Transport for West Midlands

Reimagining transport in the West Midlands:

a conversation about change

Summary

A new Local Transport Plan

TfWM, established in 2016, delivers transport on behalf of the West Midlands Combined Authority, which is the Local Transport Authority for the metropolitan area.

WMCA must produce a Local Transport Plan that sets out policies to promote safe, integrated, efficient and economic transport to, from and within the area as well as plans to implement those policies.

This must be done in a way that addresses the regions economic, social and environmental challenges and opportunities.

Our Green Paper sets out how we can do this and the trade-offs involved in addressing our key challenges via different solutions.

We will use it to inform engagement with people and organisations across the region to build consensus around how best to transform our transport system.

The metropolitan area
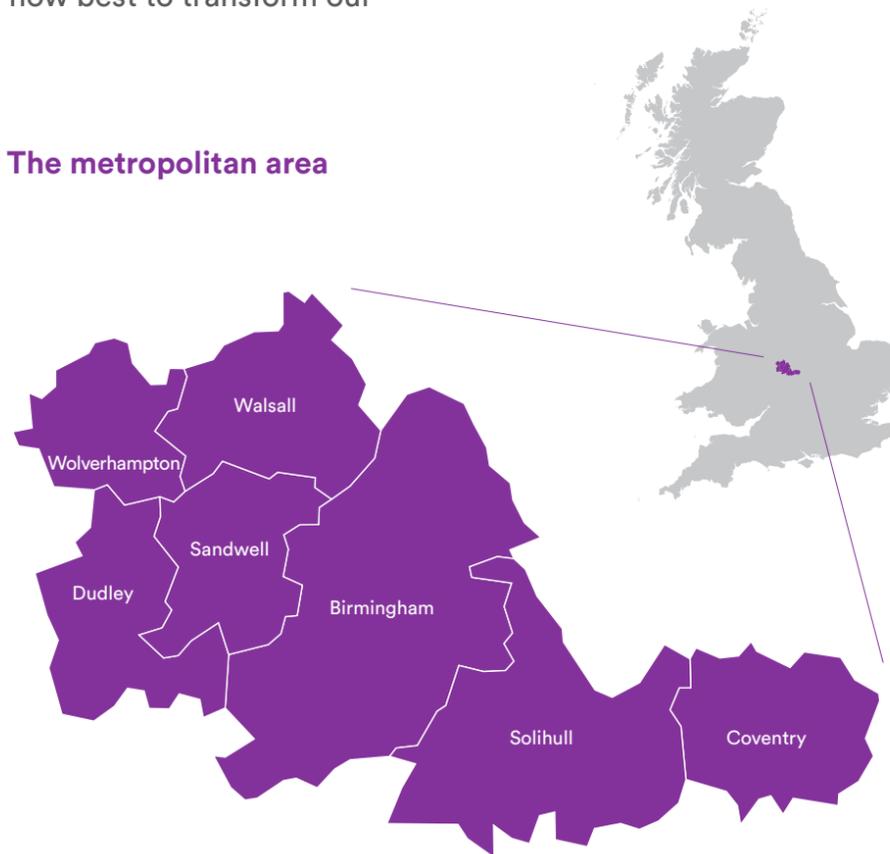
New policy agendas to consider

Recharge the West Midlands	WMCA has adopted a plan to Recharge the West Midlands; to catalyse economic recovery from the COVID-19 pandemic while building back better.
Inclusive Growth Framework	WMCA has adopted the Inclusive Growth framework to ensure socially equitable and environmentally sustainable growth secures long term benefits for everyone
WM2041	WMCA has adopted an ambition for the region to be carbon neutral by 2041 and principles for decarbonisation. The first of four 5-year plans has also been adopted. Transport has a major role to play in decarbonisation.
West Midlands Local Industrial Strategy	WMCA has placed 'Future of Mobility' at the heart of its new local industrial strategy as a strategic enabler of Inclusive Growth.

The state of transport

The West Midlands has grown rapidly over the last 150 years and will continue to do so.

Vehicles have made us much more mobile and this has been supported by long term trends of increasing affordability of motoring and the decreasing affordability of public transport.

Although vastly improved telecommunications have reduced the need to travel for some things, we are still travelling more overall. Better communication technology has not necessarily meant that we travel less; but it has modified why, where and when we travel, and impacted patterns of goods delivery.

Over that time, as our lifestyles became more car-centric alongside the way we developed our region, our relationships with places have changed.

