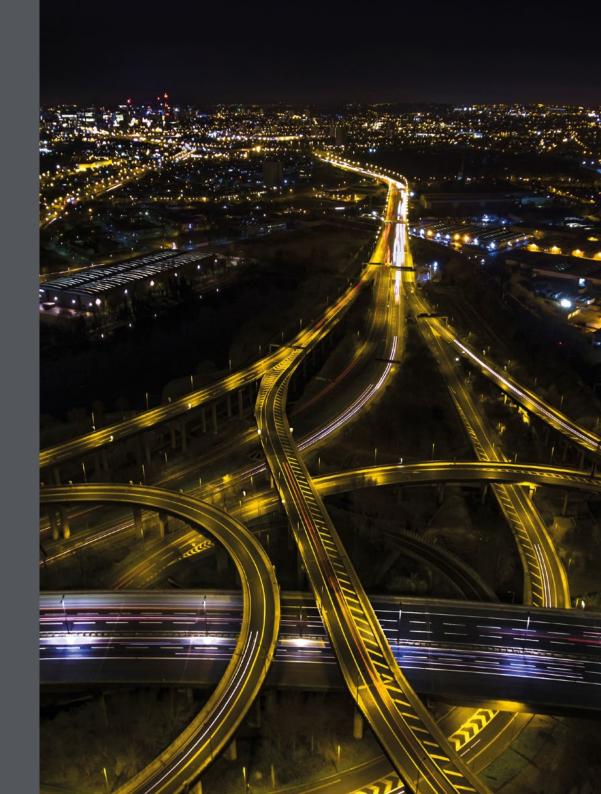
Congestion Management Plan





FORE WORD





Andy Street Mayor of the West Midlands

My Renewal Plan for the West Midlands set out my ambitions to deliver a transport system that the region could be proud of, one which allows people to prosper, by connecting our communities to opportunities in employment, learning, housing and leisure.

A transport system that has a positive impact on the quality of life, the environment, supports businesses to reach their potential and aids inclusive growth in the region by removing constraints and managing congestion.

The West Midlands Combined Authority (WMCA) and I have new powers shared with local authorities in relation to managing congestion, air quality and road safety.

Collectively, working with local authorities and other key partners such as Highways England, we need to keep our roads moving. This, however, is not about continuing as we have always done, but about giving residents the choice to travel in different ways.

We must not just tackle the points of congestion, but we all must take responsibility for our actions through changing how and when we travel.

This Congestion Management Plan identifies the causes and issues of congestion and how we will deliver the step change that we need.

The West Midlands is at the heart of transport innovation. We need to ensure we make best use of new technologies such as connected and autonomous vehicles, and support our universities and industry partners to be global leaders in devising the new ways in which we will move around on our transport system. We also need to be innovative in future mobility services that will meet rising demand for individual journeys in different ways and ensure that these are made in the most sustainable way.

To ensure we have a joined up approach to managing congestion, we will continue to work very closely with our transport partners to have a joined up approach to managing congestion including Highways England, Network Rail and key public transport operators as well as the operators of the M6 Toll.

This Congestion Management Plan is built on three core pillars providing an holistic approach to how we tackle existing congestion and sustain an increase in the demand for journeys as our population and economy grows.

These core pillars are:

- Improve Capacity;
- Improve Efficiency; and
- Manage Demand.





Roger Lawrence Leader - City of Wolverhampton Council Portfolio Holder - Transport WMCA

The West Midlands is our home. Over the next few years our region will be transformed with changes that are seen as once in a lifetime through investments in HS2, and our road, rail and tram systems. Over the last few years we have achieved a great deal to bring forward new investment in our public transport system. The WMCA, together with partners, has set out a clear plan to invest £5bn to deliver a world class transport network by 2026.

We are delivering extensions to the tram system creating a cross-regional line from the Black Country to Solihull. We are working with rail partners to deliver additional rail capacity on services and stations and the West Midlands Bus Alliance is driving forward improvements to our bus services.

We are currently developing Sprint - one of the largest bus rapid transit networks in the UK - and also making it easier to walk and cycle through initiatives such as the bike sharing scheme and implementing the Cycling Charter.

By improving public transport capacity and making walking and cycling more attractive we can provide real and sustainable travel choices that will enable residents, businesses and visitors to travel differently and reduce impacts on congestion.

We need to ensure that we keep pace with population growth and meet the future demand for journeys, in a way that does not increase congestion further.

A robust congestion management plan will introduce wide-ranging, coordinated measures to manage congestion and enable our region to thrive.

But we all have a role to play. As well as policy and decision makers improving the performance of the integrated transport system, we must all consider how and when we travel so that we can all play our part in keeping the West Midlands moving.

)

Foreword 3-4 **Executive summary** Introduction 7-13 **The Congestion Management Plan** 14-15 - Improving Capacity 16-28 - Improving Efficiency 29-36 - Managing Demand 37-41 Summary 42-43 **Delivery timeline** 44-45 Monitoring success 46-47

ш XECUTIV П S UMMA Σ

The West Midlands is enjoying a renaissance. with an upturn in economic performance. a strong economic plan and leading the UK in terms of exports, creating employment opportunities, speeding up the delivery of housing and investing in our infrastructure. We are well placed to welcome the arrival of HS2 and other major developments.

Transport is key to this economic growth, but congestion on our roads remains a challenge. Left unmanaged it will stifle our ambitions. Failure to work collaboratively and manage congestion is not an option if we are to continue to lead the country through economic, housing, social and industrial success. We must also tackle the resulting environmental impacts that congestion causes, most notably poor air quality.

We are growing new capacity on our transport network as an integrated system. Our plans include tripling the tram network, delivering the largest bus rapid transit network in the UK, revolutionising rail through new and enhanced stations and services, improving the performance

of our bus network and investing in our integrated ticketing options, making it easier and cheaper to travel. We have tackled some of the worst condestion hotspots on our road network and are tackling more, but further work needs to be done to improve both capacity and efficiency to meet future demand.

We are at the forefront of technology and, alongside our constituent authorities, will increase control of our road network through investing in on street technologies.

Congestion is an issue for us all and we need to take responsibility for the demands on the system. We must work collaboratively with partners to deliver choice, influence travel behaviour and reduce single car occupancy journeys through walking and cycling for shorter iournevs.

WMCA and Transport for West Midlands (TfWM) have a vital role to play alongside the constituent authorities to minimise congestion.

The Congestion Management Plan will:-

- 1. Tackle congestion hotspots through further investment in roads
- 2. Push for greater traffic management powers, including moving traffic offences
- 3. Invest in technology to help monitor performance and manage traffic
- 4. Deliver a regional transport coordination centre for all modes in partnership with local authorities, Highways England and West Midlands Police to manage incidents/major events
- 5. Invest in road safety and work with the Police and Crime Commissioner to manage road incidents more efficiently
- 6. Continue to build capacity into the public transport networks
- 7. Invest in communication and information tools and become a trusted source of travel advice
- 8. Coordinate the delivery of the transport investment programme and minimise impact through collaboration with the Resilience Partnership
- 9. Make better use of the M6 Toll
- 10. Deliver a travel demand action plan to encourage residents and businesses to re-mode, re-route. re-time or remove some journeys.

The West Midlands Strategic Economic Plan (SEP) sets out the vision, objectives and actions to improve the quality of life for everyone who lives and works in the West Midlands. It aims to deliver this within the context of expected regional population growth of 444,000 by 2035.

Within the SEP it is recognised that an efficient and resilient transport system will underpin future economic success. Transport connects communities to opportunities and businesses to markets.

Movement for Growth, the West Midlands Strategic Transport Plan, is accompanied by a 10year delivery plan which outlines key supporting transport projects that will deliver many of the SEP's outcomes over the coming decade.

