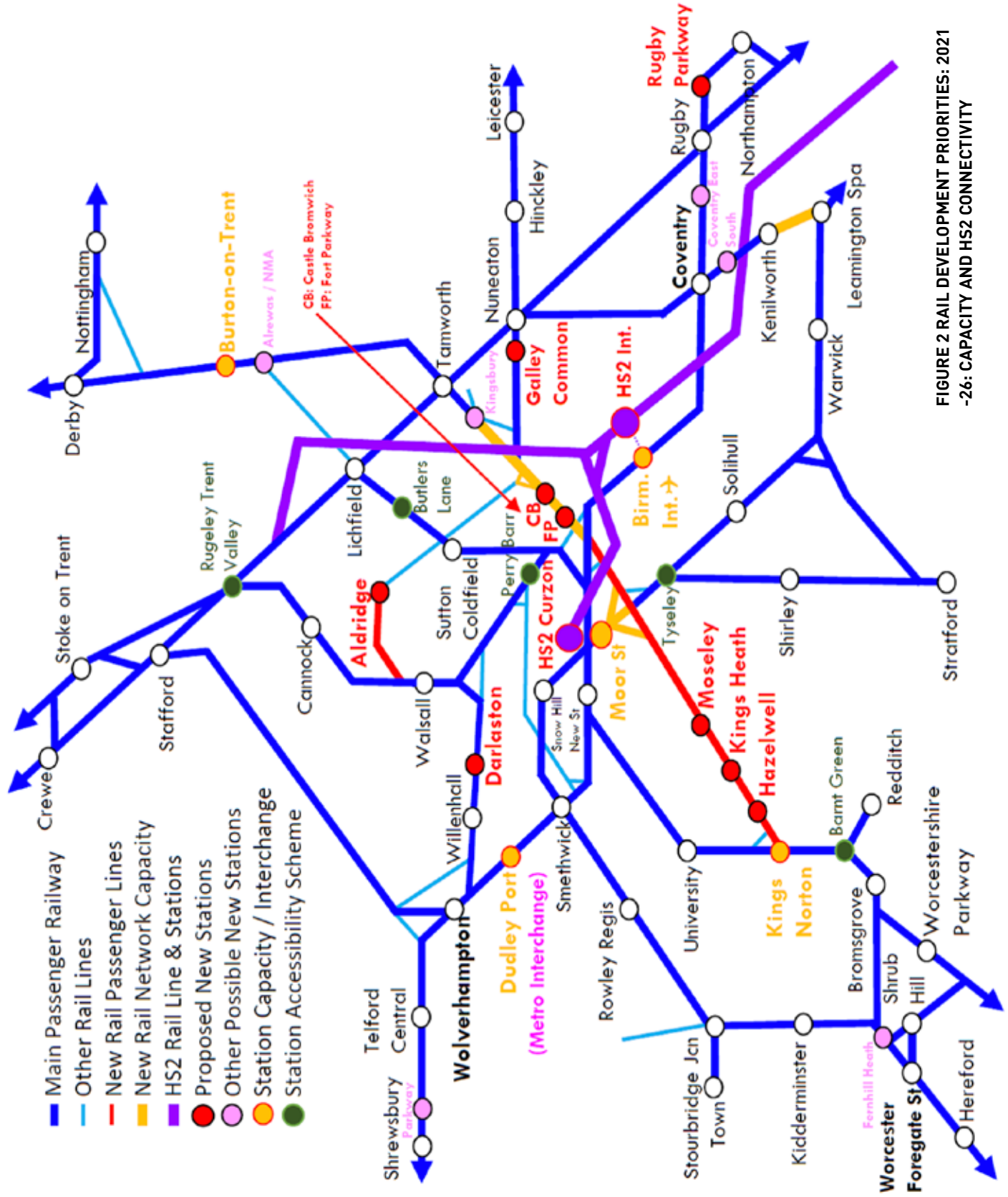


FIGURE 2 RAIL DEVELOPMENT PRIORITIES: 2021
 -26: CAPACITY AND HS2 CONNECTIVITY

4.13. **Coventry to Leicester Connectivity:** In addition to new interchange opportunities, working with Midlands Connect and others we will build the case for reinstating direct links between these two cities.

4.14. **Improve capacity and access at key local stations:** In addition to enhancements under the Midlands Rail Hub, we will (with partners) address passenger capacity and circulation problems at University, Coventry and Wolverhampton Stations. We will pursue funding and business case development for new stations (with associated services / track work) at Willenhall, Darlaston and Aldridge, and at stations where mobility access issues exist.

5. Driving Growth – the Strategic Road & Key Route Networks

5.1. The West Midlands sits at the heart of the UK's Strategic Road Network (SRN), supporting both local, regional and national economic growth. The performance of the SRN around the West Midlands profoundly impacts the highways performance of the surrounding network – directly affecting air quality, health and accessibility to other elements of the transport system. The challenges will be compounded by a predicted traffic growth of 46% by 2040.

5.2. The performance of businesses across the area, particularly in manufacturing, is directly influenced by the operation and capacity of the highway. The West Midlands has seen significant export growth in recent years compared to the national average. This growth in exports relies on comprehensive and efficient transport links to major airports, rail heads and ports to ensure that goods can reach the market place.

5.3. The Birmingham Box (consisting of the M5, M6 and M42) and wider 'secondary box' of the M40, A46, M6, provides essential connectivity to and through the rest of the SRN. Similarly to the rail network, the area is at the heart of the national system providing a critical link for north-south and east-west movements. Layered over the national and pan-regional movements there are a large number of short distance 'junction hopping' trips, typically of 1 or 2 junctions.

5.4. A focus of activity for the next 10 years will be to build the business case for addressing the major strategic challenges such as M5 capacity; better utilisation of the M6Toll; and increasing ability of alternative routes such as the A46, A5 and A42 to accommodate strategic routing away from capacity pinch points.

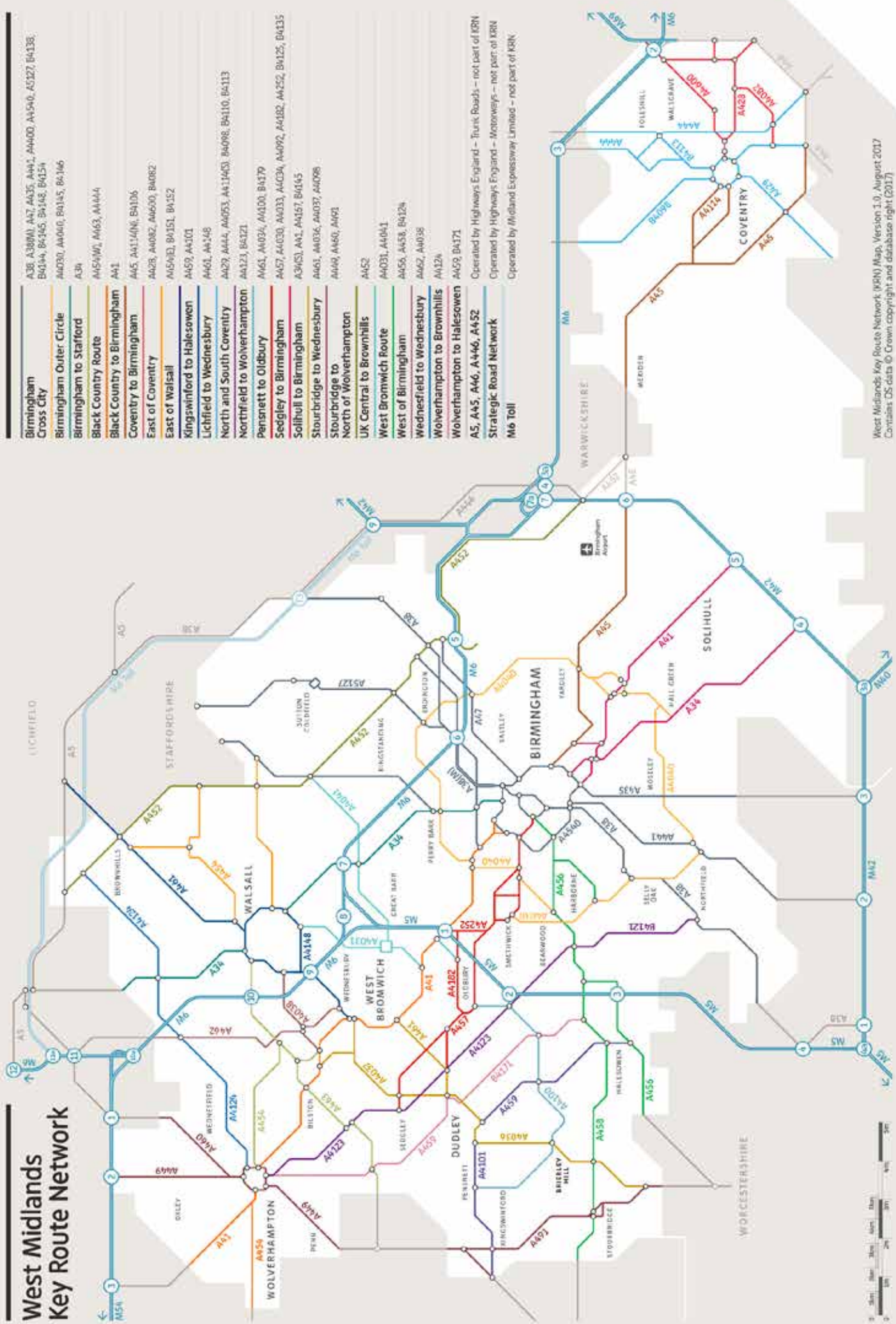
5.5. Underpinning this work will be a concerted effort to improve the coordinated management and investment in the West Midlands Key Route Network (WM-KRN). The WM-KRN is a 592km network of highways across the West Midlands region which plays a critical role in accommodating strategic local movements and providing access to and from the SRN.

5.6. The WM-KRN was defined in 2016 in consultation with the seven West Midlands Metropolitan Authorities and neighbouring highways authorities. It represents approximately 7% of the non-trunk road network in the West Midlands but carries approximately 50% of all car, public transport and freight movements. It is a new initiative supported by new devolved powers which are established in 2017 with an election of the new Metro Mayor.

5.7. The Key Route Network's highway capacity will be used effectively to cater for the movement of people and goods, through rapid transit and core bus routes, the strategic cycle network, lorries, vans, private cars and powered two-wheelers.

FIGURE 3 KEY ROUTE NETWORK

West Midlands Key Route Network



West Midlands Key Route Network (KRN) Map, Version 1.0, August 2017
Contains OS data © Crown copyright and database right (2017)

5.8. The development and management of the WM-KRN is critical to the successful delivery of our transport objectives. Our delivery priorities for the next 10 years will evolve as further work, business case development and collaboration with our partners is undertaken. However, preliminary priorities include:

- **Developing a live performance dashboard to improve strategic and operational decision making:** This will build on the success of the West Midlands Urban Traffic Management and Control major scheme and include an enhanced sensor network to provide live operational data to operators and travellers, as well as track the impact of traffic on air quality.
- **Establishing a suite of adopted policies and strategy for the maintenance and management of the network:** This will enable Highway Authorities and partners to hard-wire efficiencies into everyday activity, for example in reducing the number of times the highway is dug up for statutory utilities work or maintenance.
- **Developing the strategic and business case or complementary enhancements to the WM-KRN which can benefit the performance of the SRN:** We will identify new opportunities to improve overall network performance as well develop the case for:
 - Enhanced connectivity between the A46 and A45 in order to better connect the growth in Warwick District and around the south of Coventry to the UK Central Hub area and HS2
 - A strategic enhancement to the A46 Express Way corridor, building on the committed measures in the Governments Road Investment Strategy 1 and CW LEP investment
 - Improving the Bromford Gyratory/A47/A4040 - Outer Ring Road in Birmingham increase resilience, unlock and enable access to the Washwood Heath area
- **Ensuring access to existing and new strategic Park and Ride (road and rail based):** We will bring forward an evidenced and prioritised strategy for strategic Park and Ride provision including, but not limited to, those sites already identified in the strategies of our partners. These could be served by heavy rail, Metro, bus or other emerging technology such as Very-Light Rail or autonomous pod. Broad potential locations for new strategic park and ride which will be explored include those shown in table 2.