As a result, travel patterns are more disperse than ever; our travel horizons have expanded, meaning we often make longer journeys and most of this travel is not focused on city/town centres. The role of walking, cycling and public transport in our lives has arguably therefore reduced.

This has come with a host of issues; congestion, less safe streets, emissions, and marginalising people who cannot drive or access a car.
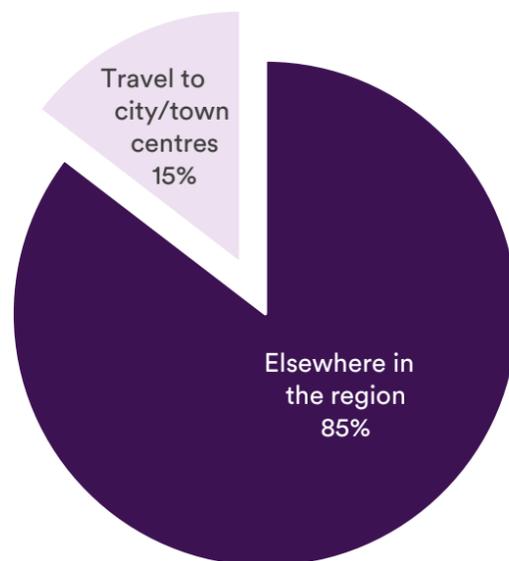
Where car trips are going in peak travel hours

Travel to city/town centres 15%

Elsewhere in the region 85%

Our growing population

West Midlands metropolitan population (Millions)