Midlands Connect is also developing proposals to provide better inter-regional connectivity between the East and West Midlands through improvements to road and rail networks. As part of the Midlands Engine this initiative has identified a number of key corridors and initiatives to manage congestion on this sub regional level.

With continued economic success, travel demand has grown rapidly with 2016 seeing record levels of traffic on the region's roads.

With the predicted population growth, it is anticipated that 215,000 new homes and up to 506,000 new jobs will need to be created across the West Midlands by 2030.

Based on current travel habits this growth could add an additional 1.2 million trips to our network each weekday, increasing car kilometres by 34%.

Congestion on the region's roads is already a concern for residents and businesses: in a recent survey conducted by WMCA, 62% of people in the West Midlands said they were dissatisfied with current congestion levels.

It is critical that we deal with managing congestion collaboratively at a regional and local level. Our congested network is undermining economic performance and stifling the very growth that is planned.



Key Route Network key statistics 50% |7% Of the road Of road traffic is carried on network **17.7**mph Average weekday peak speed Over



A growing region

Between now and 2035, our region will grow every day, by:



Which is the equivalent of filling an extra...





 $(\begin{tabular}{c} \end{tabular}, \end{tabular$



Customer satisfaction

62% Dissatisfied with congestion





Dissatisfied with information on delays



216,000

Fewer people are within a 45 minute bus journey time of Birmingham city centre compared to 2008 because of congestion

.473

Deaths per year related to air pollution, of which transport is a major contributor.

10x

More people are likely to use the bus than travel by train in areas with lowest levels of car ownership



Fig 1: Traffic congestion on the Key Route Network AM Peak

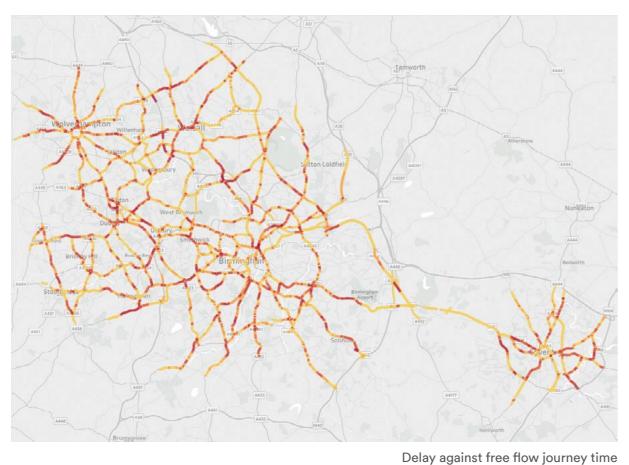
Fundamentally, congestion and reliability problems arise when road space demand starts to outstrip available supply. Measures of congestion through the network, cover speeds and travel time, typically in morning and afternoon peaks.

Reliability of journey times is also a factor. Most notably, delayed or unreliable journey times impact the freight and logistics sector by adding unplanned time onto journeys.

Recent studies on the region's Key Route Network¹ identify the levels of congestion within the morning and afternoon peak periods.

Fig 1: shows the percentage of additional time a journey is taking in the peak period, versus the free-flow journey time.

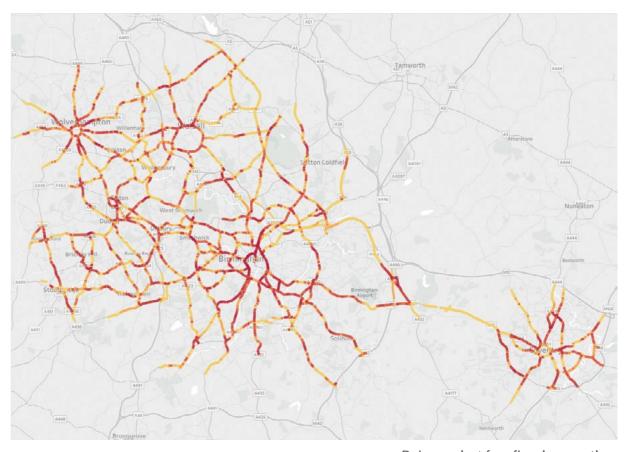
¹Key Route Network definition – the strategic road links between the motorway and trunk roads and main economic and housing centres. It comprises 7% of the local road network and carries 50% of the traffic. It has been defined within statute.



201+% 161-200% 121-160% 81-120% 41-80% 0-40%



Fig 2: Traffic congestion on the Key Route Network PM Peak

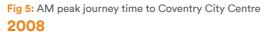


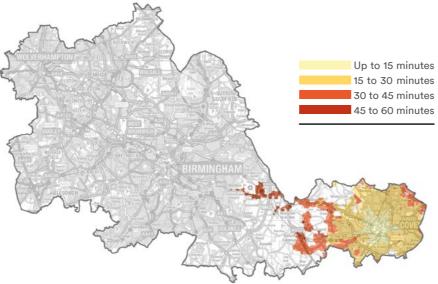
Delay against free flow journey time 201+% 161-200% 121-160% 81-120% 41-80% 0-40%

Congestion is not just felt by those in private transport but also by bus users. The following diagrams represent the decreased distance that buses are able to travel on the network during the same time based on 2008 and 2018 data.

Increasing journey times and poor reliability of bus services impacts on those that rely on this as their main form of transport impacting on the region's desire for inclusive growth and enabling all of our communities to take advantage of education and employment opportunities.

We need to ensure that we can improve local bus services for this to continue to be a viable option for many and reverse the decline in patronage.





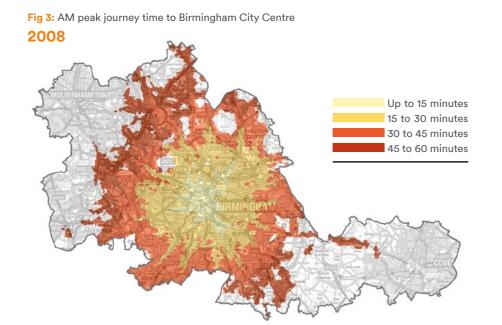
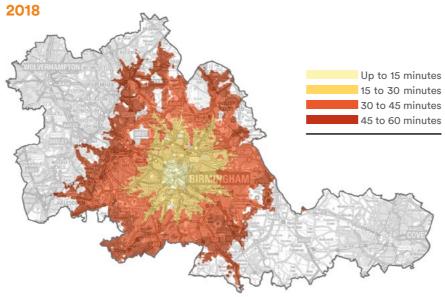
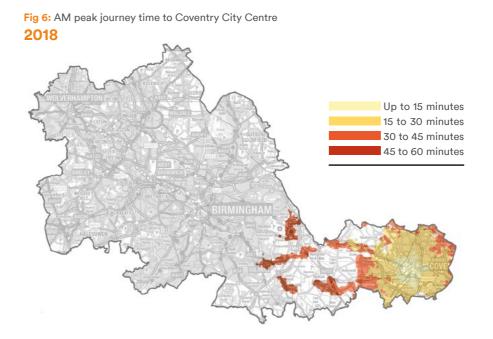


Fig 4: AM peak journey time to Birmingham City Centre





As well as impacts on individuals and businesses, congestion can also have significant social and environmental costs; road traffic accounts for 65% of NO2 and contributes to noise pollution and greenhouse gas emissions.

The opportunity to tackle congestion collaboratively at a regional level enables us to improve the performance of our road networks through a range of measures.