TABLE 2 BROAD LOCATIONS FOR NEW STRATEGIC PARK AND RIDE	
Identified in existing strategies	
Brinsford, near Wolverhampton	Worcester Parkway
Bromsgrove	M42 J3
Longbridge	M5 J3
North of Stratford-upon-Avon	Lichfield Trent Valley
Kidderminster	North Redditch
Tamworth	Castle Bromwich
Other locations that could be considered:	
Expansion of Coleshill Parkway	Leamington Spa/Warwick/M40
Coventry North/M6	Coventry South/South West
Bristol Road A38	Birmingham Airport/Solihull/A45
Alcester Road/M42 J2	M42 J4/Stratford Rd
Great Barr A34	J1 M5

6. HS2 Connectivity and Growth

- 6.1. The Midlands will be home to the first phase of HS2 and will benefit from an Interchange Station by Birmingham Airport & the NEC in Solihull, and a terminus station at Curzon Street in Birmingham City Centre. These stations will be catalysts for growth, both in their immediate localities and across the wider area.
- 6.2. WMCA has adopted a £4.4bn HS2 Growth Strategy which sets out how the positive effect of HS2 will be maximised across the region. The approach levers HS2 investment to create a legacy in terms of regeneration, jobs, skills, economic development and connectivity for the Midlands.
- 6.3. The HS2 Growth Strategy contains approximately £1.2bn of transport connectivity investment to be delivered by 2026 focused on four key strands:
 - a) Connectivity to HS2 Stations: Providing excellent local and sub-regional connectivity from across the Midlands to HS2 stations in the area, thus improving access to businesses and job opportunities
 - b) An Integrated HS2: Ensuring the delivery of a fully integrated network between HS2 and the local and national transport networks to ensure that businesses in the wider area have excellent access to the HS2 network
 - c) Midlands Connect: Maximising the capacity released by HS2 on the conventional rail network and optimising the Midlands' local rail and road networks in preparation for HS2 and to exploit post opening capacity release
 - d) International Connectivity: Building the case for direct international services from the West Midlands to Paris, Brussels and beyond via a direct rail link between HS2 and the existing HS1 line to the Channel Tunnel and wider European High Speed Rail Network
- 6.4. A substantial amount of technical work has been undertaken in developing the connectivity programme, ensuring a robust evidence based set of measures to localise the benefits of HS2 in the West Midlands. These include new Metro alignments, new bus based rapid transit 'SPRINT' services, and rail station and track capacity measures.
- 6.5. Cycle links are also being considered in HS2's scheme design.



6.6. A detailed implementation plan was submitted to Government in summer 2016 which sets out key milestones for developing the programme. WMCA adopted an agreed programme of schemes in February 2017. A number of schemes within the HS2 Connectivity Package are at early stages of development and further feasibility and outline design is being undertaken to support the development of business cases to unlock funding. All the schemes are incorporated in this overarching delivery plan.

7. A Gateway to the Air

- 7.1. Birmingham Airport is a vital major transport hub, a large employer and provides access to markets for many of our key companies. Passenger growth at the airport is strong and the opportunities to strengthen the national role of the airport will increase with the delivery of HS2. Improved connections to Birmingham Airport will be promoted, related to its growth in use.
- 7.2. The important role of Birmingham Airport for the growth of the West Midlands economy is recognised. Increasing the number of destinations served by the airport is supported to further this, including direct flights to China and other emerging markets.
- 7.3. We will work closely with the airport, HS2 Ltd, the Urban Growth Company and the relevant local planning authorities to ensure surface access plans meet the needs of all stakeholders and are promoted.

8. The Bus Alliance and Beyond

- 8.1. Eight out of ten public transport trips in the West Midlands are made by bus, accounting for over a million journeys each weekday. The extensive coverage of the bus network plays an indisputable role in supporting inclusive economic growth in the region by connecting employers and businesses to labour markets. As such, the bus will be essential in facilitating growth by accommodating anticipated increased travel demand in the short, medium and long term.
- 8.2. Whilst the bus is one of the only means of rapidly accommodating increases in travel demand, congestion on the region's road network is at record

levels and continues to increase sharply. Slower buses mean increased journey time, reduced reliability and fewer bus passengers.

8.3. To combat these challenges, bus operators across the West Midlands have, with each other and WMCA, signed up to a Bus Alliance, an award winning partnership which is the first of its kind in the country. It will see £150 million invested by operators and partners between now and 2021 to deliver the following outcomes:

- To increase bus patronage by 5%
- Improvement in peak time journey speeds.
- Fare rises of no more than the Retail Price Index +1% per annum
- Customer satisfaction levels remaining at over 85%
- Discounted young person's travel for everyone under 19 years old
- Integrated ticketless travel in line with intelligent mobility policy
- Increased investment in highways infrastructure to aid journey times and reliability
- Improvement on board through improved seating, next stop announcements and Wi-Fi.
- New vehicles and new payment technologies
- Network development plans, meeting future economic objectives

8.4. The Alliance challenges operators to meet rigorous new standards on key issues such as vehicle emission levels, branding, maximum fares and frequency. This is supported by a commitment from TfWM to improve bus shelter infrastructure and the work of the Safer Travel Partnership to further improve passengers' personal safety and security. The Bus Services Act 2017 allows revised partnership arrangements to help secure these improvements.

8.5. This will allow quality issues to be tackled such as removing older, more polluting buses and include making wider use of Statutory Quality Bus Partnership (SQP) powers under the Transport Act 2000 and Local Transport Act 2008. The Bus Alliance has a commitment from operators to invest in at least 350 new vehicles by 2020, with all buses being Euro V or VI by 2020.

8.6. The Alliance will also set out a framework to increase and sustain investment in highway infrastructure and urban traffic control on key bus corridors to transform reliability and journey times. Not only boosting the economic potential of the region by connecting more people to more jobs but also catalysing the benefits of Sprint, Metro and local rail providing high-quality interchange and supporting a truly integrated public transport network.



8.7. Improving the speed and reliability of buses will require a range of interventions and techniques to tackle the progressive slowing of the bus network, from short-term local highway schemes to relieve bottlenecks, optimising traffic signals, reviewing the operation of bus lanes; to more strategic types of intervention including behavioural change programmes and packages of strategic bus priority schemes.



8.8. A strategic action plan to respond to the specific challenges around bus congestion, particularly on the KRN, is currently under development, which will build upon the KRN Strategic Framework to support delivery of the Mayor's priorities for transport.

8.9. The emerging plan has identified a number of bus corridors which have been highlighted as high priority for highway investment and will be subject to further studies to identify potential improvements:

- Bartley Green to Birmingham (via Harborne)
- Druids Heath to Birmingham via Kings Heath and Moseley
- Cotteridge to Birmingham
- Outer circle-Bearwood to Selly Oak
- North Solihull to Birmingham via Washwood Heath
- Handsworth Wood to Birmingham
- Halesowen to Walsall
- Sutton Coldfield to Birmingham via Erdington (City Link)

Network Development Plans

8.10. The Bus Alliance is committed to delivering Network Development Plans (NDP) for the region, in order to ensure that the bus network continues to meet local needs and is able to adapt to meet future opportunities and challenges.

8.11. NDPs will be produced for all areas within the region, taking a long term, strategic approach to planning the bus network to support growth and development.

8.12. NDPs will take a spatial approach to analysing proposed development sites, including details of numbers and phasing of houses and jobs growth within development plans. They will provide evidence to influence how major sites should best be served by bus and the associated transport infrastructure required to support bus access.

8.13. As such, NDPs will be critical to ensuring the bus fulfils its potential in supporting future growth, providing the framework for progressing future service changes and funding opportunities. It is therefore important that NDPs are enshrined within local development plans and decision-making on planning applications.

8.14. NDPs will be completed for the following areas:

- Walsall and Wolverhampton
- North Birmingham
- Sandwell and Dudley
- South Birmingham
- West Birmingham
- East Birmingham and North Solihull
- South Solihull
- Coventry
- Birmingham City Centre

8.15. In addition to the Bus Alliance, TfWM will be working with Birmingham City Council, operators and other partners to bring forward innovative new solutions for public transport users. This will build on recent nationally recognised success with low carbon bus fleets.

8.16. In November 2016 Birmingham City Council awarded planning consent for a new hydrogen fuel facility at Tyseley. This will be the catalyst for a new generation of ultra-low emission vehicles, including a bus fleet (alongside other public service and taxi vehicles) that will directly tackle some of the area's worst air quality hot spots.

8.17. In addition to this, and in partnership with Midlands Connect, TfWM will work to bring forward new payment technologies across bus, rail and parking at Park & Ride sites. This will increase the use of Smart payment systems and contactless debit card options in order to build on the 3m passengers journeys per month already using our Swift payment card.



9. Metro, Sprint and Very-Light Rail – Rapid transit for the West Midlands



Metro

- 9.1. The West Midlands Combined Authority, the design consortium of Egis, Tony Gee and Pell Frischmann and contractor Colas Rail, (supported by their sub Alliance Partners Colas Ltd.; Barhale; Thomas Vale; and Auctus Management Group) have come together in the form of the Midlands Metro Alliance (MMA). The MMA will implement a £1.2 billion 10 year programme of tram network extensions and new lines. The following extensions will be completed in the next 10 years:
- Centenary Square – Edgbaston Extension 2019 to 2020/21
 - Wolverhampton Interchange 2019/20
 - Eastside 2022/23
 - Wednesbury – Brierley Hill 2023
 - East Birmingham to Solihull 2026
- 9.2. Other potential schemes will require development work over the next ten years, including an extension from Wolverhampton Interchange to New Cross Hospital, Wednesbury to Walsall, and investigations into the feasibility of an extension from Digbeth through the Smithfield Development site to Edgbaston/University of Birmingham/ University Hospitals Birmingham.
- 9.3. A new depot and stabling will be required to accommodate a new fleet of trams proposed to run the services, as the existing depot will not be big enough to cater for all of the new trams necessary. The Metro Control Room will also require upgrade to enable it to manage multiple routes. The capacity, resilience and reliability of power systems and sub systems will be reviewed to ensure that when systems need to be renewed or upgraded (due to being life expired or due to the requirements of an individual project), the longer term plans are taken into account.
- 9.4. When we procured the new trams in 2012 they were fitted with 'passive equipment' to allow easy conversion for catenary free running.
- 9.5. The first tram has gone back to the suppliers for fitting and testing and the remainder of the fleet will be converted at Wednesbury.
- 9.6. It is planned that the catenary free operation will be utilised between Grand Central and Centenary Square, Five Ways and Edgbaston; on elements of the East side extension; and a short extension to Wolverhampton Station. The fleet conversion project is due to be completed in May 2019

Figure 4: Planned Metro Lines

- Metro Line 1**
- Committed Programme**
 - Bilston Road Metro Track
 - Birmingham Eastside Extension
 - Birmingham Centenary Square
 - Edgbaston
 - East Birmingham - Solihull Extension
 - Wednesbury - Brierley Hill
 - Wolverhampton City Centre Extension
- Schemes for Further Investigation**
 - Wolverhampton New Cross
 - New Cross - Willenhall - Walsall
 - Brierley Hill - Stourbridge
 - Walsall - Wednesbury
 - Digbeth - Smithfield
- Interchange People Mover Committed Programme**
- Very Light Rail Committed Programme**
 - Coventry - University of Warwick
 - JLR/Whitley
- Scheme for Further Investigation**
 - Coventry - Interchange
- Other Rail and Rapid Transit Network**