PROJECTIONS
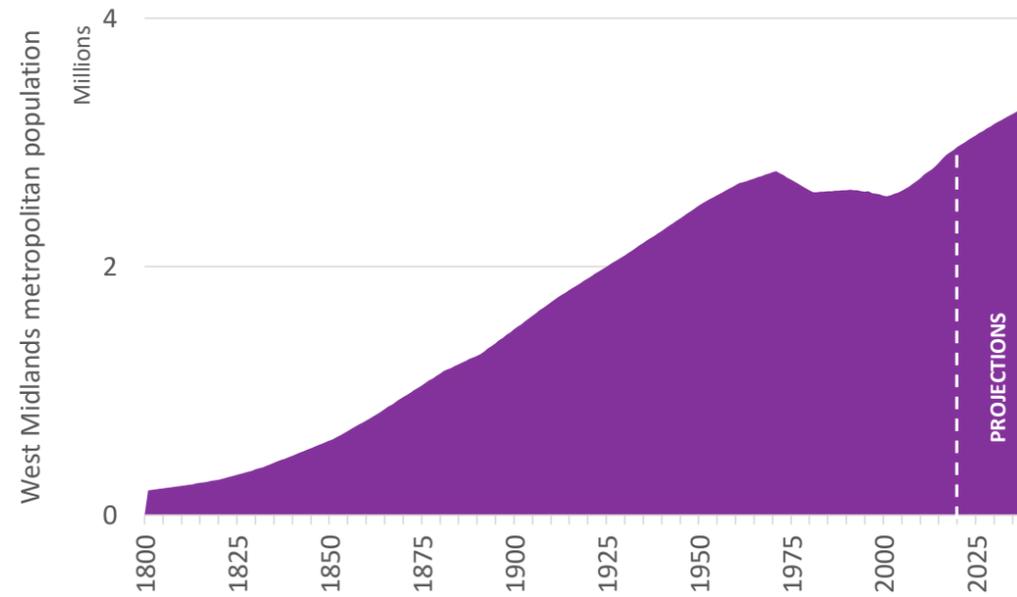
Our growing travel demand

GB approx passenger miles (motorised) by mode since 1904

- Cars
- Motorcycles
- Buses and coaches
- Rail based transport
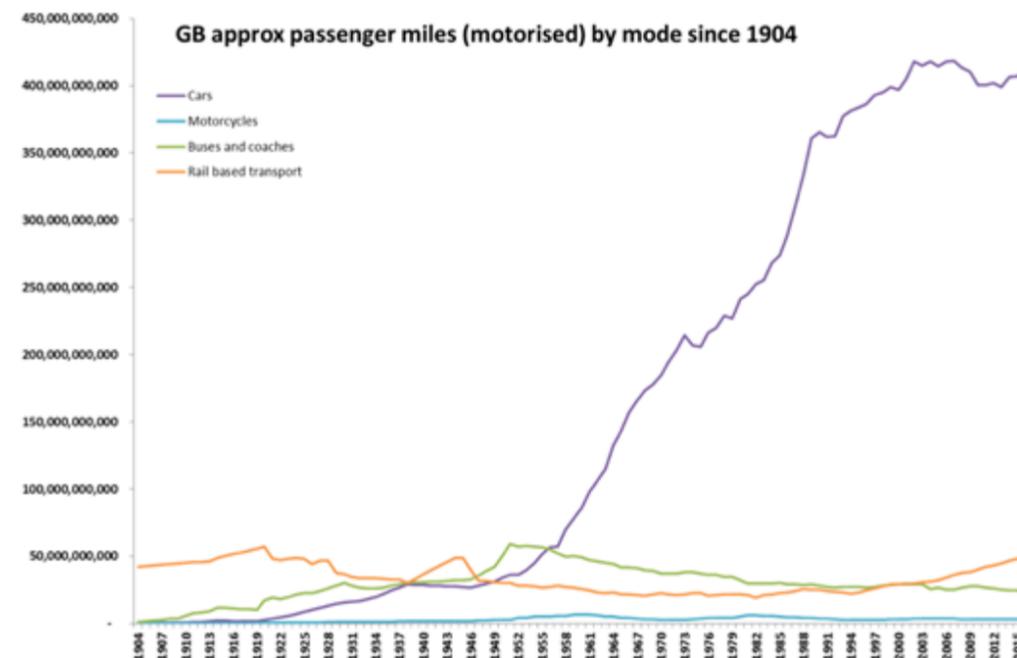
How TfWM is investing to connect the region

There is plenty of great stuff happening across the West Midlands.

- Our Swift multi-modal ticketing is the largest and most comprehensive smartcard scheme in the UK outside of London. Before the pandemic it was used 75m times a year by 537,000 card holders. We plan to extend our Swift Go fare-capping service across public transport.

- Metro extensions and Sprint bus schemes are currently being built with many more planned to connect neighbourhoods and centres across our region.

- The £22m West Midlands Regional Transport Coordination Centre, opened in 2020, manages congestion, daily operations, events and emergency incidents across public transport and road networks.

- We are improving the attractiveness of cycling and walking by partnering with local authorities to deliver the 500 mile Starley Network. Good progress has already been made, including the 3 mile A38 Bristol Road cycle, which route provides a high quality two way segregated cycle route between Selly Oak, the University of Birmingham and Birmingham city centre.

However, whilst important, the current approach isn't enough to generate sufficient travel behaviour changes to address many of the challenges we face. If significant behaviour change is a core part of our aims, then we will need to do more.

How the pandemic changes things

The pandemic will have long lasting effects – economic shocks, changes to travel behaviour and the way we work and live, and a reshuffling of priorities.

There is uncertainty as to how consumer demands may change as people explore new ways of working. Public transport, which many rely on, will be vulnerable if patterns of demand do not return to town and city centres.

Car use has recovered quickest as lockdown measures have relaxed. Any sustained mode shift to cars will increase the negative impacts of transport in the region.

The pandemic has presented challenges to everyone, but has also shown us that we are adaptable.

Investment in transport can support our economic recovery by improving access and providing employment opportunities. There is already consensus on building back better – now we have to decide what kind of future we want and how we can shift the status quo to secure it.

When asked in May 2020 what they wanted to see change as a result of the crisis, people said…