Fig 7: AM peak journey time to Wolverhampton City Centre

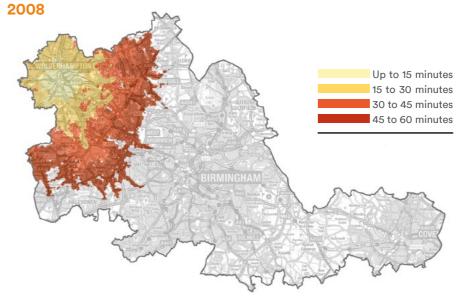
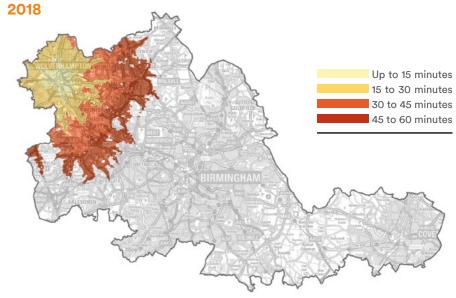


Fig 8: AM peak journey time to Wolverhampton City Centre



© Crown copyright 2018 OS 100019543, West Midlands Combined Authority

You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

This plan outlines the approach to achieving a more effective network and actions to better manage congestion.

It recognises that no economically successful urban region has truly solved the congestion challenge. Improvements at network bottlenecks and pinch-points can deliver some congestion relief, however if we are to meet the demands of growth we must also use our existing infrastructure more efficiently and influence how people and goods are moved around the network.

This plan reflects the relationship of all modes as an integrated transport system that meets the requirements for travel and the most efficient ways for movement of people and goods.

This plan focuses on making the best use of data insights and congestion monitoring information to identify and support the delivery of measures to increase capacity, maximise road space efficiency and influence the demand for journeys to move people and goods around the region in the most efficient way.

Moving people, not just vehicles is critical to get the best out of the network.

Managing congestion is therefore built upon three core pillars:-



Increasing Capacity:

This involves providing more capacity on the public transport and road networks.



Improving Efficiency:

We aim to improve efficiency of local roads through better integration across modes, reducing roadwork delays, optimising traffic signals and improving responses to disruptive incidents.



Managing Demand:

Overall demand to move people and goods across the transport network will continue to grow. We can better manage this by influencing the choices by residents businesses and visitors to make more sustainable journeys.

m

0

G

П

 $\mathbf{\Omega}$

 \bigcirc

()

Z



Fig 9: The three pillars of the Congestion Management Plan

Congestion Management Plan



Increase Capacity



Improve Efficiency



- 10 Year Delivery Plan TFWM/Local Authorities
- Park and Ride
- Highways England Programme
- Network Rail Programme
- HS2
- HS2 Delivery Plan

- Regional Transport **Coordination Centre**
- Key Route Network Management
- Bus Action Plan
- Rail Services
- Safety and Security
- Moving Traffic Offences
- M6 Toll

- Behaviour Change/Travel Planning
- Communications
- Marketing
- Walking And Cycling
- Linked to Air Quality Plan
- Re-Mode, Re-Route, Re-Time, Remove

Walking and cycling

In the West Midlands, 41% of journeys under two miles and 67% of journeys under five miles are made by car so there is huge scope for an increased role for walking and cycling to provide sustainable, effective local accessibility. Walking and cycling also play major roles in improving health and wellbeing in the region.

The WMCA Cycling Charter sets out commitments to increase the share of journeys made by bike to 5% by 2023 and 10% by 2033.

TfWM is delivering an innovative bike share scheme across the West Midlands, providing a world-class system that is integrated with Swift payment system and Whim Mobility as a service trial.

In addition, constituent authorities and TfWM are developing future cycling infrastructure building on the work undertaken under previous Local Sustainable Travel Fund (LSTF) programmes, Cycle City Ambition grants and LEP funding. A comprehensive infrastructure delivery plan is currently being developed.



Public transport

TfWM is delivering a comprehensive programme of public transport improvements together with the constituent authorities.

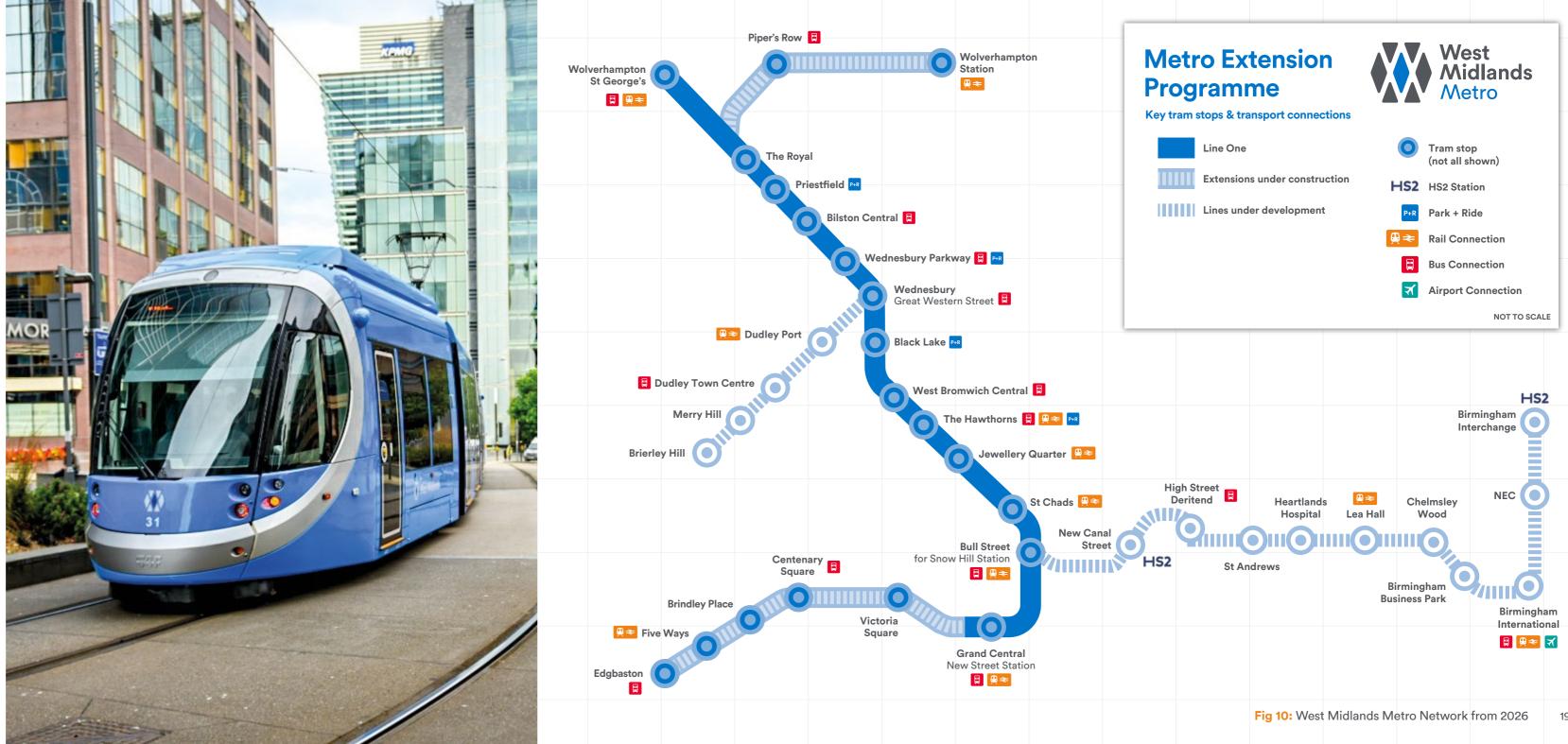
Metro

Metro is the region's tram system currently linking Wolverhampton to Birmingham. A number of extensions are being delivered or planned which will triple the size of the network, taking it to 54km.

The recently completed extension to New Street Station has seen the patronage increase from approximately 5 million passengers in 2015 to approaching 8 million per year in 2018. The further planned extensions will support this growth.