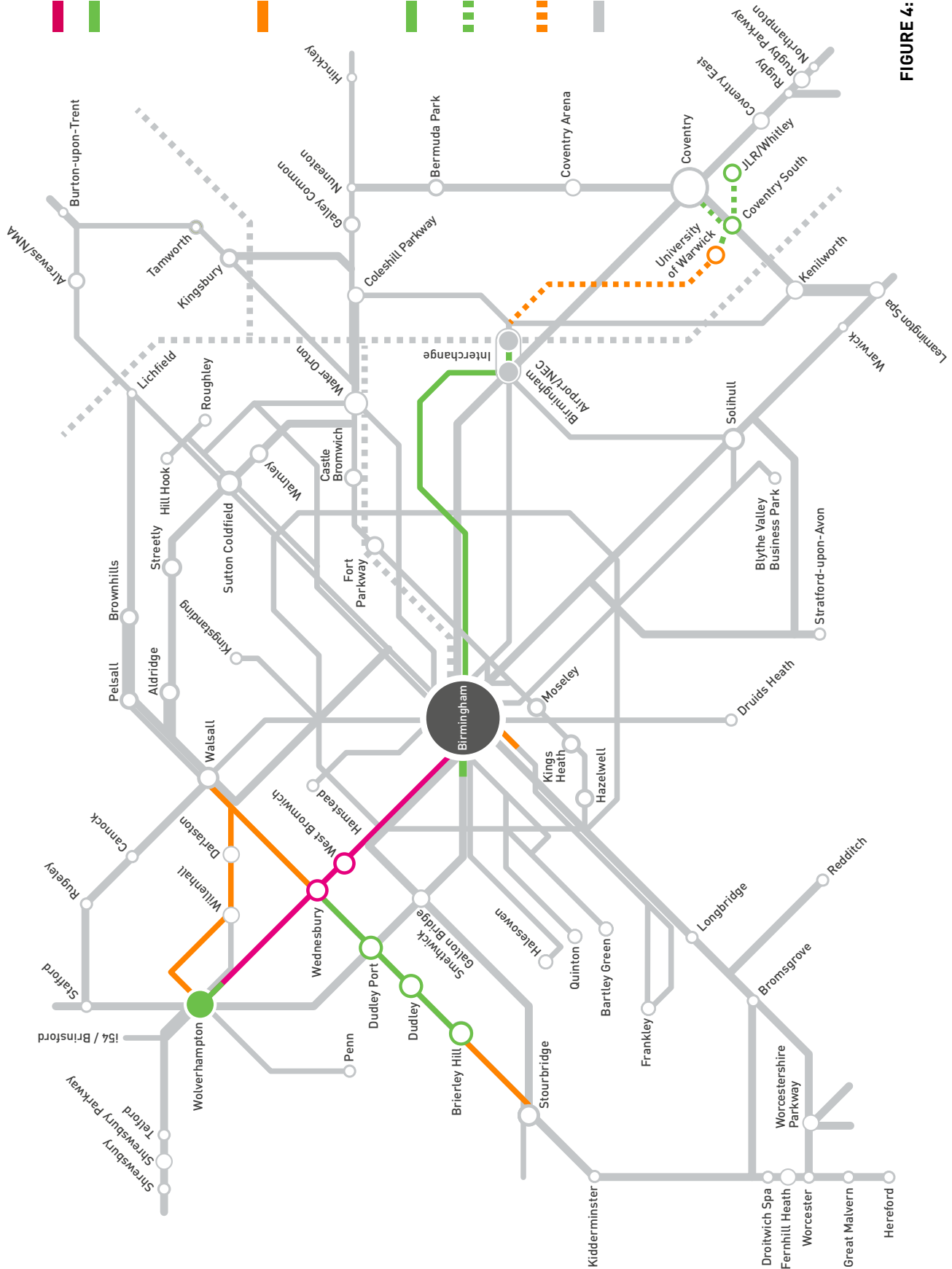


FIGURE 4: PLANNED METRO LINES

Very Light Rail

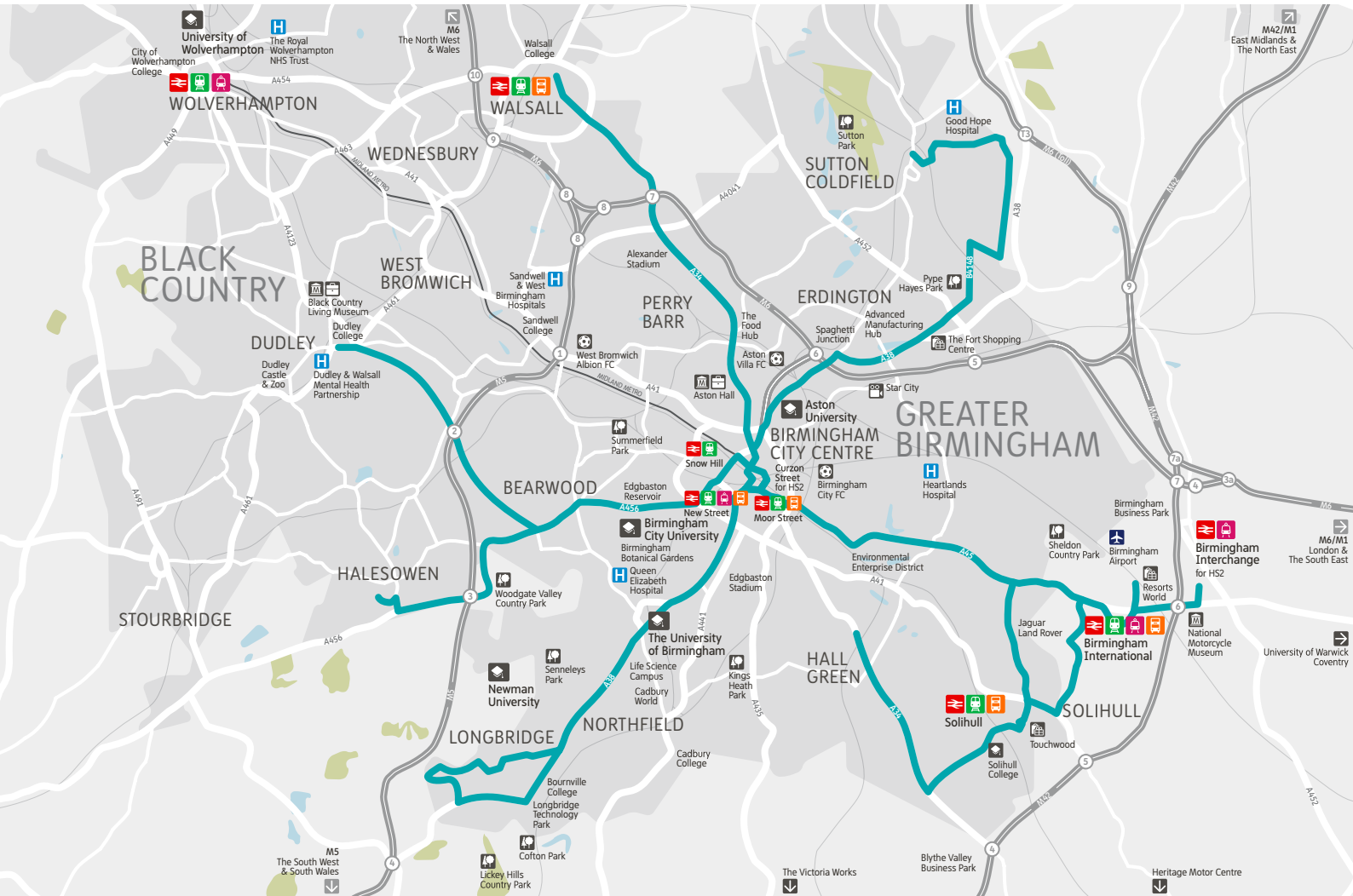
- 9.7. The aim of Very Light Rail is to provide an affordable alternative to conventional light rail systems, which due to cost can make business cases challenging. Conventional tramways can require all services under the road to be relocated and often need complex overhead wiring. The concept of Very Light Rail would utilise lightweight technology which has been successfully applied in the automotive sector and the latest propulsion technology to create a low cost, lightweight tram that is capable of running on-street and negotiating tight corners.
- 9.8. We will also develop a lightweight track solution which has the potential to reduce the need to divert services and reduce construction costs and disruption. No overhead wiring will be required as the vehicles will utilise innovative energy storage solutions, such as those being explored by the Advanced Propulsion Catapult at Warwick Manufacturing Group.
- 9.9. Working from this initial concept we will progress a research programme working with expert research centres in the West Midlands to investigate the technology opportunities and business cases for Very Light Rail Deployment. This will include utilising a new Very Light Rail Innovation Centre in Dudley and seek operational use cases across the area and beyond.
- 9.10. Coventry will be the initial area of search for a publically operating modern Very Light Rail system, as an alternative to tyre based and conventional Metro based connectivity solutions. Subject to the outcome of the development work planned over the next two years, it is envisaged that the first route will be between Coventry Railway Station in the city centre to the University of Warwick with a potential further route to link up with the proposed growth around Whitley. Ultimately the aim would be to connect the city to HS2 Interchange and UK Central.

Sprint

- 9.11. Sprint is a tyre based rapid transit solution which provides tram like quality and experience. Sprint services will benefit from more direct routing with less frequent stops, quicker journey times, high quality vehicles with off board ticketing, multi door boarding, and dedicated infrastructure. A core cross-city Sprint route will be delivered in the first 5 years of the Delivery Plan; comprising the following schemes:
- Hagley Road (Birmingham to Quinton)
 - Hagley Road (Extension to Halesowen)
 - Birmingham to Birmingham Airport/Solihull Town Centre (A45)
- 9.12. The first phase of Sprint routes also includes a route in support of the sustainable urban extension at Langley, between Sutton Coldfield and Birmingham via Langley and three further routes (A38 Birmingham to Longbridge/Frankley; A34 Walsall to Birmingham; and Dudley to Birmingham via Hagley Road) will have their delivery coordinated with the development of the growth areas that they provide connectivity for. The Hall Green to HS2 Interchange via Solihull route will also be delivered to provide connectivity ready for the arrival of HS2 and the growth of UK Central.
- 9.13. Prioritisation for this first phase of routes is currently being finalised.
- 9.14. On Sprint routes, there will be a focus on introducing measures which can enable priority for the Sprint vehicle compared to other traffic. As part of the delivery of Sprint it is anticipated that wider highway efficiency measures will also be considered and, where appropriate, implemented to provide benefits to as many other road user groups as possible. The needs of cyclists will be taken into account in the design of Sprint and Metro schemes and park and ride provision will also be considered as part of Sprint schemes.

9.15. Other bus routes off the Sprint network are also expected to benefit from bus priority measures and upgrades. These will be identified and linked to the work of the Bus Alliance, with bus improvements complementing Sprint routes

and promoting interchange as part of an integrated public transport network. Similarly, opportunities for interchange between Sprint and Metro will be explored where appropriate.



**FIGURE 5 PLANNED SPRINT LINES
WEST MIDLANDS METROPOLITAN AREA**

10. Demand Responsive Services

- 10.1. The role of demand responsive services as part of the public transport mix will also be explored further, recognising the continued importance of bus services for the West Midlands.
- 10.2 This will address how taxis, private hire vehicles, ride pooling and private hire vehicles that can easily be booked by smartphone apps can assist in meeting peoples mobility needs in accord with our overall approach of making better use of existing transport capacity and increasing sustainable transport capacity.

11. Cycling

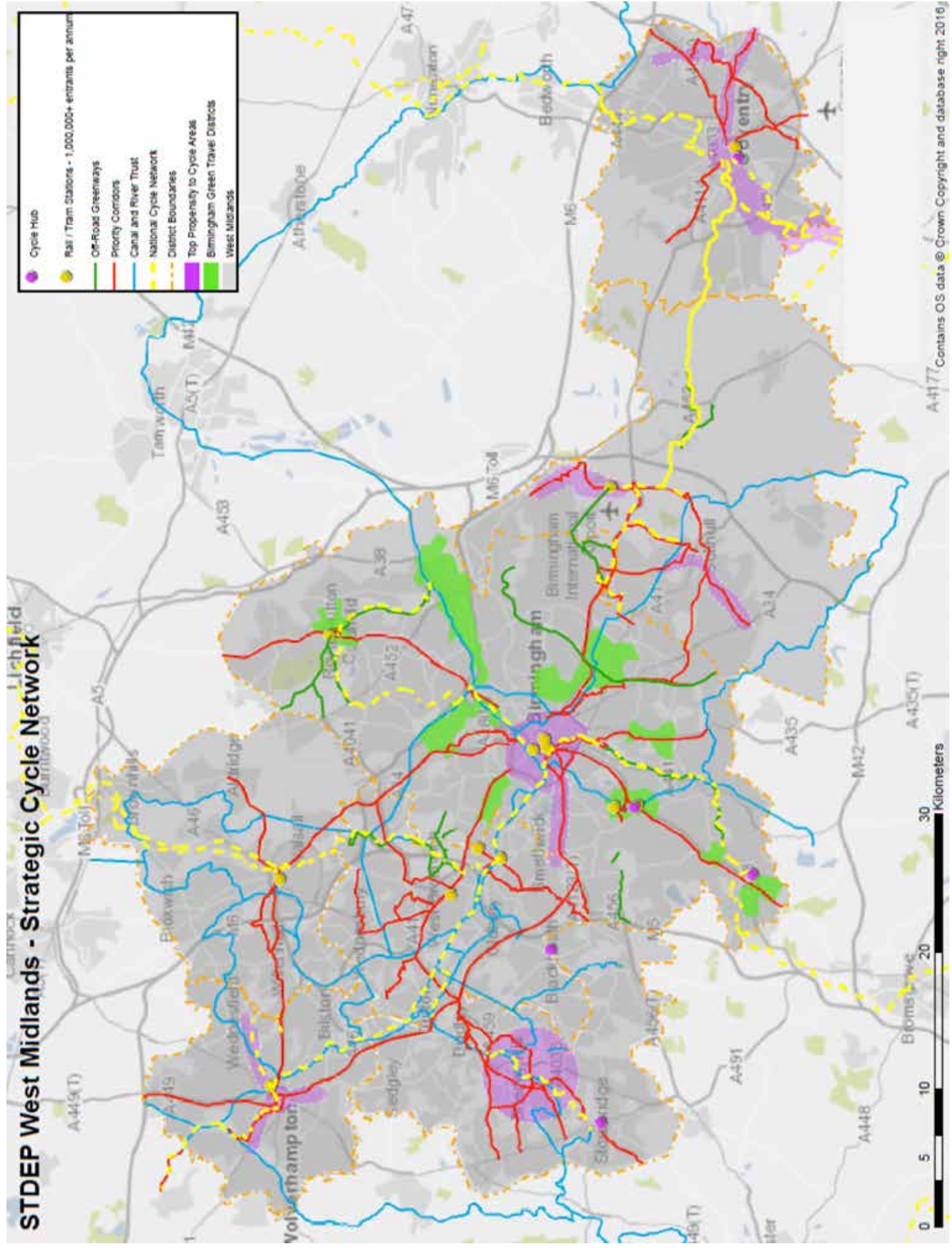
- 11.1. Cycling has an important role in our transport strategy and the delivery plan is in line with this. Our cycle charter aims to increase cycling to 5% of all journeys by 2023. The Combined Authority board has approved the development of a strategic cycle network across the area, and which links between constituent and non-constituent members. This will increase opportunities to travel safely and improve health, as well as providing affordable access to skills, education, employment and other services.
- 11.2. The strategic cycle network (figure 6) will be progressively integrated with the local cycle network throughout this delivery plan period and beyond
- 11.3. Strategic cycle network links and local cycle networks have committed schemes in the delivery plan. These are initial schemes to be boosted by more comprehensive delivery through a new West Midlands Strategic and Local Cycle

Network Programme. This is a new, unfunded £165m capital programme which will combine with new, currently unfunded, revenue funding and committed and potential cycling schemes in the programme to give a £283m overall ten year package for cycling. This is in line with the Mayor's commitment to spend £10 per head on cycling. Capital funding will be sought for this and revenue funding will also be sought for measures such as promotion, education and cycle to work schemes.