Cleaner air — **81%**

75% — Quieter streets

Better work/life balance — **67%**

65% — To be fitter and healthier

Stronger community ties — **59%**

58% — Greater use of neighbourhood shops and local high streets

More diversity and wildlife — **58%**
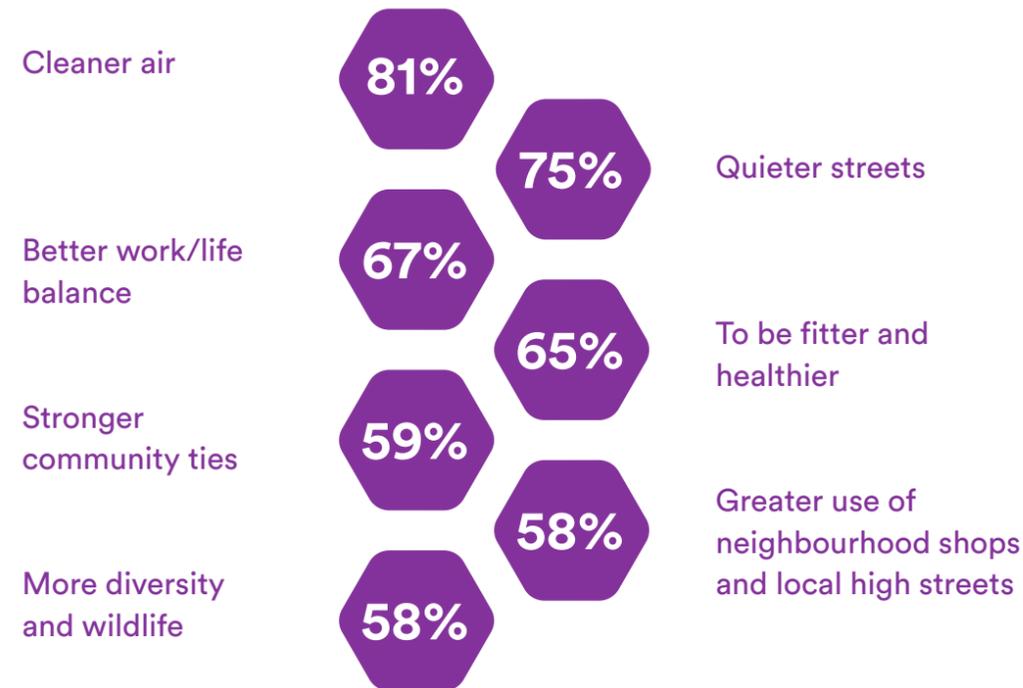
…but when asked in Summer 2020 to name their top priority for the region's recovery after the pandemic, people said…

Jobs — **45%**

35% — Health

Education — **9%**

8% — Environment

High streets and neighbourhoods — **3%**

1% — Community
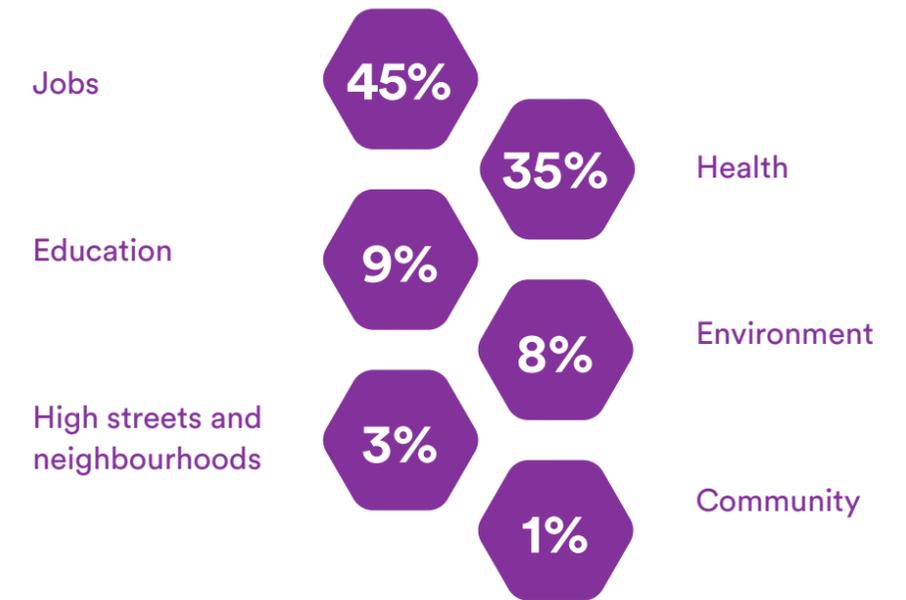
Travel demand response to lockdown