These extensions include:

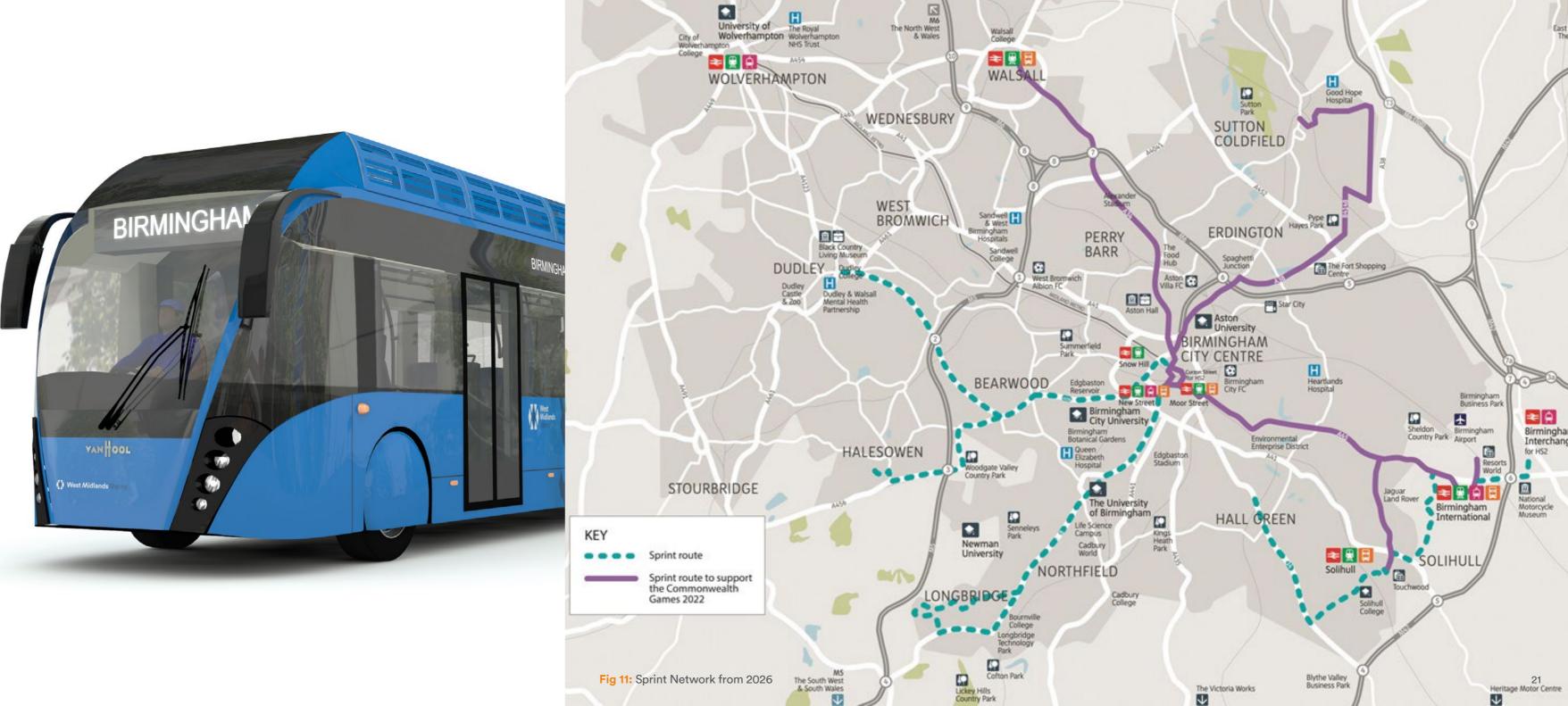
- Connection into Wolverhampton train and bus stations, open in 2020
- New Street Station to Hagley Road, Birmingham open in 2020
- Wednesbury to Brierley Hill via Dudley open in 2024
- Connection to HS2 Curzon Street Station and Digbeth in Birmingham open in 2022
- Digbeth across East Birmingham to the HS2 station in Solihull open in 2026



Sprint

Sprint is a high-frequency bus rapid transit service which aims to offer a level of service comparable to the West Midlands Metro making best use of the existing highway network, to provide a fast and reliable service to over 23 million passengers a year.

A number of routes are under development, the first of these corridors along the A34 north from Birmingham to Walsall, A45 from Birmingham to the airport and the A38 north to Sutton Coldfield currently being accelerated to open in 2022 ahead of the Commonwealth Games with further routes to follow.



The bus network has an undisputable role as the workhorse of the transport system. It reaches every corner of the region, generating four in every five public transport trips made each year, providing an essential mobility service to access employment, education, leisure and other key facilities. Good bus services are fundamental to the region's sustainable growth, particularly for people without access to the private car.

As a result of increased congestion, peak hour bus services now take, on average, 20% longer than three years ago, reducing connectivity and labour market catchments for the people who often have no other transport option.

There is a commitment within this plan to set the bus network free from congestion. In 2018/19, nearly £8 million will be invested into the highway network to speed up bus journey times. This will be followed by an indicative three-year programme of bus priority schemes, as shown in Figure 12.

In addition this plan will be supported by a bus network action plan to mitigate against congestion impacts. This will set out our strategic aspirations for the bus network, aiming to deliver even greater priority for buses and ensuring the network supports the anticipated scale and shape of growth across the region.



Strat Corr

	Bus delivery programme Proposed 2021 Gantt Chart		2018		2019			2020				2021			
	Intervention	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ort-term orities	Birmingham City Core & Ring Road traffic signal review														
	Birmingham Bus Lane Enforcement Tranche 2														
	A441 Pershore Road Quick-wins														
	Smallbrook Queensway Bus Lanes														
	Lister Street/Great Lister Street Bus Gate														
	Coventry Road - Digbeth High Street to Bordesley Circus outbound bus lane														
	Upper Dean Street to Moat Lane bus only														
	Pershore Road / Sherlock Street outbound bus lane														
	Pershore Road / Belgrave Middleway gyratory improvements														
	Constitution Hill to St. Chads Bus Lanes														
	Quinton Road bus laybys														
	Bristol Street / Thorp Street bus lane widening														
	Longmore Street bus lane extension														
timising sting sets	A435 Alcester Road Bus Lane Review														
	A34 Stratford Road Bus Lane Review														
	B4128 97 corridor Bus Lane Review														
	A454 Willenhall Road Bus Lane Review														
ategic rridors	Bartley Green to Birmingham (via Harborne) Bus Priority														
	Great Charles Street Queensway bus priority phase 2 & 3														
	QE Hospital/New Fosse Way Bus Priority														
	A435 Druids Heath to Birmingham via Kings Heath and Moseley Bus Priority														
	A441 Cotteridge to Birmingham Bus Priority														
	A41 Handsworth Wood to Birmingham Bus Priority/Journey Time Reliability														
	Sutton Coldfield to Birmingham via Erdington - Bus Priority														

Development Delivery

West Midlands rail network from 2026 Stations • Future Rail Stations Existing Rail Stations Lines Rail Line Projects to 2026 Existing West Midlands Railway Lines

Rail

HS2 will provide additional capacity not just on this line but by releasing capacity on existing lines. It has also been a catalyst for the HS2 connectivity package which is bringing forward further improvements to the existing rail infrastructure regionally.

We are seeing improvements at the 4 major rail stations. Alongside the completed New Street station there are proposals for Wolverhampton, Coventry and Birmingham International stations. In addition to this, there are also rail stations undergoing improvements such as University and Perry Barr, new stations being proposed along the Camp Hill line and feasibility work being carried out for new stations at Brierley Hill.