- 11.4. The West Midlands Strategic and Local Cycle Network Programme will be used to ensure wider Key Route Network schemes incorporate high quality cycle provision and to provide funding for other discrete cycle route schemes.
- 11.5. The maintenance of cycle networks will be addressed as part of wider maintenance plans and cycle parking provision will be increased. Access to canal towpaths and their lighting are other details which will need to be addressed as part of our improvements to cycling.



STDEP West Midlands - Strategic Cycle Network



12. Walking

- 12.1 Improved conditions for walking will be created through the delivery of district and city centre public realm improvements, local area enhancements and area wide 20mph speed control. Walking to school will be promoted.
- 12.2 Key Walking Routes will also be implemented in the West Midlands and greenways using green urban spaces will be promoted.

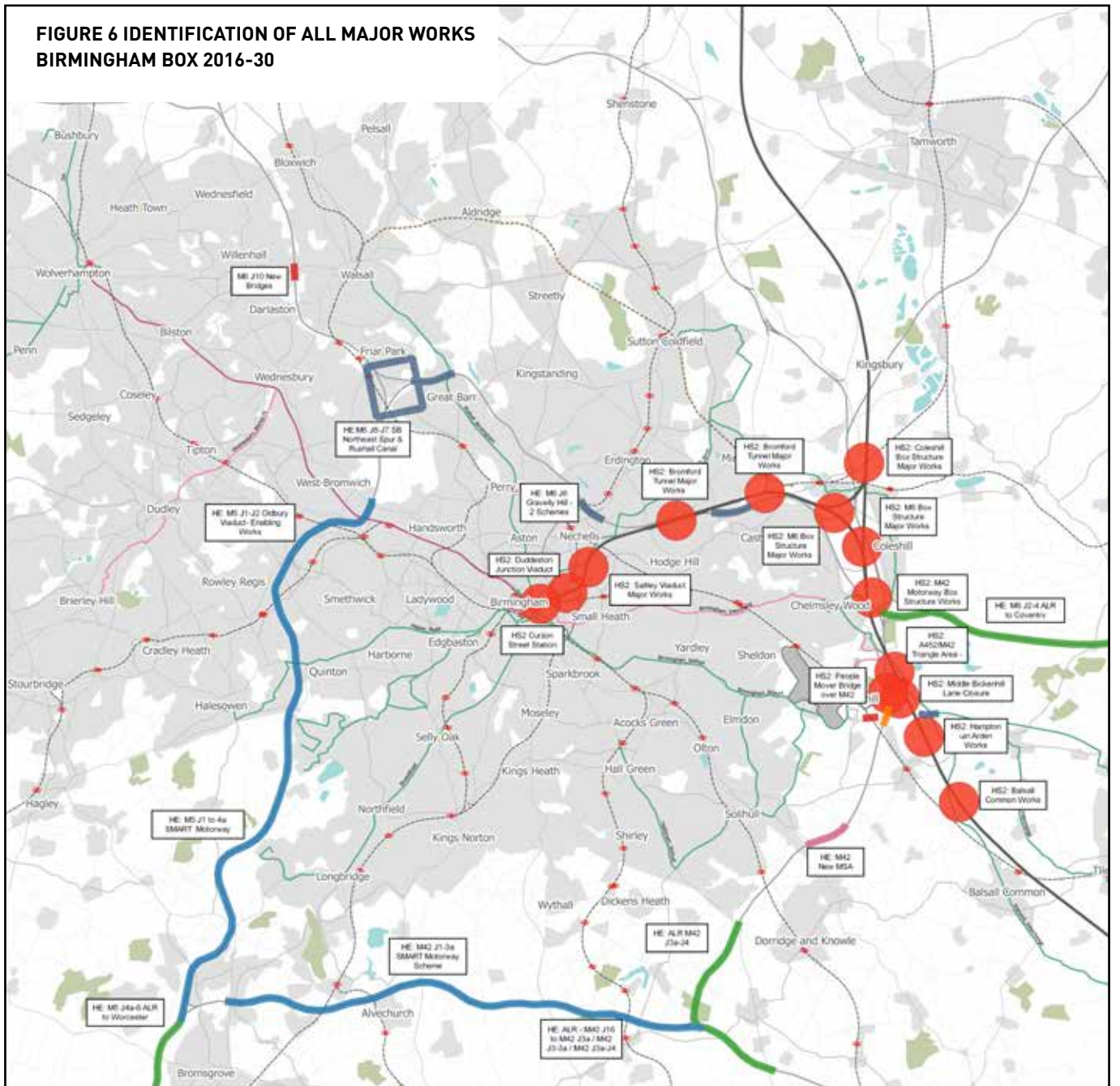
13 Network Resilience

- 13.1 It is clear that the scale of delivery across the West Midlands over the next 10 years is significant, with a level of investment not seen for several decades. This will bring its own challenges as we keep the economy running and deal with chronic skills shortages in order to land the economic transformation that the investment will help release.
- 13.2 Alongside planned investment, the West Midlands will better equip itself to deal with incidents and unplanned disruption on the network.
- 13.3 As a vibrant, positive conurbation, the West Midlands will also host major entertainment, cultural and sporting events over the next ten years. Careful planning of these will be undertaken in relation to network resilience.
- 13.4 Consequently TfWM has been negotiating with Government for further powers and agreements to enable the delivery by all partners – HS2 Ltd, Highways England, Network Rail and WMCA Authorities - to be a success. Disruption to normal travel patterns cannot be avoided, but with strong governance supported by the most senior politicians and executives; a culture of collaboration; and excellent communication, a network which is resilient to disruption can be achieved.

13.5 A number of immediate actions have been identified, and are proposed to be put in place as soon as possible. Whilst peak construction impacts will not occur until 2018, there will be tangible impacts from early in 2017. Immediate priorities are set out below:

- Form a formal and fully empowered multi-agency partnership with robust governance to work together to tackle the issues.
- Define and agree clear objectives for the partnership, to be based around ensuring that economic activity is able to continue to operate and grow, whilst existing transport system capacity issues are addressed and new growth sites are unlocked.
- Form a robust and universally adopted communications strategy which can operate with a single voice, and which emphasises the overall benefits of the investment; as well as providing clear messaging around meeting the daily travel demands of businesses and residents.
- Undertake a more detailed evidence analysis and develop firm mitigation strategies and schemes, including detailed feasibility and costs for these.
- Secure funding for and undertake enabling and preparatory actions, including setting up a West Midlands Regional Integrated Command Centre to bring together all stakeholders with all the relevant information to direct both the strategic and operational activity for delivery by all partners.

**FIGURE 6 IDENTIFICATION OF ALL MAJOR WORKS
BIRMINGHAM BOX 2016-30**



14. The Movement of Freight

14.1 The West Midlands Freight Strategy – Supporting our Economy , Tackling Carbon – sets out the West Midlands approach to ensure safer, more reliable, sustainable and efficient freight and logistics movements. A last mile strategy is being developed in line with this which will consider last mile issues and ways to ensure effective drop off points to make these connections easier.

15. A Foundation of Technology and Evidence

Connected and Autonomous Vehicles

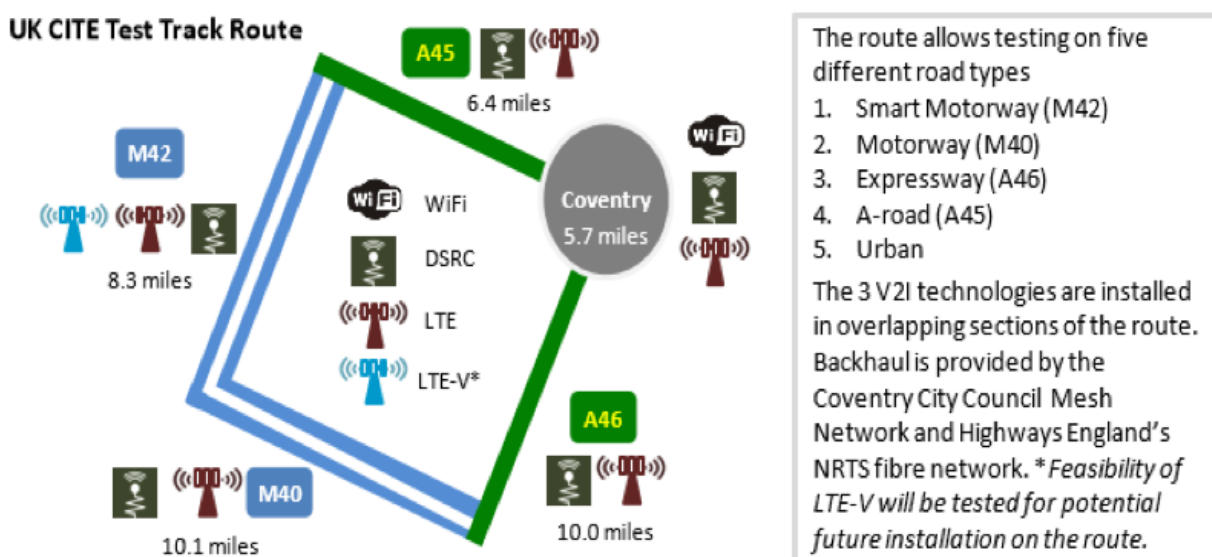
15.1. The West Midlands operates as a major hub for the development of Connected and Autonomous Vehicles (CAV) and the supporting technology. We will build upon existing research projects; planned infrastructure developments; the region’s innovative manufacturing base; a rich pool of entrepreneurs; a thriving community of digital/technology start-ups; and the wealth of applied research and development within the academic sector. The realignment is strong with public sector key objectives, and we will ensure our investment develops the regions assets. We will rapidly develop a joint CAV Strategy setting out our drive and actions to be the main actor within this fast developing sector.

15.2. Acting as the UK’s main research hub for the automotive sector provides the ideal basis in which to fully understand and exploit this technology. The area is building the ability to test the deployment of these vehicles in order to prove the validity of business models that are sustainable whilst also providing solutions which meet the needs of the citizens within the West Midlands. Our research will then be rapidly scaled up through our established partnership with Tier 1 motor manufacturers and automotive companies. Our early proving of business models will ensure fully exploited benefits to the region, both in terms of the benefits CAV technology will bring to transportation systems and in growing the local economy.

15.3. Coventry City Council in particular has established an early lead with an Intelligent Mobility programme to deliver a Smart City inclusive of all user groups and modes of transport. Intelligent Transport Systems will support the most efficient highway operation and improve the accuracy of travel information for the public. These projects have significant future benefits for improving the impact of transport on air quality, congestion and the ability of people to travel more freely. Learning from our pilot areas such as Coventry, Birmingham and Wolverhampton will support exploitation into the wider system.

FIGURE 7 - 42 MILE REAL WORLD TEST ENVIRONMENT BEING DELIVERED OVER 2017-18

The test route brings together the full spectrum of challenging conditions faced by a CAV:



15.4. UK Autodrive in Coventry are facilitating trials of Connected and Autonomous Vehicles within the city, working with major industry partners and with demonstrations planned over the next two years. UK CITE is establishing a globally unique Connected and Autonomous Vehicle real-world test environment along urban roads, A-roads, and Smart Motorways and iVMS/Dynamic Routing will deliver immediate traffic management efficiencies, as well as develop new technologies to improve vehicle routing and network resilience.