% diff. from pre-COVID-19 pandemic normal

Bus — Metro — Rail — Motorway
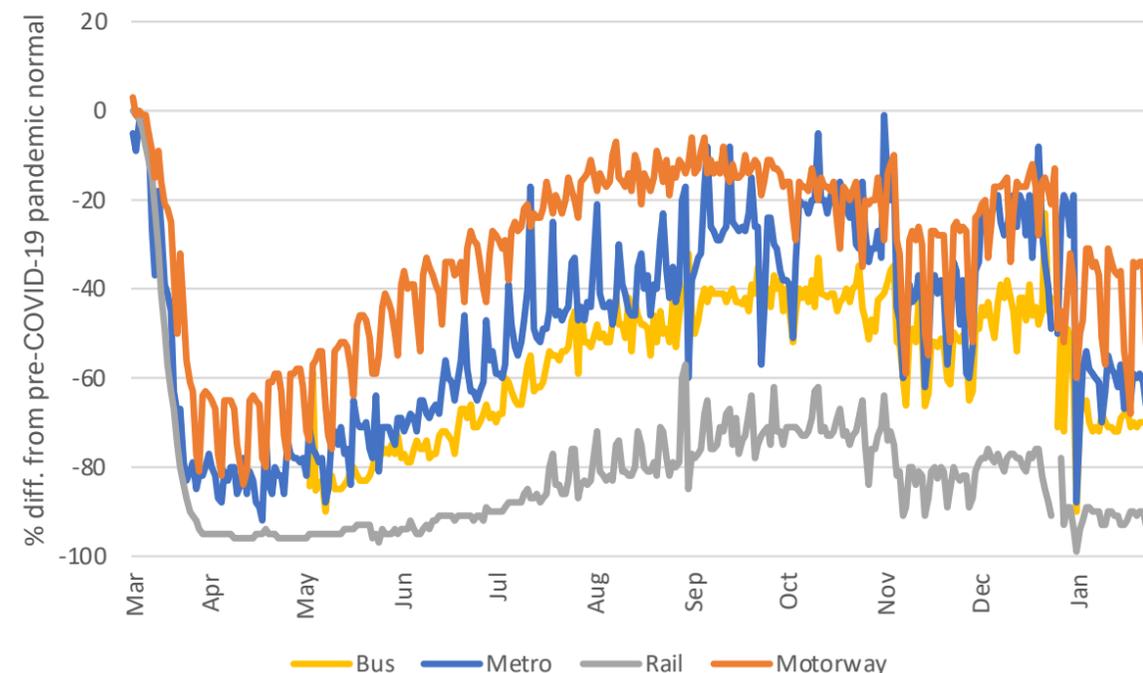
Our Motives for Change

TfWM has adopted five Motives for Change to frame the relationship between transport and Inclusive Growth.

Through them we will explore why change, although perhaps difficult in the short-term, is likely to be much better for all in the long-term.

All the Motives for Change are important. As we work with the public to set a new direction for transport, our collective challenge will be finding a new direction that best delivers the level of change people want across all our Motives for Change.

Sustaining economic success

The West Midland has experienced strong economic growth and investment in recent years; we want to leverage transport to sustain this success and to ensure everyone can benefit and participate.

Maintaining the status quo risks increasing congestion, pollution, transport infrastructure and maintenance costs, undermining the region's productivity, attractiveness, and quality of both life and places.

Delivering transformative benefits to our economy could be achieved by maximising the benefit of existing infrastructure; minimising the external costs of transport (such as health problems); levelling up mobility for those without car access; and ensuring that transport supports investment in places across our region.

We have significant industrial strengths in sectors that underpin mobility, including our unique logistics advantages given our central position in national rail and motorway networks, and our automotive cluster. We can work with industry to create a transport market that enables innovation, development and deployment of these products and services locally to address our Motives for Change.

Creating a fairer society

The way our urban environment has been retrofitted and developed to suit car-centric lifestyles has resulted in significant disparities in access. Those without access to a car have fundamentally less access than those who can access a car. There are particular groups who are much less likely to have access to a car, including younger people, women, those who are on lower incomes and those from ethnic minority backgrounds.

Those who are most mobile generate the most transport impacts such as road injuries and deaths, air pollution and noise. Whereas those who are more deprived (and likely to be less mobile) tend to be more exposed and vulnerable to traffic impacts.

Addressing transport inequality requires more equitable access to both transport services and transport information, reducing the negative impacts of transport like air and noise pollution, and rebalancing mobility to support those who are currently marginalised in what they can access. This will require investing beyond active and public transport, as these modes cannot match the mobility of private motor vehicles.

Jobs accessible within 45 minutes without a car

Jobs accessible within 45 minutes with a car

Legend

Number of jobs accessible within 45 minutes

< 50,000   > 1,800,000

Areas within lowest 10% of Indices of Multiple Deprivation
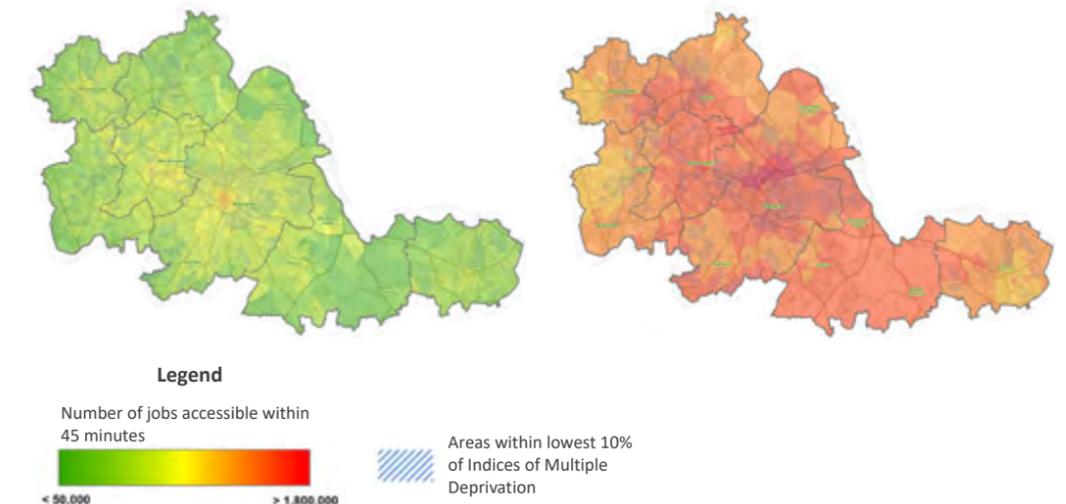
Supporting local communities and places