The new locally-specified and managed rail franchise (launched in May 2019) will deliver an additional 20,000 seats and space for a further 50,000 extra passengers during morning peak from 2021. Additional off-peak services are being introduced during 2018 and by 2022 there will be a significant increase in evening and Sunday services to reflect changes in customer demand.

The West Midlands Rail Investment Strategy (to be published in winter 2018) will outline key projects that are being developed and delivered up until 2047. MP

ス

Q

0

 \triangleright

As measures are brought forward to address congestion, well located park and ride facilities will be vital in ensuring people can still access rail and rapid transit services for travelling into major urban centres when they are unable to walk, cycle or catch the bus to their nearest station/stop.

TfWM is taking a strategic approach to developing and managing park and ride capacity. This will consider how best to use land around rail and rapid transit stations/stops and how to best help people access those services sustainably.

In addition, there are a number of existing schemes that TfWM has already committed to deliver.

These include:

- Tile Hill
- Bradley Lane
- Whitlocks End
- Longbridge
- Tipton



Roads

Tackling key congestion points on the Key Route Network (KRN) will benefit all road-based transport, including buses.

A set of KRN baseline reports, published autumn 2018, identified 20 priority congestion points in the morning and afternoon peaks that require targeted interventions.

In 2017/2018, TfWM, with the local authorities, delivered schemes to improve highway performance worth £5.8 million.

These projects included:

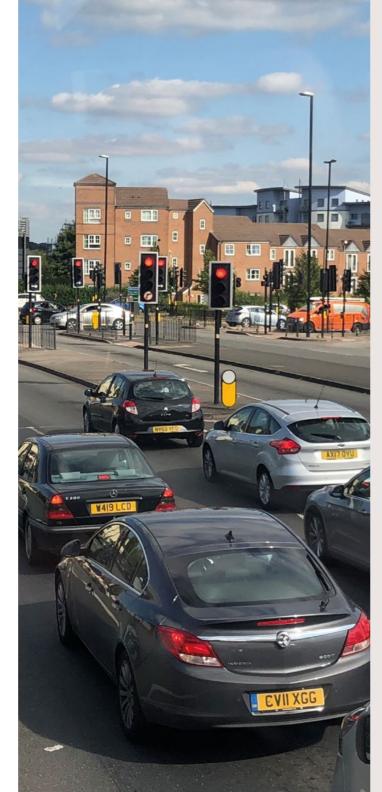
- Keeping Coventry Moving highway signalling scheme
- A34 Stratford Road Growth Corridor signalling scheme
- Solihull Bridge five year programme (2017/18)
- A4124 traffic signal upgrades and bus priority
- Brierley Hill Strategic Centre highways improvements
- A34 Birmingham Road/ A4041 Queslett Rd/Newton Rd
- A461 Eastern Opportunity Area
- Bromford gyratory improvements
- Holloway Circus improvements

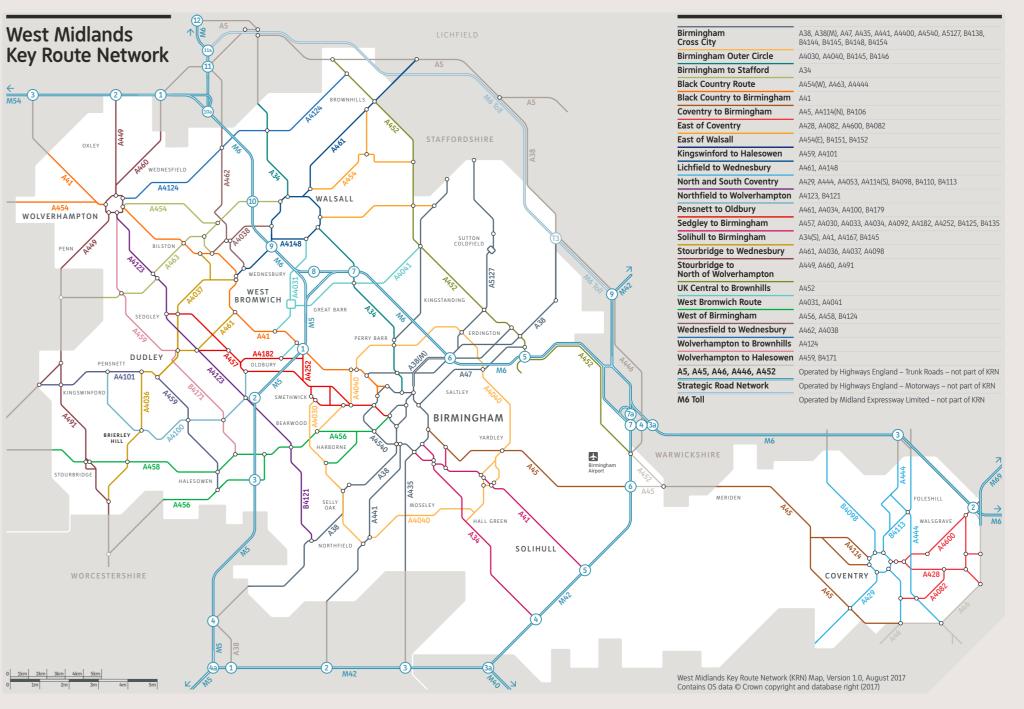
Improving capacity on our roads at these key locations will keep traffic moving and minimise negative impacts of highways on the environment and health, particularly in relation to air quality.

Highways investment plan

In increasing capacity on the region's road network, TfWM will work with partners to develop a Highway Investment Plan, setting out a long-term programme for the region's Key Route Network. The plan will identify schemes to tackle congestion hot spots and network bottlenecks, using the evidence within the KRN baseline reports, the emerging bus network action plan and local development plans and transport strategies.

Being clear on the region's priorities for the KRN will allow a strategic approach to investment. This recognises that congestion does not end at the border of a district. It also ensures we can deliver the performance needed to support the region's growth ambitions. The Highways investment plan will therefore be a key tool in addressing the congestion challenge.





Motorway junction improvements

Other measures are being delivered by Highways England in partnership with TfWM and the local authorities including Junction 10 of the M6, Junction 6 of the M42, capacity improvements and delivery of smart motorways to assist with all lanes.

WMCA will continue to work with Highways England to bring forward further investment in the Strategic Route Network that will assist with wider congestion management programmes.



infrastructure will, during construction, cause and act as an exemplar of good practice for view of the programme across all partners which disruption to the network. There is a need the future delivery of HS2 and other major can be used for planning and communication to ensure that these work programmes are investment programmes. coordinated and that residents and businesses within the West Midlands are still able to go This is supported by a regional forum as well as a Transport Coordination Centre. about their day to day business. In addition, the region is to play host to a series of major events, and deal with the detail of their delivery. including the Coventry City of Culture in 2021 and the Commonwealth Games in 2022.

There is a requirement for the existing transport infrastructure to work more efficiently to mitigate the impacts of construction and manage congestion.

Creating strategic partnerships for network resilience

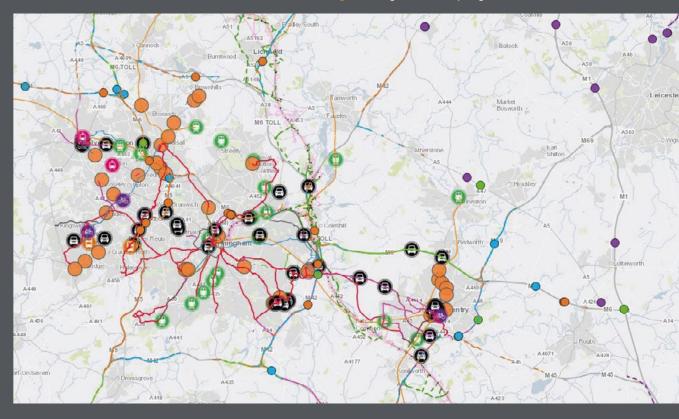
With multiple partners investing in the transport system, there is a need to work collaboratively to coordinate programmes and to minimise the impact. This is being undertaken through a Resilience Partnership which, at the top level, includes the Minister for Transport, the Mayor of the West Midlands, the WMCA Portfolio Holder for transport, the Police and Crime Commissioner and the chief executives of HS2, Highways England and Network Rail.