FIGURE 8 EXAMPLE OF A POD BEING TRIALLED IN COVENTRY AND MILTON KEYNES

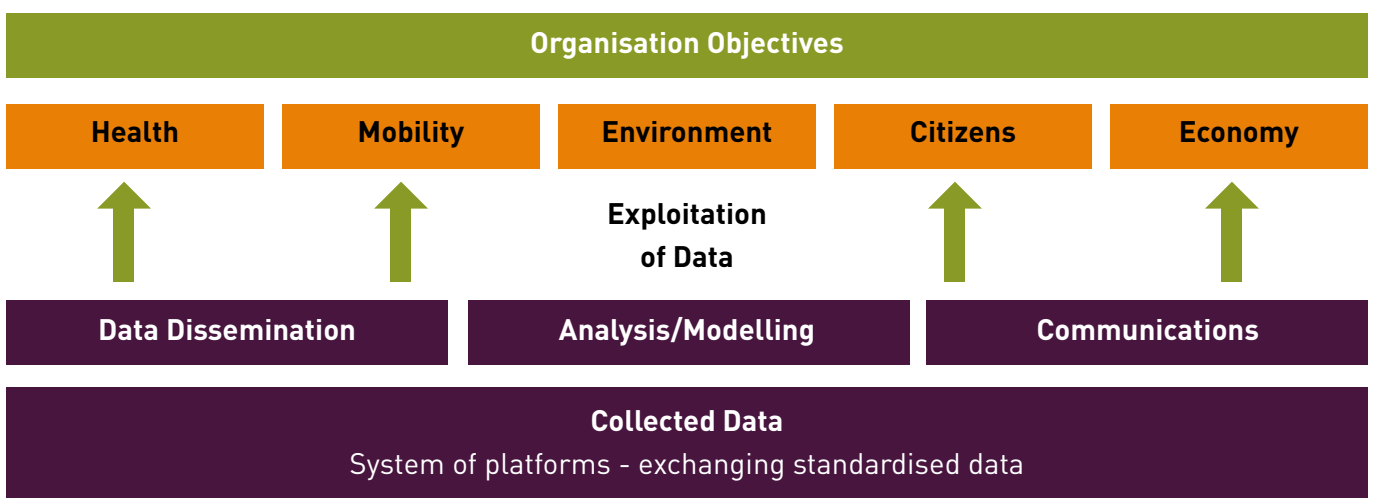
16 Data Driven – Evidence Led:

- 16.1 Data is essential to the planning, delivery and management of the challenges across WMCA. Data is being generated in new ways, for example through sensors increasing the quantity and quality of data to be exploited. This brings opportunities to explore new approaches for collaboration between organisations in the private and public sector ensuring our decisions are being data driven.
- 16.2 TfWM are exploring a model that allows us to access and share data, utilising automatic processes to extract data from many different sources, check the quality and transform it for the purposes of querying and analysis. This allows us to present and visualise the data in a meaningful way. This approach will enable partners to share and access data, leading to greater visibility and insight into progress against the 2026 Delivery Plan for Transport and the Performance Management Framework.
- 16.3. The Joint Data Team contract currently provides the core strategic transport modelling for the West Midlands Combined Authority area. The contract encompasses Local Transport Plan surveys, Traffic Surveys, Accidents data collection, Planning development, the Spectrum system and the PRISM model. The re-let provides an opportunity to reshape the approach to transport modelling, data analysis and data collection in order to deliver support for transportation scheme development and data intelligence at an affordable level.

- 16.4. Our new approach will bring benefits to not only the transportation sector within the West Midlands, but can stimulate innovation; improve the evidence base for decision making; support research and intelligence; and assist wider communication. Our data collection, whilst focussed on transport modelling and analysis, is already collecting planning, transport, demographic, infrastructure, safety and economic data. This data is key to the analysis that underpins the strategic transport models and feeds into the Dynamic Economic Impact Model.
- 16.5. Enabling wider exploitation of the data, analysis and modelling through an open and interoperable way will enhance the investment already undertaken in the existing contract and enable innovation over the next 10 years.
- 16.6. The operational information will be improved and utilised for a variety of purposes to support a more informed set of stakeholders and the population at large. This will form the basis of strategic planning to ensure that the monitoring of infrastructure investment is used to inform the decisions undertaken for future developments.

17 Powered Two Wheelers

- 17.1. In line with the Movement for Growth Strategy, powered two wheelers will be considered in our new road safety strategy, our mobility for inclusion strategy and Key Route Network development. We will seek to ensure that secure parking for powered two wheelers is provided in centres and at Park and Ride sites.



18. SMART Payment Systems

SMART Ticketing

- 18.1. The WMCA is committed to the development and delivery of a contactless payment “best value” fare capping solution across all three modes of transport (bus, train and tram) to at least match that which has been delivered by Transport for London (TfL).
- 18.2. This is a newly emerging and fast moving area where a number of agencies including Transport for the North (TfN) and National Express West Midlands have already announced their intentions to develop a solution for which WMCA may have an opportunity to integrate with.
- 18.3. The approach will build on the Swift smart ticketing platform which incorporates an extensive offer for adults across both bus and tram with a wide variety of ticketing options including Pay As You Go, multi-day and season tickets valid within the West Midlands area. Swift is also accepted on the train but currently the offer is limited to direct debit customers only.
- 18.4. There are three main objectives for the next phase of the Swift programme. Firstly, the introduction of the child ticketing range onto the platform. Secondly, the wider rollout of Swift across the rail network; and thirdly, the wider rollout of Swift functionality throughout the WMCA area.
- 18.5. TfWM are currently accelerating:
- nTrain Direct Debit wider rollout
 - Swift nTrain and nNetwork Direct Debit “add-on”
 - Wider retailing of nNetwork
- 18.6. The WMCA has established a Smart Ticketing Board, led by TfWM’s transport lead, to develop a roadmap and business case to deliver a Smart

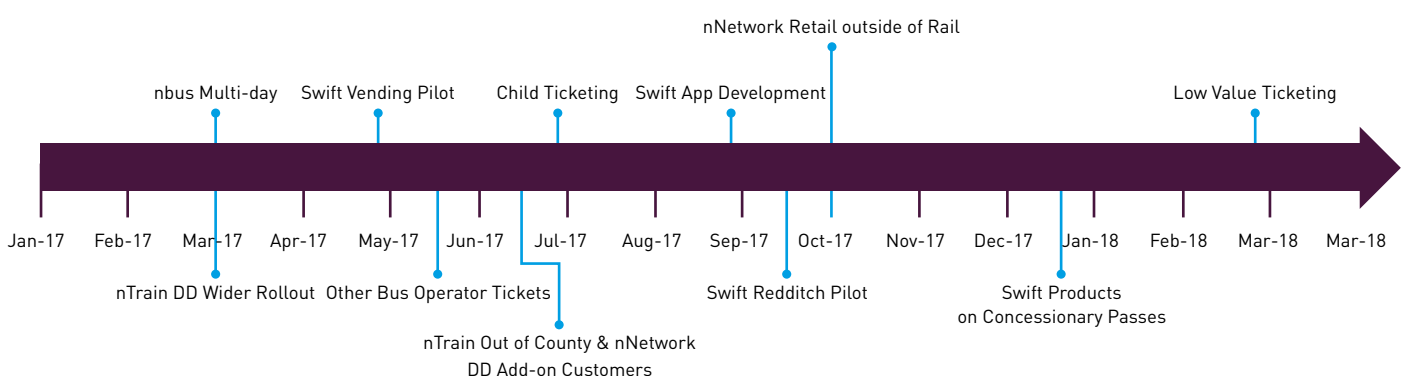
ticketing scheme across the West Midlands that provides a capped ticketing solution using ITSO Smart cards and contactless bank cards. This roadmap and Business Case will be delivered by April 2017. The delivery timeline for 2017-2018 being worked to is set out in figure 9 below. Going forward we will also explore cross-boundary use of Swift over the full WCMA area and not just the constituent area.

- 18.7. The needs of all customer groups will be recognised as ticketing evolves for the West Midlands.

“Mobility as a Service”

- 18.8. Developing “Mobility as a Service” (MaaS) and facilitating a commercial pilot will also allow WMCA to address a number of significant challenges the West Midlands are facing from network resilience and to support the development of the West Midlands as a centre for Connected and Autonomous Vehicles.
- 18.9. MaaS fulfils customers’ needs for mobility by combining all relevant transport services into one single mobility service, accessed on demand. A MaaS service customer can choose from public transport, taxi or car rental and even car or bike-sharing options. One single MaaS account can provide the freedom of mobility for either a single monthly payment or a Pay As You Go service. We will develop a commercial market based pilot during 2017-18 with industry partners.
- 18.10. This is in line with our vision to have an effective and well used intelligent mobility solution which supports integrated travel across all means of transport.

FIGURE 9: SWIFT DELIVERY TIMELINE 2017 - 18



19. Mobility and Social Inclusion

- 19.1. Social inclusion and good quality of life plays a vital role in supporting economic activity across the region and, together with transport infrastructure, helps maximise people's accessibility. This includes connecting people to employment and training, better access to shops, services, healthcare, education, family and friends, entertainment and other life-enhancing opportunities.
- 19.2. Nevertheless, across the region there are areas of deprivation, low educational attainment, poor health and people on incomes below 60% of the UK median. Citizens living in these circumstances are more likely to lack access to the transport network because of age, disability or financial constraints – resulting in social exclusion.
- 19.3. TfWM fund a range of socially necessary transport measures including Ring and Ride and minor community transport contracts, subsidised bus services and additional Metro/rail concessions. These services are often invaluable to many, but don't always address every vulnerable group. In 2018 we will adopt a Mobility for Inclusion Strategy (MfIS). This will set out clear priorities and provide the rationale for balancing the varying needs of all excluded groups, so every group has fair access to vital services and opportunities.
- 19.4. The MfIS will form the rationale for enhancing social inclusion and will explore transport barriers across the whole of a person's 'life course' – as evidence shows disadvantage and inequalities starts before birth and accumulates throughout life. Therefore a range of individual transport policy strands, designed to support individuals at different stages of their lives will form a key part of the strategy. This will include policies on:
 - **Children and younger people** where TfWM will explore cheaper and simpler fares, particularly for those on an apprenticeship, low salaries or not in employment, education or training (NEETs). We will also ensure young people have a say in how our network develops and how we make it safer, as they are the future users.
 - **Ensuring the right provision for older people as the life expectancy for many continues to grow.** Tackling issues of social isolation for this age group is a key priority, as well as addressing the rapid decline in bus use by retired people. As with other user groups, continuing to ensure consistent, high standards of public transport facilities, high quality vehicles, and customer service as well as good network coverage remains a priority.
 - **In our region, 1 in 5 people are mobility Impaired.** Under the Equality Act, 2010, we have a duty to ensure that all our transport infrastructure, vehicles and information are designed to be as accessible as possible to all our customers, regardless of their mobility. The MfIS will set out for delivery over the next 10 years a range of accessibility improvements across the network to ensure everyone can access opportunities. This will include consideration of the mobility needs of people with a hearing impairment and people with visual impairments. This will also recognise the role of mobility scooters for some journeys.
 - **Finally people with multiple and complex needs who are experiencing problems such as homelessness, addiction, offending and poor mental health will also be included.** WMCA's Public Service Reform workstream and the wider devolution agenda will allow for more joined up approaches, allowing us to equip vulnerable people with the information and confidence they need to make a journey and improve their wellbeing and quality of life.

20. Mobility for Health and for a Clean Environment

- 20.1. There are important relationships between health, wellbeing and wealth. A healthier West Midlands can have a wider impact on the economy in the region by reducing the need for health and social care and other public sector services. Good health can increase productivity by getting people work ready, reducing sickness absence, and keeping people in the labour market for longer.
- 20.2. There are inequalities in health within the West Midlands. For men, the range of healthy life expectancy is from 56.4 years to 63.8 years, and for women the range is from 59 years to 67.9 years. Closing this gap in health inequalities and increasing the healthy life expectancy by 2030 is an objective of the WMCA's Strategic Economic Plan.
- 20.3. The way that people travel is an important part of physical and mental health. Opportunities for greater levels of physical activity during travel can reduce obesity and associated conditions such as heart disease or strokes. Alongside the risk of injury, the perceived safety of roads can discourage active travel.
- 20.4. Poor air quality resulting from transport damages our citizens' health, and carbon emissions contribute to climate change. The design and availability of transport networks can cause community severance and increase social isolation, or connect people to places that can have a positive impact on health, such as green space, services and employment.
- 20.5. To further support our delivery plan, Transport for West Midlands will develop a Health and Transport Strategy that makes use of public health data and sets out a future direction for healthy transport in the West Midlands.
- 20.6. A new regional road safety strategy is also being developed with local authorities, the Police and other stakeholders to reduce the number and severity of road traffic accidents in the West Midlands.

21. Improving Air Quality

- 21.1. Our area has significant air quality problems, with Public Health England figures showing approximately 1,500 adults deaths each year attributable to poor air quality in the West Midlands. There are a number of areas in the region where transport causes air pollution to approach or exceed legal limits. This pollution is caused by the volume of traffic on our roads, congestion and the popularity of diesel engines with vehicle owners. Poor air quality reduces our residents' quality of life because of the damage it does to health and the potential negative impact that it has on inward investment and growth.
- 21.2. There are parts of the West Midlands where air quality is so poor that tough action such as the introduction of a Clean Air Zone (CAZ) is necessary.
- 21.3. CAZs aim to reduce the use of older, more polluting vehicles as well as implement wider focussed measures to improve air quality. The implementation of any CAZ will improve the emissions of vehicles used in the West Midlands and change how people use our transport network, introducing new challenges in managing the transport of people and goods in the area.
- 21.4. Additional schemes, changes to schemes, and re-prioritisation of schemes in the delivery plan will be considered as our evidence base improves. The plan must be implemented so that schemes improve air quality where needed and do not worsen air quality problems. Where schemes could reduce air quality, appropriate redesign and/or effective mitigation will be considered. In addition, disruption to the transport network caused by construction during implementation of the plan will be managed carefully. This has significant implications for our efforts to improve the resilience of our transport network.