As traffic and car ownership have increased, motor vehicles have increasingly taken over the function of streets and the space available on them. This has harmed the quality of places and limited opportunities to use streets for wider functions that deliver greater social and economic value to communities.

Our increased mobility has affected what we can access in our local areas; as people have spent more time further from home (or behind a screen) local consumer demand for services dropped leading to many feeling that local provision of services has worsened. However, access to local opportunities has also worsened because traffic and transport infrastructure has created severance and made conditions for walking and cycling worse.

In an ideal "20-minute neighbourhood" residents could access a good variety of daily goods and services within 20 minutes of their home without using a car. This could help people live healthier and reduce the impacts of traffic in their area. However, for this concept to work, it has to be underpinned by safe streets, sustainable local connections and supporting changes to land use

Streets are filling with parked cars
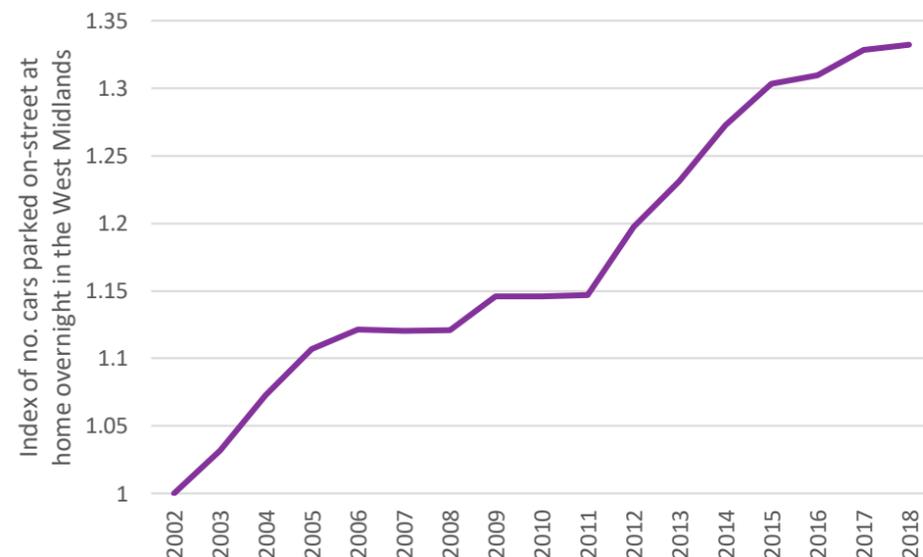
Becoming more active

1/3 of adults in the West Midlands do less than

30 min

per week of activity

The Government recommends

150 min

per week of moderate intense physical activity for a health-related benefit

Over two thirds of people feel they are not doing enough exercise and want to increase their activity levels through habits and routines which they can maintain.

Physical activity improves physical and mental health, and productivity, and frees up public spending for other worthwhile projects.

Around a third of adults in the West Midlands are currently inactive, with women, those with disabilities, deprived socio-economic status, and older residents disproportionately inactive.

Making our region more safe and convenient for walking and cycling by shifting shorter journeys (and making more local trips) is an opportunity to sustain healthier habits. This will require providing a street environment where people feel safe with direct and convenient routes for travel without a car.