The partnership aims to work collaboratively to keep the West Midlands open for business, supporting growth during the extended

tactical group to look at the responses to works

Investment in the capacity of transport construction period of transport investment. This has enabled the development of a single purposes as well as supporting the operation of the transport network as part of the Regional

Fig 15: Single view of programme



Map data sources: © OpenStreetMap contributors Contains OS data © Crown copyright and database right (2018)

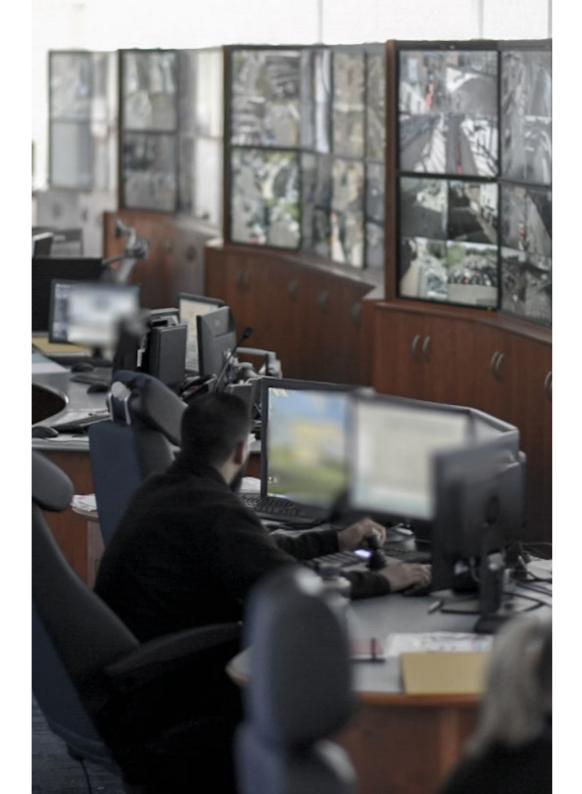
Developing a Regional Transport Coordination Centre (RTCC)

The day to day management of the local road network rests with the constituent authorities, as well as Highway England's regional control centre for the motorway network.

At present there is no single place in the West Midlands where a common and unified view of the transport network across all modes is available. This impacts the management of the road network when there are cross boundary programmes of work or incidents that affect traffic flow, particularly outside of the normal operating hours.

The RTCC will provide a coordinating umbrella across all modes of transport with partners. It will provide the means with how we manage the day to day operations of the network, planned events such as major construction programmes and culture and sporting events as well as major incidents.

Funding has been secured through the Devolution Agreement to develop a full business case for a RTCC to inform delivery. This work is progressing to deliver an RTCC by December 2019 ahead of the major construction programmes and events. In the short term, TfWM will run a number of pilots to test an operational plan. In particular working with partners to provide a single view of the network and work programme, monitor the network and disruptions and, form the basis of information and travel advice to residents businesses and visitors to assist in avoiding disruption and congestion.



Technology on the network to support the RTCC

On the road network we have invested in:

• Signal upgrades

IMPRO

VING

Ш

П

Т

ō

IENC

- Telecoms connecting traffic signals to control centres
- Journey time monitoring systems
- Ground detection cameras
- Traffic route models
- Common database providing location, operational performance and management of the highway network.

Alongside the RTCC, there will be investment in the sensor technology to ensure that we can understand and manage the road network more effectively in real time.

Road safety

Accidents on the road network are estimated by the DfT to cost the economy £1.8m per accident in terms of accident management and congestion. Monitoring of the Key Route Network can identify where these problems are and support the development of a programme of work to improve the safety of the network which will contribute to minimising disruption and delays caused through these collisions.

A Road Safety Strategy is currently under development for the region being led by Coventry City Council. This will provide the framework for ways in which we can improve road safety with an overall impact on managing congestion by preventing accidents.

Incident management and the Network Emergency Plan (NEP)

As well as taking measures to improve road safety, reviewing the way accidents are managed when they do occur, can help reduce the impact of resulting delays. TfWM and the local authorities (LA), alongside the Police and Crime Commissioner are working on a protocol which will enable the emergency services to control and manage road traffic collision scenes with the LA's traffic teams and the RTCC providing support to minimise those caught up in resulting disruption.

TfWM has also developed a Network Emergency Plan (NEP) which will support this and other major incidents that disrupt the network. Working alongside emergency partners, this will allow us to effectively manage traffic flows

and public transport impacts to keep the region moving and provide tactical and strategic responses to emergencies.

Monitoring of the Key Route Network (KRN)

TfWM together with the LA's have reviewed key information it would need to collect to enable insight into performance, produce congestion dashboards for stakeholders and identify future areas for investment and improvement including:

- Collisions
- Congestion
- Asset condition
- Roadworks
- Preventable disruption
- Future impact
- Air quality

This review identified current data access and monitoring capabilities, gaps in monitoring and best practice and made recommendations to support improvement to the management of the KRN which will support appropriate congestion management measures.

Managing road works and permit schemes

Where permit schemes have been introduced they have effectively cut works times, reduced inconvenience for road users and helped manage congestion.

A coordinated view of current and upcoming roadworks will allow appropriate planning to mitigate impact of scheduled works on road users. Permit schemes are being introduced by the constituent authorities in 2018/19 (Coventry already has a scheme in place with Warwickshire).

Permit schemes enable the potential to introduce lane rental schemes to manage and coordinate roadworks minimising the impacts on congestion. Trial lane rental schemes by TfL and Kent County Council have identified further efficiencies in manging roadworks, reducing congestion. TfWM is working with constituent authorities to review the potential for a lane rental scheme to provide a positive impact on managing congestion.

Innovation in the transport system

Innovation is key to improving efficiency in the region. There are many projects helping to ascertain the viability and benefits of cutting-edge technologies to support future mobility demands. We are working with regional universities and industry partners to make the West Midlands a global leader in new technologies and create new high-tech jobs which will be key to retaining young talent.

These innovations enable a shift from single car occupancy journeys to other more sustainable choices and include;

- Establishing a West Midlands innovation group to coordinate activity on innovative transport solutions to manage congestion.
- Mobility as a Service: via smartphone apps such as WHIM, we will influence how these can support the wider economic objectives and demand for journeys whilst responding to the reduction of congestion.

- Connected and Autonomous Vehicles (CAV): establish real world environment in-vehicle and roadside technologies that will enhance the performance of the network.
- Drone Technology: assist with management of our transport system including rapid response for major traffic incidents, enable real time monitoring and reaction of emergency services, first responders and traffic management centres.



Making better use of the M6 Toll

Although well used, the M6 Toll carries less traffic than originally forecast (circa 45,000 vehicles per day, compared with original forecasts of 75,000). This underutilisation, especially by HGVs, has a negative regional and national impact on productivity and economic competitiveness for local businesses.

Securing better use and integration of the M6 Toll into the wider highway network to achieve environmental, air quality and economic benefits is critical to helping manage congestion.

Encouraging greater use of the road by HGVs is a core priority for the West Midlands. Data analysed by TfWM identifies that there is scope for further HGV through movements to transfer to the M6 Toll. It also suggests that more could be done to encourage greater use outside peak periods for traffic travelling through the region.