- 21.5. We need to make sure that we keep traffic moving whilst reducing the number of miles travelled by vehicles on our network, especially where air quality is a concern. We will achieve this by changing people's behaviour so that they use cleaner more sustainable transport options. Where this is not possible, we need to make sure that vehicles are used more efficiently, e.g. better management of freight deliveries.
- 21.6. Our delivery plan already includes opportunities to improve air quality. For example:
- Opening the Camp Hill Rail Chords for rail commuters has great potential to shift many road based journeys from south Birmingham into the city centre onto rail. This will mean fewer vehicles on the roads, fewer vehicle miles travelled and reduced congestion.
 - Developing the local and strategic metropolitan cycle network and key walking routes will encourage the use of bikes and reduce the number of motorised vehicles on the road.
 - Improving traffic management will improve the flow of traffic around our busy urban centres resulting in reduced congestion.
- 21.7. To ensure that delivery of the plan enables us to make the necessary improvements to air quality, our decisions must be:
- Linked to a clear and well-defined ambition and commitment to improving air quality that is embedded in policy across the region.
 - Informed by greater understanding of the potential impacts of individual schemes on air quality and the total impact of development across the region.

As part of our overall approach we will seek to develop the role of electric vehicles in the West Midlands, ensuring a coherent approach to charging points and the promotion of e-bikes.

- 21.8. Joint accountability of both the Mayor and the Leaders of the WMCA's constituent members for air quality and transport delivery will ensure our quality remains a focus in all transport delivery decisions. The improvement of air quality will also be a key component of our Transport and Health Strategy.

22. Co-ordinated Delivery in Corridors

22.1. Our rolling 10 year delivery plan approach to the long term Movement for Growth strategic transport plan is based on two over-arching principles:

- Ensuring all parts of the West Midlands are “plugged-in” to the two High Speed Rail Stations, and the significant growth and development that is already happening at their locations.
- Steering transport investment into priority corridors for new jobs and homes, providing a joined up land use/transport planning approach to support the aims of the Strategic Economic Plan.

22.2. Priority corridors for new jobs and homes were identified from West Midlands Combined Authority work on infrastructure needs. Strategic locations for new economic development and housing development were identified by the WMCA and relate closely to local authority priority areas. These are shown in Figures 11 & 12.

22.3. Maps showing all schemes and measures within these corridors are set out in the Annexes to this summary document.

22.4. Whilst major scheme investment is steered towards the priority corridors, there will be a series of network-wide , smaller scale improvements of minor works and maintenance measures across the West Midlands,

22.5. The corridor strategies will be regularly reviewed and updated as scheme delivery takes place and projects are developed and brought forward. They will be further informed by Statutory Infrastructure Delivery Plans and Local Plan Area Action Plans

22.6. Wider transport proposals in development plans such as parking standards will also shape the use of transport in the corridors.

22.7. When bringing forward any proposals for delivery the promoting authorities will seek to maximise any opportunities for localised employment growth and business regeneration.

22.8. The series of documents for the Delivery Plan is shown in table 3.

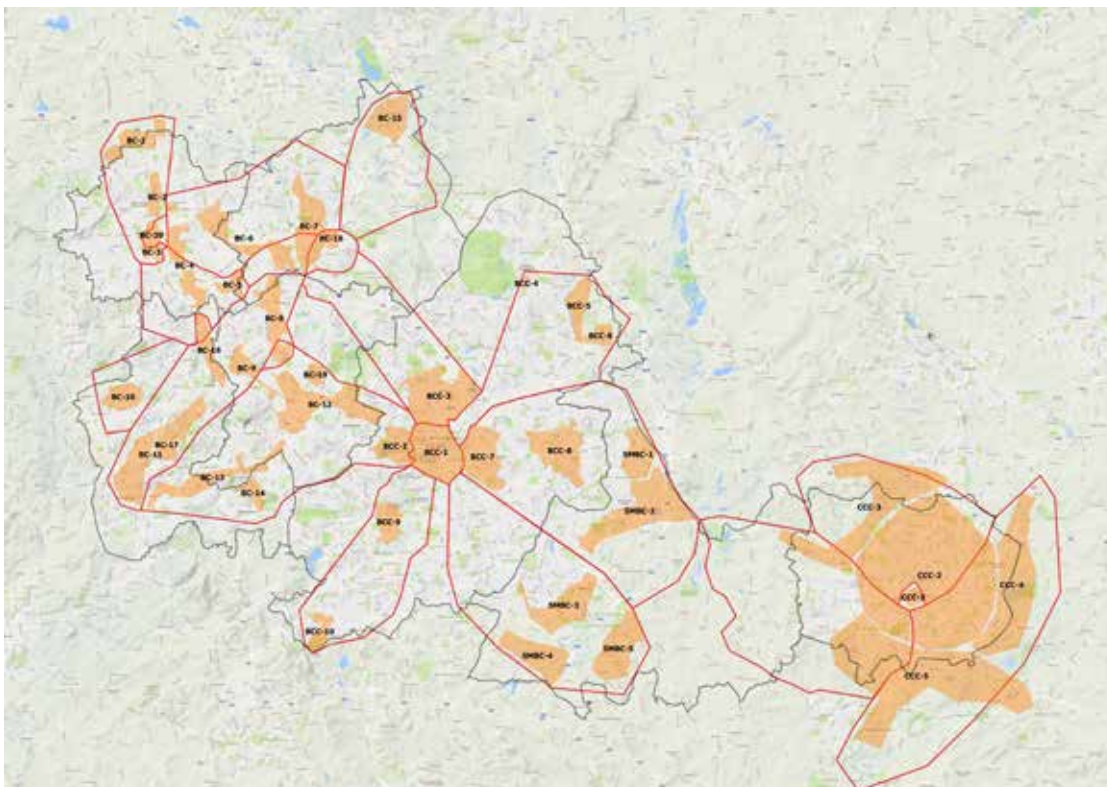


FIGURE 11 STRATEGIC LOCATIONS FOR ECONOMIC DEVELOPMENT AND HOUSING DEVELOPMENT

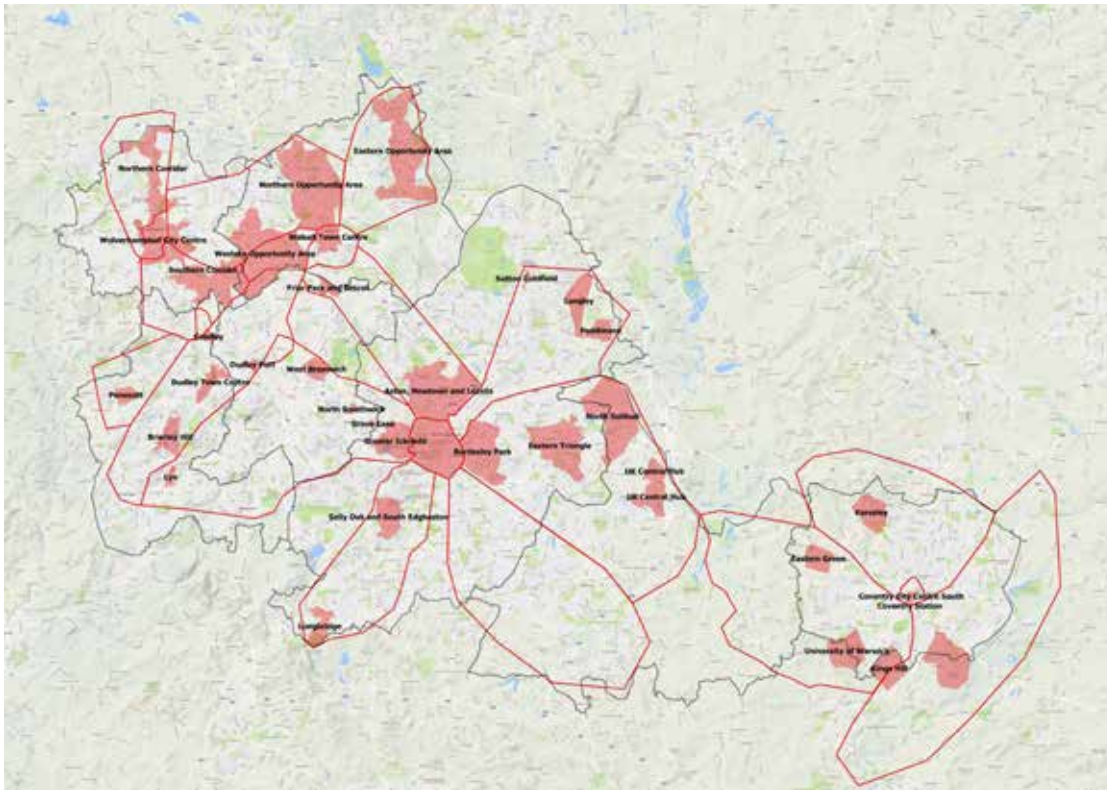


FIGURE 12 LOCAL AUTHORITY PRIORITY AREAS FOR DEVELOPMENT

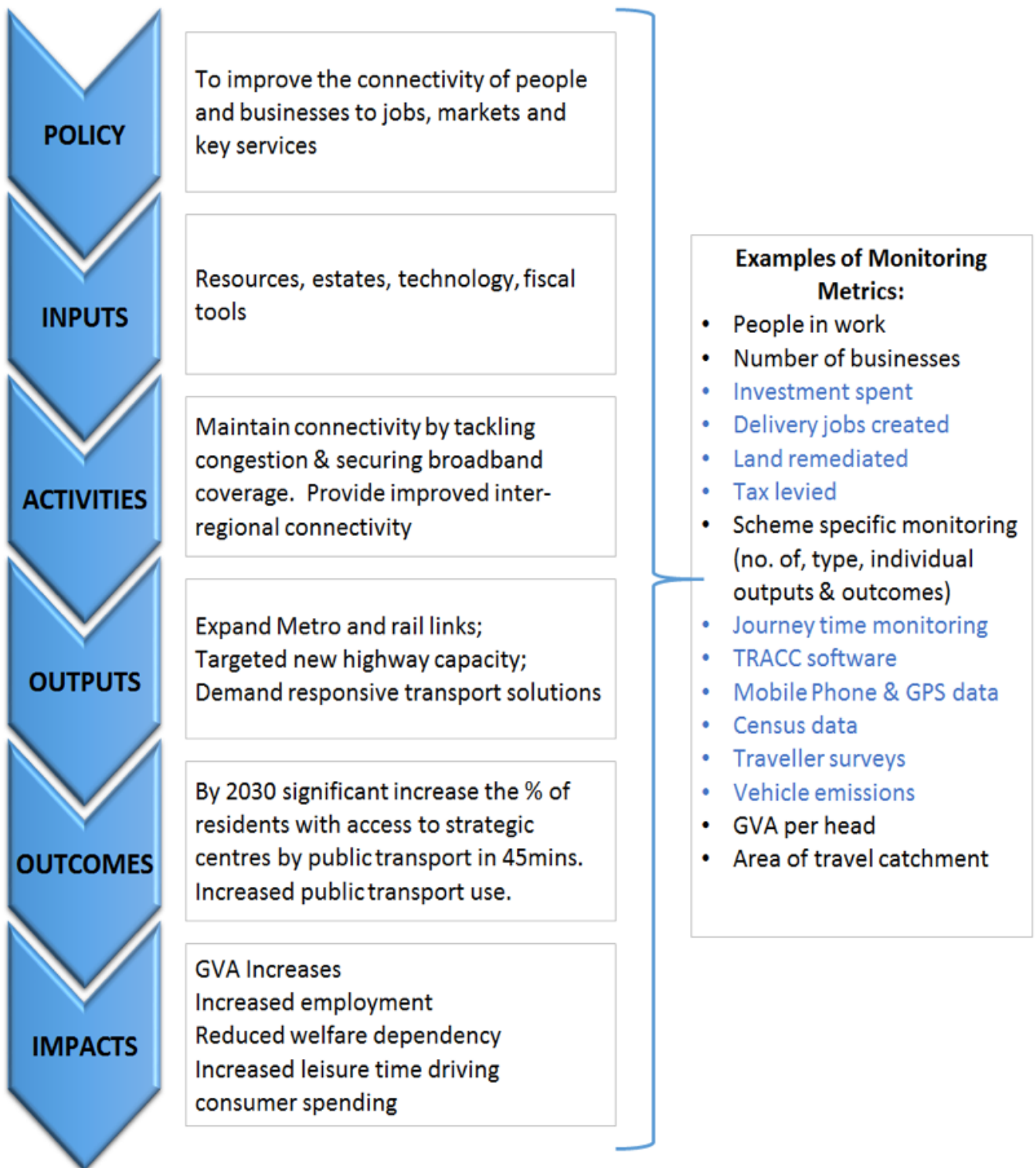
TABLE 3 SERIES OF DOCUMENTS FOR THE DELIVERY PLAN

Delivery Plan Element	Description	Intended audience
Summary Report	The 2026 Delivery Plan for Transport (this report)	Investors, Leaders/MPs, public with general interest
Corridor Strategies	A summary of the key issues and deliverables within each area. An annex to the summary report.	Other organisations, Government departments, wider WMCA, developers
Dashboards	A summary of the schemes and progress against programme for our four main delivery areas: Black Country, Birmingham & Solihull and Coventry.	Investors, Leaders/MPs, public with general interest

23. Monitoring and Evaluation

- 23.1. Overall progress against the delivery plan will inform the complementary set of metrics within the WMCA Performance Management Framework (PMF).
- 23.2. Progress will be tracked against the high level measures within the Movement for Growth through a formal annual monitoring report, enabling us to appraise and prioritise our delivery.
- 23.3. Success will also be measured through the continual monitoring and evaluation of schemes and programmes, to ensure the scheme is delivering against the overall strategic objectives. A baseline is being put in place in 2017 and a suitable detailed Monitoring and Evaluation activity plan based on the high level plan adopted by WMCA in February 2017 is being implemented.
- 23.4. In order to maintain a regular rolling review of the delivery plan there is a requirement to provide an efficient process for updating and monitoring delivery of the programme across multiple funding streams (not just the WMCA Investment Programme). This should place the minimum burden on scheme promoters. We are in discussions with partners to identify best practice tools for scheduling, data translation and visualisation.
- 23.5. The Black Country Transport Dashboard has been identified as best practice across the constituent area. It is proposed to replicate the Black Country dashboard to provide for Birmingham, Black Country, Coventry, Solihull and overcharging dashboard. An initial format for this forms an annex to this first delivery plan.
- 23.6. There is an opportunity to automate the process of updating the dashboards, with the ultimate intention of providing live online reporting.
- 23.7. Figure 11 provides an example of a typical logic chain that we will monitor tracking policy through to impact.