Percentage of trips and distance travelled for short journeys by main modes

		Walk	Cycle	Car	Public transport
Trips	**Less than 1 mile**	80%	1.1%	18%	0.7%
	1 to 2 miles	31%	2.8%	60%	5.3%
Distance travelled	**Less than 1 mile**	76%	1.2%	21%	1.0%
	1 to 2 miles	31%	2.9%	59%	5.4%

Tackling the climate emergency

UK sector carbon emissions and breakdown of surface transport
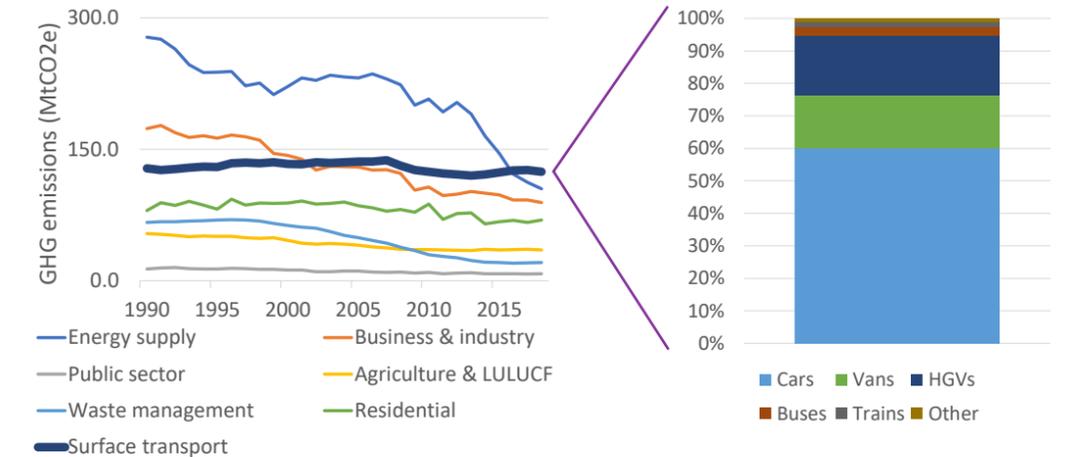
The Paris Agreement commits the UK to achieving net-zero carbon emissions by 2050. There is evidence that suggests we need to act quicker to avert climate change, so the West Midlands and many local authorities have set more ambitious targets.

Failure to reduce emissions will accelerate climate change beyond our control, diverting public funds to respond to property and infrastructure damage, disrupting economies, and leading to loss of life.

Since 1990 almost every sector has reduced carbon emissions, however increased travel demand, particularly from cars, means transport emissions have not fallen.

A rapid reduction of transport carbon emissions will mean significant changes. The phasing out of combustion and hybrid vehicles in favour of ultra low emission vehicles will be required to achieve emissions targets. However, this will not deliver sufficient carbon reductions; we will need to reduce the energy we use for transport through behavioural shifts such as making fewer and shorter journeys, and shifting to more sustainable modes of transport.

Reimagining transport in the West Midlands

Building back better from the COVID-19 pandemic means we need to reduce the harmful impacts of transport on people, places and the environment, while ensuring we improve access equitably.

Access is critical for social and economic prosperity. The ability to access something is not solely dependent on your transport options; accessibility can be enabled by being physically mobile, being close to opportunities, or through digital connectivity. However, there are also many options for travelling that could help us achieve better and more sustainable productivity and quality of life.

The need to tackle the climate emergency has a particular urgency that the other Motive for Change lack; once global carbon emissions exceed what we have budgeted for and average temperatures get too hot, climate change will escalate and we'll likely be unable to prevent it. Current predictions suggest that if we don't rapidly reduce our carbon emissions we could reach that point by 2030. This suggests a new LTP should have a much stronger focus on achieving transformational change within the next 10 years, rather than focussing on a longer term vision and more gradual change.

In that time-frame we are not going to fundamentally redevelop our urban environment; it takes time for land uses to change. This means that in the short-term we need to focus on rapidly changing how we travel using existing technology and infrastructure, as well as making the most of digital connectivity.