TfWM will continue to push for greater cooperation from partners to encourage this shift through an established Memorandum of Understanding with the M6 Toll Operator: Midlands Expressway.

West Midlands Bus Alliance

The West Midlands Bus Alliance was formed in 2015 in a formal partnership with bus operators to strengthen relationships and develop a more strategic approach to improving the bus services.

The Alliance has an independent chair from Transport Focus and an emphasis on improved outcomes for customers and integration within a wider transport offer. The strategic action plan will aim to tackle congestion which impacts on the reliability of bus services and has identified high priority bus corridors and associated bus priority on the network for investment and ongoing studies with network development plans.

The Alliance partnership has identified high priority bus corridors for investment and is undertaking studies to produce network development plans to improve bus services to customers now and into the future.

Short-term priorities aim to deliver measures in traffic blackspots and improve efficiency by addressing congestion quickly and cheaply. Alongside short-term schemes, strategic development of bus priority on the network is vital to maximise benefits and address congestion. (See bus section in Improving Capacity for the current programme.)



Connecting public transport

Navigating the West Midlands by public transport requires passengers to be able to make connections between modes as quickly, seamlessly and conveniently as possible. An integrated transport system will ensure that public transport is an attractive and viable alternative to using a car.

The Movement for Growth 10 year delivery plan includes a number of locations across the conurbation where improvements are being made at key public transport interchanges.

Projects include:

MP

R O

IN

Ш

П

Т

0

m

Z C

- Wolverhampton Interchange
- Dudley Interchange
- Walsall's St Paul's Street bus station refurbishment
- Sutton Coldfield HS2 Gateway
- University Station Interchange
- Birmingham Interchange HS2 Station and One Station project
- Solihull rail station capacity and accessibility improvements
- Perry Barr rebuild
- Snow Hill new entrance
- Coventry rail and bus

Switching between modes will be easier and cheaper through our integrated ticketing systems and further enhancements to Swift, the region's smart travel card.

Ticketing - Swift

The West Midlands has the largest smart ticketing scheme in the UK outside London (Swift), accepted on buses and trams and on the train for direct debit customers (with plans to roll out the full range of Swift onto rail, including Pay-As-You-Go).

Swift provides tailored discounting and offers supporting behaviour change. Work is underway to improve the customer experience through improved digital channels, contactless payments and further roll out of fare capping.

TfWM is also working to increase its multi-modal offer incorporating:

- Parking
- Cycle Hire
- Taxis
- Electric Vehicle Charging



000

Collaboration and enabling by TfWM is critical in managing journeys and supporting project delivery, given the scale of the investment programme. This is particularly so when delivery is adding to the constraints on the network. Unchecked, demand for single occupancy car • Remove journeys. travel creates issues that extend well beyond the daily commute including environmental, social impacts and financial costs on people and businesses.

A comprehensive demand management approach will be introduced separately to this plan.

Previous programmes such as the Smart Network, Smarter Choices programme, which was supported by the Local Sustainable Travel Fund, achieved good progress on behaviour change. We can learn from this and apply innovation, such as digital technologies, to manage demand for travel.

The new TfWM demand management approach will recognise that customers can make intelligent decisions given the right information. We should also not underestimate the spare capacity that exists on the network outside of peak hours and how this should be utilised.

The basis for this approach will be to:

- Re-mode journeys
- Re-route journeys
- Re-time journeys

A key focus is to target business sites around 2. Create a pathway towards personalised prime areas of disruption, providing advice and support to enable them to mitigate impacts of congestion and disruption.

In addition, the demand management approach will target educational sites and communities impacted by the investment programme and support wider health agendas through active The resilience communication and engagement travel, walking and cycling.

Communications and marketing

Movement for Growth states that disruption to normal travel patterns cannot be avoided, but with strong governance supported by senior politicians and executives, a culture of collaboration, and excellent communication, a network which is resilient to disruption can be achieved. A robust and universally adopted communications and engagement strategy can greatly assist with managing congestion and underpin the demand management approach.

As part of its new approach, TfWM will implement a resilience communications and engagement strategy that will:

- 1. Provide effective communications that are up to date, manage customer expectations and offer advice on alternative travel.
- travel information or 'zoned' alerts through social and digital media.
- 3. Provide multi-modal journey-planning advice and information alongside targeted marketing campaigns and ticketing offers to incentivise using other forms of transport.

strategy will be coordinated across all delivery partners with a consistent message outlining the positive impacts of the investment programme on the growth ambitions, as well as social and environmental outcomes. Working with partners, the strategy will provide a framework that can support localised messaging within a consistent context.

The resilience communication and engagement strategy will also support the Network Emergency Plan and the RTCC when dealing with major incidents.

ANAGING

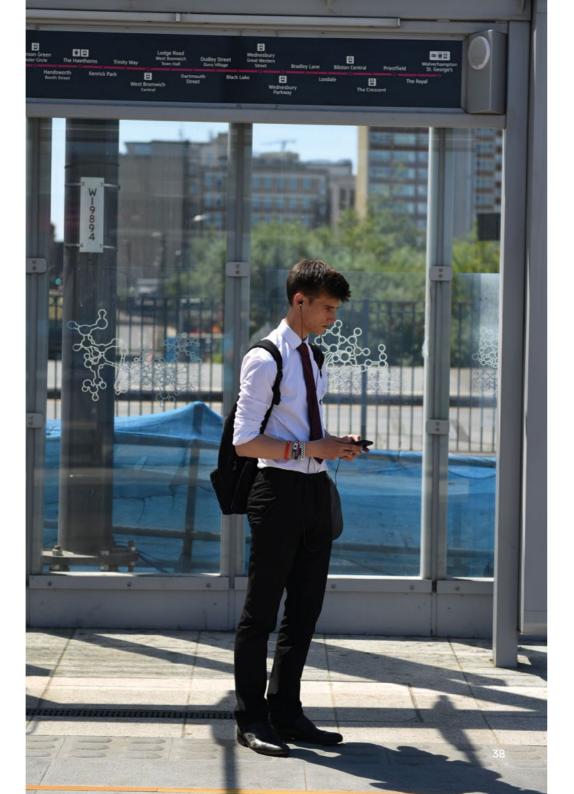
DEMAN

Journey plannning

It is important that businesses, residents and visitors to the region have easy to access and trusted information on travel planning and disruptions.

TfWM's Network West Midlands digital platforms are already a trusted source of travel information for public transport. They allow users to plan journeys and receive live updates during trips. They are where people go to plan alternative routes during major incidents. However, they do not provide this information across the road network and they are not able to communicate congestion or the impact of road works or incidents.

TfWM will transform existing digital platforms to provide a multi-modal single source of the truth on travel, incorporating real time information on the public transport and road networks. This will bring together information from those investing in the network, operating services and managing traffic flows. It will enable the communication of day to day operations, as well as planned events and incidents that cause disruption to the network. This portal will also seek to publish information openly to ensure relevant information is available to all journey planners.



How you can help

It is not just up to TfWM to reduce congestion; a number of organisations are working together to improve the way we travel in and around the West Midlands and through our programmes we will work with you to keep the region moving.

Roads and public transport will be busier than normal while essential works take place. You will still be able to get to where you need to go, but will need to plan ahead and check your journey before you travel.

There will also be a large number of extra visitors to our region as we prepare for the Coventry City of Culture and the Commonwealth Games, so in some cases you may need to re-think your route or change the time you travel. We can help you plan your journey through networkwestmidlands.com which we will improve to cover all modes of transport.

We all need to think about how we travel and there are ways in which together, we can help reduce the impacts of congestion.

These include:-

1. Could you change the time of your journey? Avoid travelling during peak times wherever possible. Plan ahead, check timetables or apps and leave more time for your journey as services will be busier.