FIGURE 11: LOGIC CHAIN/IMPACT PATHWAY EXAMPLE: ACCESSIBILITY (ECONOMIC IMPACT) - INCREASE IN % OF RESIDENTS ABLE TO ACCESS STRATEGIC CENTRES BY PUBLIC TRANSPORT IN 45 MINS



24. Programme Overview

24.1. This first version of the delivery plan contains 190 schemes in total. These are predominately schemes promoted by the Local Authorities and TfWM, alongside some Midlands Connect, HS2 Ltd, Highways England and Network Rail promoted schemes. During the first year of the plan further detail will be added to include major maintenance schemes and statutory utilities work.

24.2. All the schemes have been attributed to one or more delivery corridors to enable alignment of schemes promoted by different organisations. The corridors are plotted overleaf and identified as below.

Ref.	Corridor Name
A	Wolverhampton i54
B	Wolverhampton - Walsall
C	Wolverhampton - Bilston
D	Walsall - Brownhills
E	Walsall - Stourbridge
F	Kingswinford - Dudley
G	Stourbridge - Halesowen - West Bromwich - Birmingham
H	Walsall - Birmingham
J	Birmingham - Sutton Coldfield
K	Birmingham - East Birmingham - UK Central
L	Birmingham - Solihull
M	Birmingham - Longbridge
N	East Coventry - A46
O	West Coventry - A45
P	North Coventry - Keresley - Foleshill
Q	Coventry City Centre

24.3. All schemes are also classified as one of the following:

- **Committed:** A scheme which may not be wholly funded but is at least substantially funded with a reasonably high degree of confidence that the required funding gap can be met.
- **Potential (subject to funding):** A reasonably well developed idea or potential scheme which has had some work undertaken on it and either a single preferred option or limited number of options identified. The scheme will be majority dependant on a funding grant that is yet to be secured or confirmed.
- **Studies & Scheme Development:** A scheme or problem area which is at an early stage of feasibility or concept for which options are yet to be determined in any significant detail and for which demand/feasibility is unproven.

24.4. This Delivery Plan will be reviewed and updated each year, as schemes are built, funding for schemes is secured, and studies for longer term projects are completed.

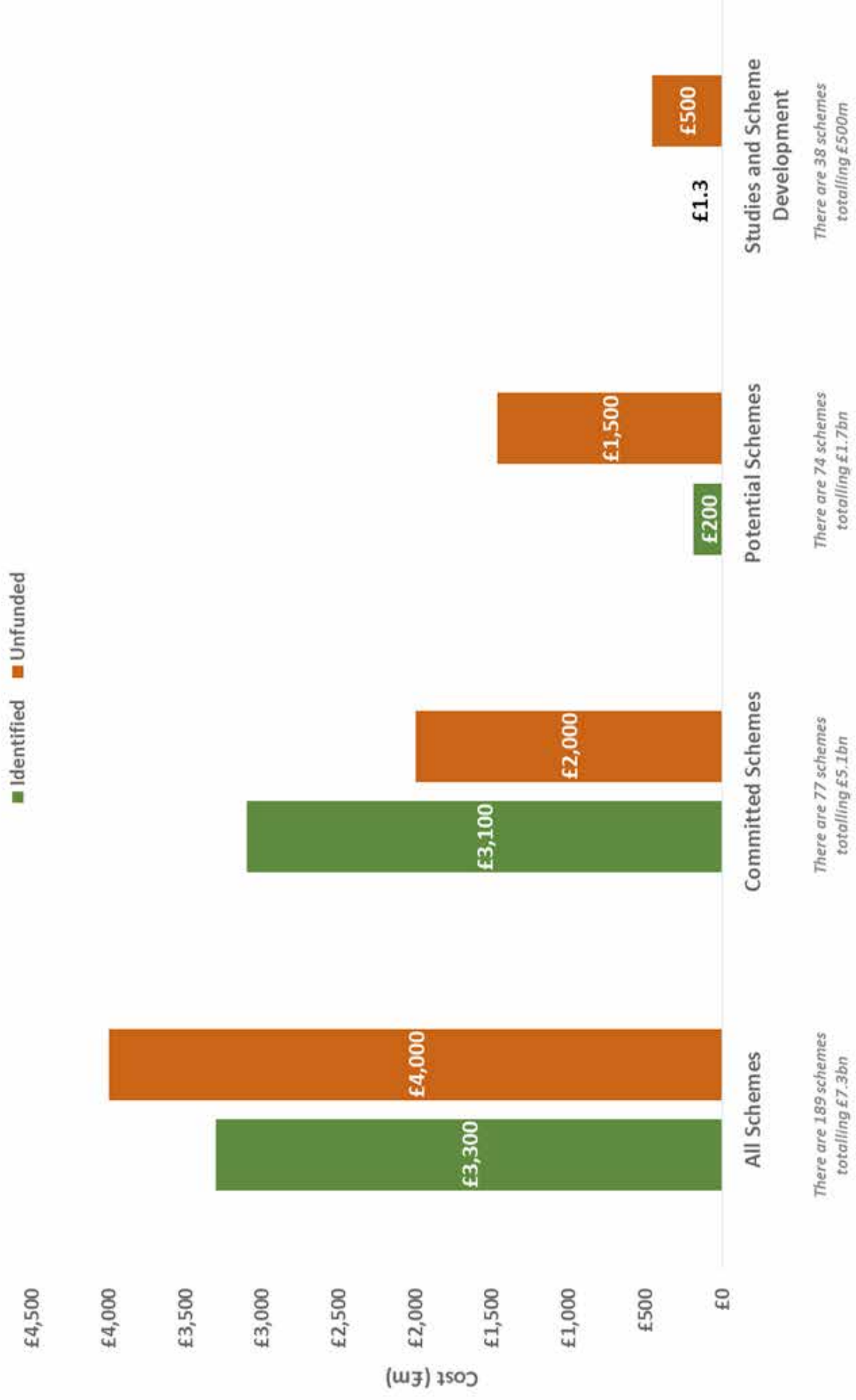
24.5. The total capital cost of the programme identified to date across all scheme promoters is £7.3bn. Of this, a total of £3.3bn funding has been identified, much of which is subject to approvals processes.

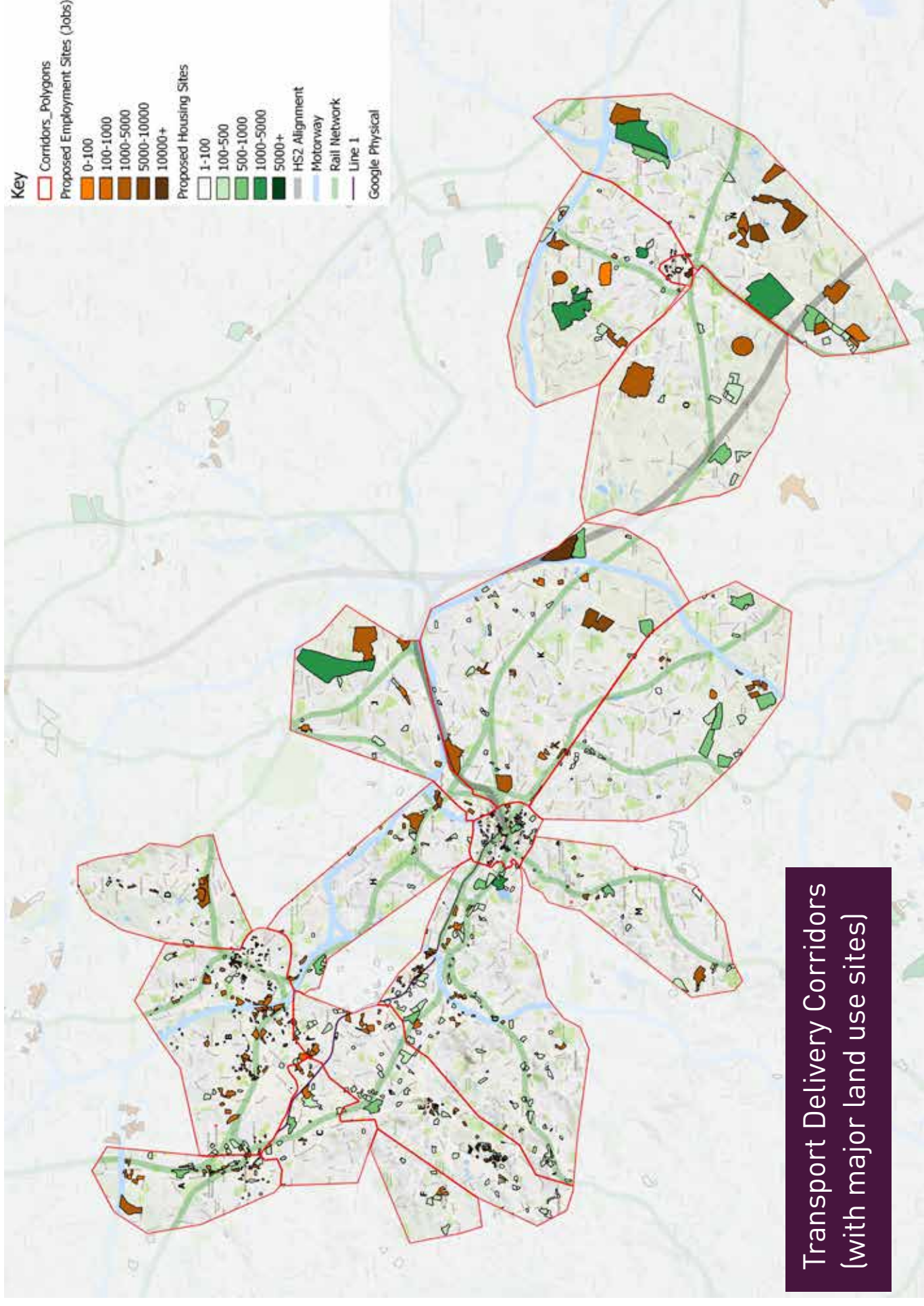
24.6. How this funding is divided between committed, potential and studies and scheme development is shown overleaf.

24.7. Of the 77 committed schemes, with a total capital cost of £5.1bn, 61% of funding has been identified: £3.1bn. The majority of these committed schemes have secured 80% or more of their funding. A substantial component of the £2bn funding gap for these committed schemes is for a limited number of larger scale schemes for which targeted funding sources are being identified.

- 24.8. The total capital cost of the 74 identified potential schemes is some £1.7bn with £0.2bn of funding identified. The related funding gap is to be expected as many of these schemes will be subject to feasibility and business case development work, which will include identifying funding.
- 24.9. £0.5bn of the funding gap is for schemes in the 'Studies & Development' category, which is cost based on an indicative 30% allowance of the total anticipated capital cost of these schemes. For some schemes this indicative allowance will be too high, but on other complex long term schemes (such as larger rail based schemes) this may be insufficient. However, for general planning purposes the percentage allowance provides a guide value. Development of many of these schemes will not start for some years and it is to be expected that studies funding would not yet be identified. Nevertheless the value of identifying them at this stage enables a more joined-up approach for opportunities to be exploited if, and when, developments, or other schemes come forward.
- 24.10. The significant majority of schemes within the 2026 Delivery Plan for Transport are currently being developed to Outline / Final Business Case Stage. Where funding depends upon approval of an acceptable final business case, the funding for the scheme will largely be considered as 'unsecure'. This is despite the fact that there may be a non-binding agreement that funding will be granted upon submission of a suitable business case. Specific examples include the Brierley Hill and HS2 Interchange (East Birmingham to Solihull Metro) where the Government "supports the work of the WMCA Board to develop a delivery plan, encompassing the Metro extensions in order to realise the full benefits of HS2".
- 24.11. A significant exception to the above, relates to the £1.5bn of WMCA borrowing underpinning the Investment Programme transport schemes. The ten year delivery plan assumes that WMCA Borrowing for those named schemes is 'secure', recognising that these schemes need to pass through the WMCA Assurance process in advance of formal award of funding. This approach is adopted because those schemes are included within an endorsed WMCA Programme and the income underpinning the borrowing is understood.
- 24.12. The Mayor's new "Funding for Growth" Programme will help identify new funding mechanisms for unfunded schemes in the delivery plan.
- 24.13. Future iterations of the delivery plan will also include further work to identify opportunities to narrow the funding gap and consolidate identified schemes into larger, more closely coordinated programmes. Where funding is unlikely to be identifiable then delivery aspirations will be placed in a pre-development 'waiting list'.
- 24.14. As spatial development plans continue to be reviewed and further information emerges from the Midlands Connect studies (such the Rail Hub and Motorway Box), then opportunities for further strategic alignment can be considered.
- 24.15. The total delivery activity profile peaks in 2019, which coincides with some of the peak delivery activity by Highways England and HS2 Ltd. This underlines the Network Resilience challenge and the need to closely coordinate delivery plans in order to minimise disruption.
- 24.16. The following figures set out infrastructure development and planning assumptions which have been used to inform the development of this first delivery plan. These figures, and the maps contained in the corridor strategies, do not constitute statutory planning documents.