2. Could you car share with a friend or colleague?

Car sharing for just two journeys a week could help to keep traffic at 'school holiday' levels all year round. It will save you money, reduce congestion and some companies even offer priority parking to staff when they share their journeys.

3. Could you leave your car at home?

By using public transport, congestion on key roads across the region will be reduced. The bus, train or Metro might be a good alternative for your journey depending on where you need to go and at what time and for shorter trips walking or cycling could be the fastest route to your destination, as well as providing exercise and health benefits.

4. Could you use a different route?

If you do have to use the car, check your route before you leave. Google Maps or a Sat-Nav with live traffic updates will help you pick the least congested route each time.

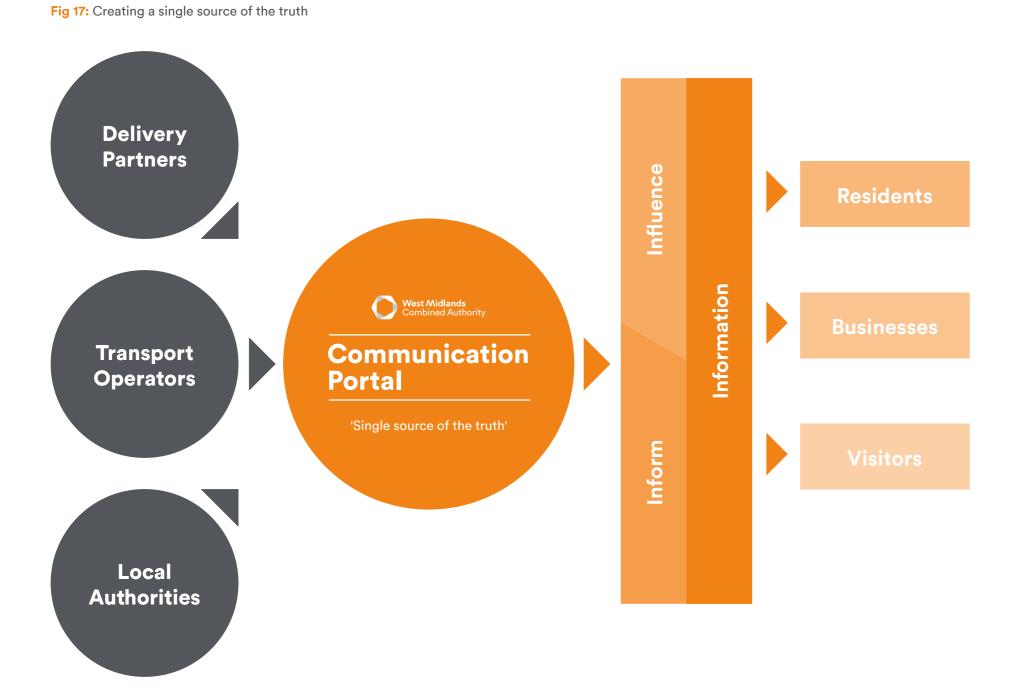
5. Could you speak to your employer?

If you commute for work, speak to your employer about whether there is the option of working from home. This will help to reduce the number of journeys being made each day.

Stay up to date with the latest transport projects and plan your journey at **networkwestmidlands.com/keepmoving**

or follow the conversation on **Twitter: @networkwm**

MANAGING DEMAND





Congestion is a major problem for many The level of disruption that we will experience cities across the UK. In the West Midlands we acknowledge that we cannot continue change. This will require us all to consider how, with the traditional approaches to congestion when and where we travel and whether the management that have provided limited journeys are necessary or could be shared. We success and therefore we believe a fresh need to encourage consideration of the full approach is required.

The next decade will see an unprecedented level of investment in our region, which will generate We will work with all parties to maximise the additional pressures on our already congested transport networks.

solutions. Whilst TfWM and partners can provide and physical health to our residents. improvements to the network through additional capacity and issue trusted information to aid sustainable travel choices, this journey will only be successful if we undertake it together.

brings with it many opportunities for behavioural range of travel choices available and to utilise the information that has been provided.

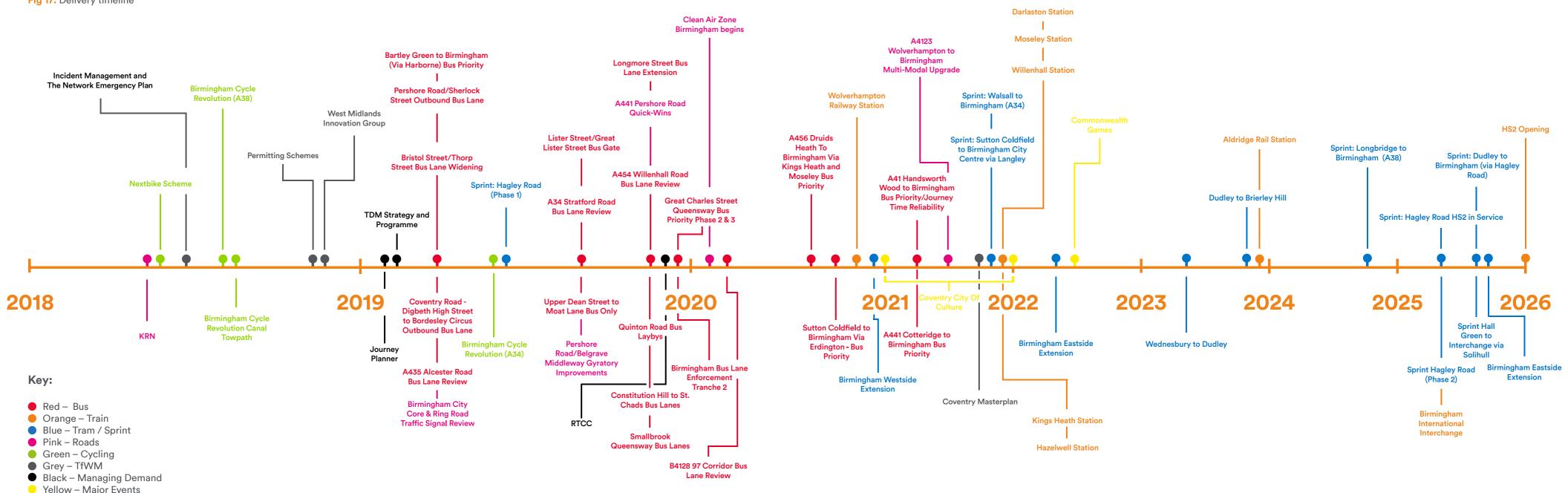
opportunities to firmly establish a long term change to existing travel habits with sustainability at its core. This will reduce the impact on our We all have a role to play in contributing to the environment, improve air quality as well as mental

> Ultimately the investment taking place in the West Midlands will provide the foundation to build towards our vision for a healthier, happier, better connected and more prosperous region.



Fig 17: Delivery timeline

DELIVERY TIMELINE



Monitoring our success

We need to know that we are being successful in managing congestion so it is important that we monitor and adjust where appropriate. To do this we will continue to monitor movement for growth outcomes.

In addition we will now keep the Key Route Network under constant review to ensure that we are able to identify key hotspots for congestion, road safety issues and the reliability of the network. This is in line with the KRN monitoring framework and will enable us to target appropriately further investments linked to economic growth.

We will also continue to undertake customer satisfaction surveys on all modes to help understand how we are doing from the users' perspective. This again will help us to review our programmes of work and adjust to improve what we do.





Transport for West Midlands Building a healthier, happier, better connected and more prosperous West Midlands.

16 Summer Lane, Birmingham, B19 3SD | 0345 303 6760 To request a copy of this document in a different format, please get in touch.