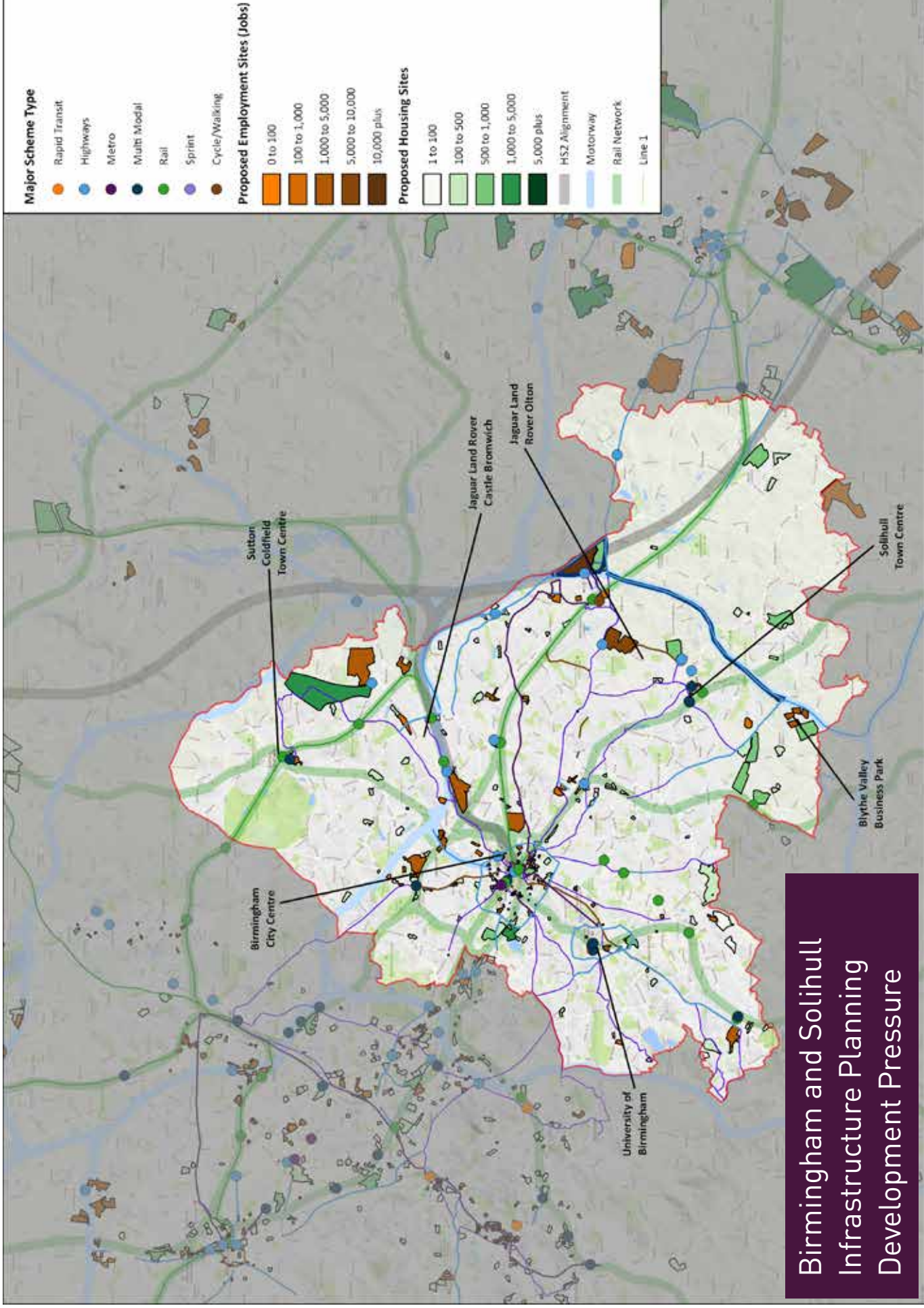
2026 Delivery Plan for Transport



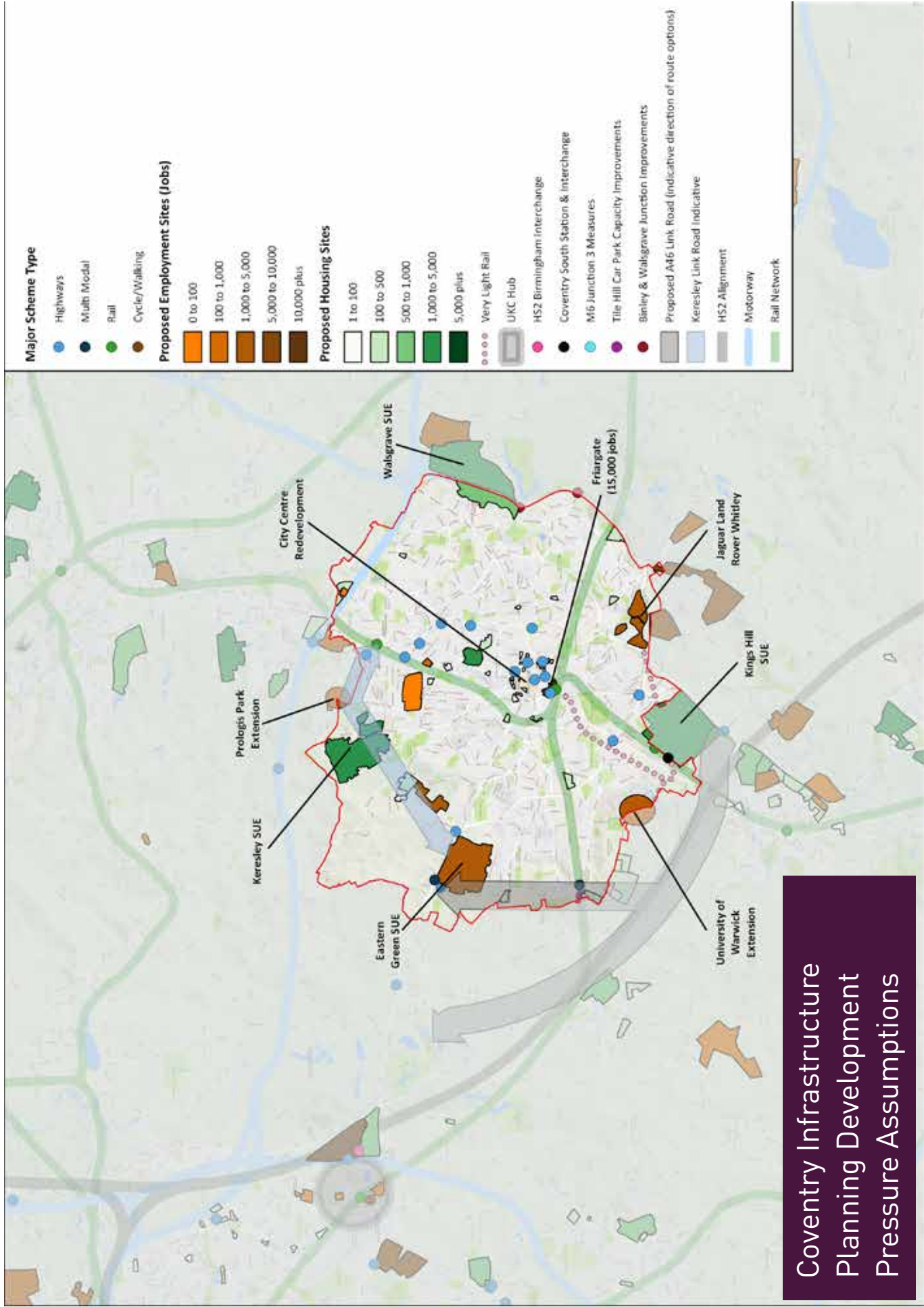


**Transport Delivery Corridors
(with major land use sites)**

The maps used are based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

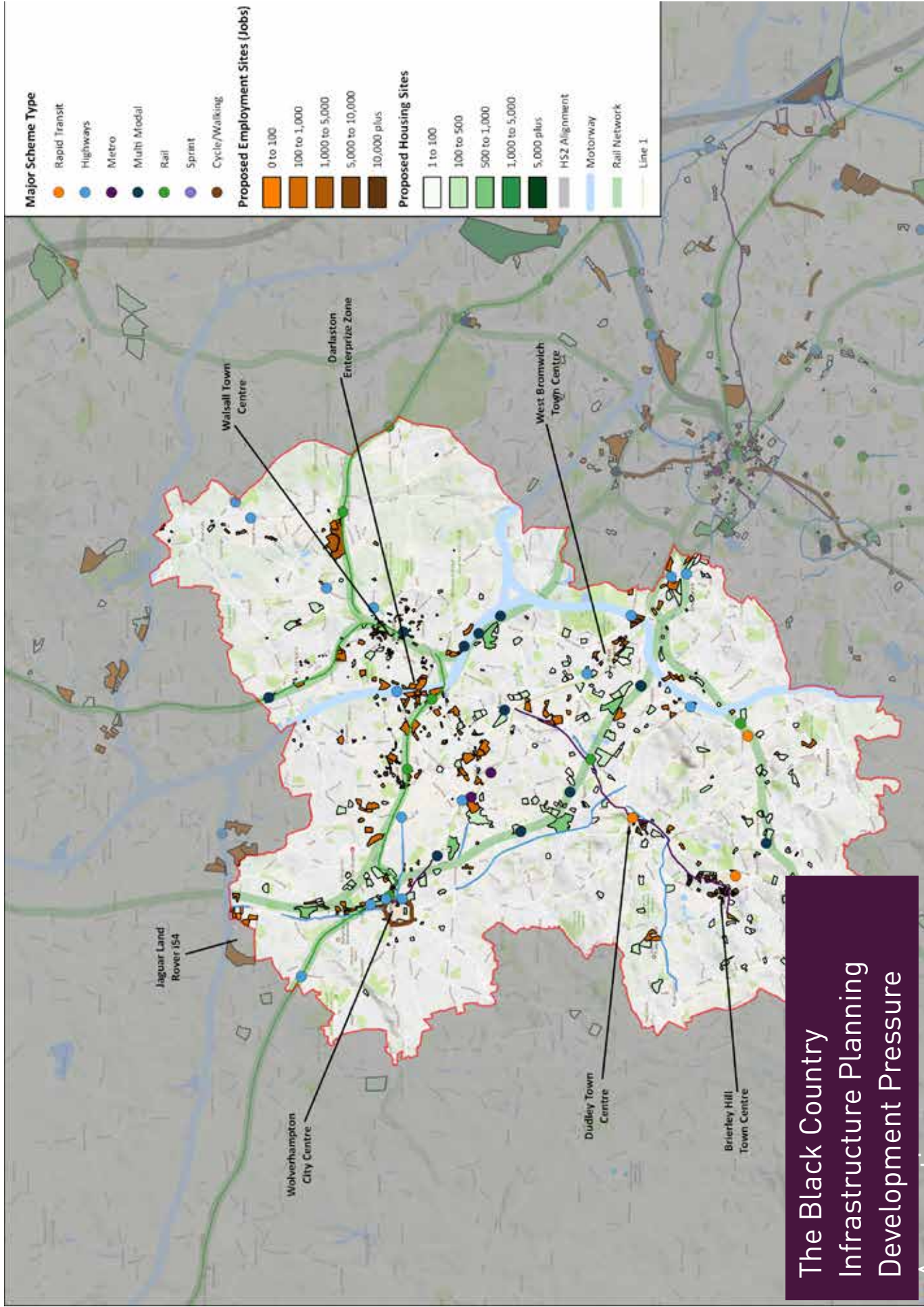


The maps used are based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. TFWM, 100019543 2017.



Coventry Infrastructure Planning Developments Pressure Assumptions

The maps used are based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. TFWM, 100019543 2017.



The Black Country Infrastructure Planning Development Pressure

The maps used are based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. TFWM, 100019543 2017.