The Triple Access System

This is the triple access system that shows how physical mobility, digital connectivity and spatial proximity interrelate and provide access.
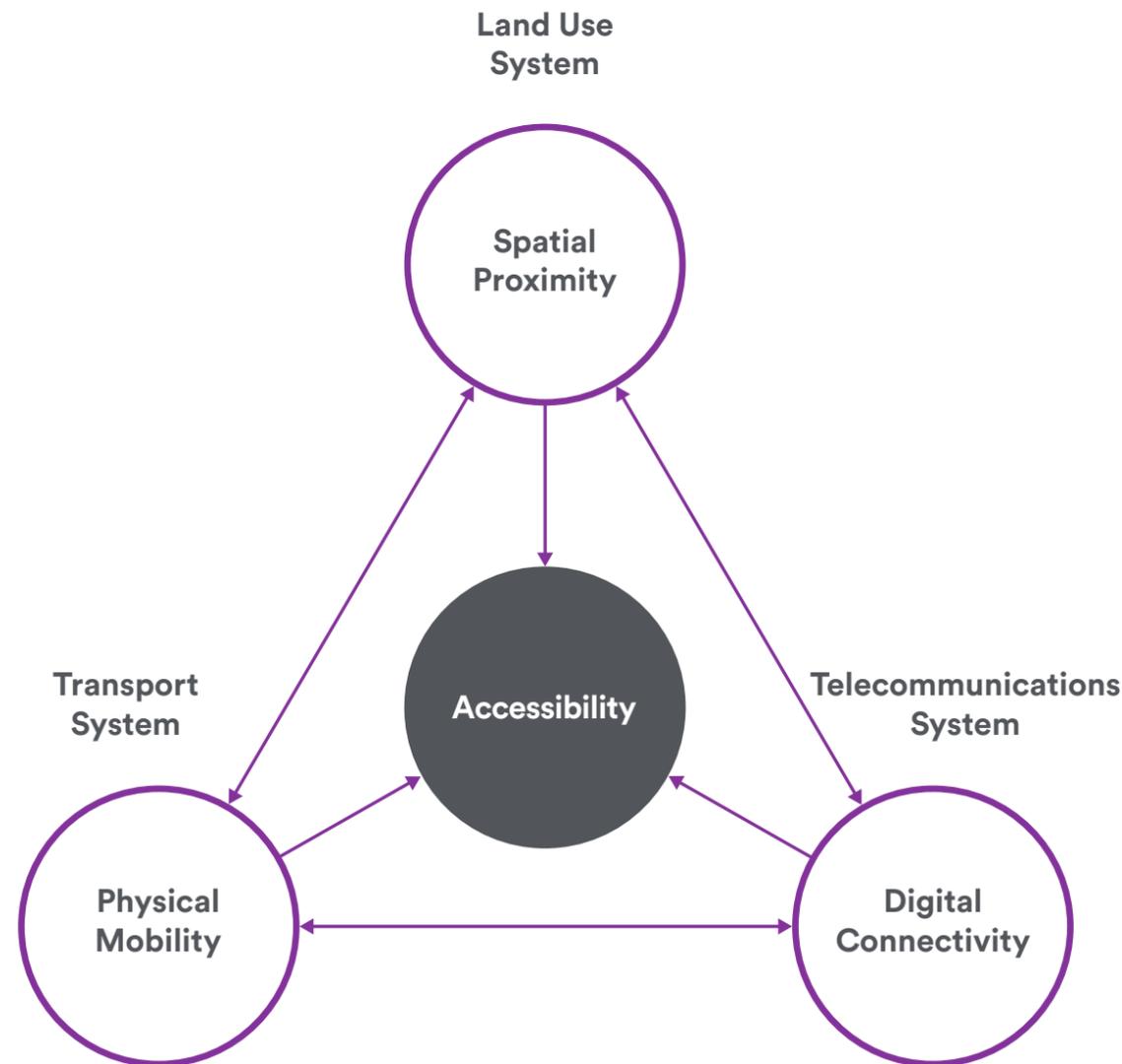

Source: Lyons, G. and Davidson, C. (2016). Guidance for transport planning and policymaking in the face of an uncertain future. Transportation Research Part A: Policy and Practice, 88, 104-116.

More sustainable modes

Typical energy flow through a petrol/diesel car
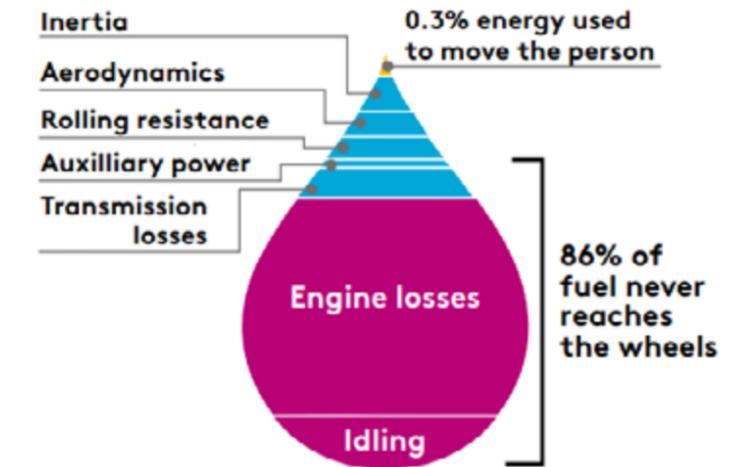
We have many options for travelling
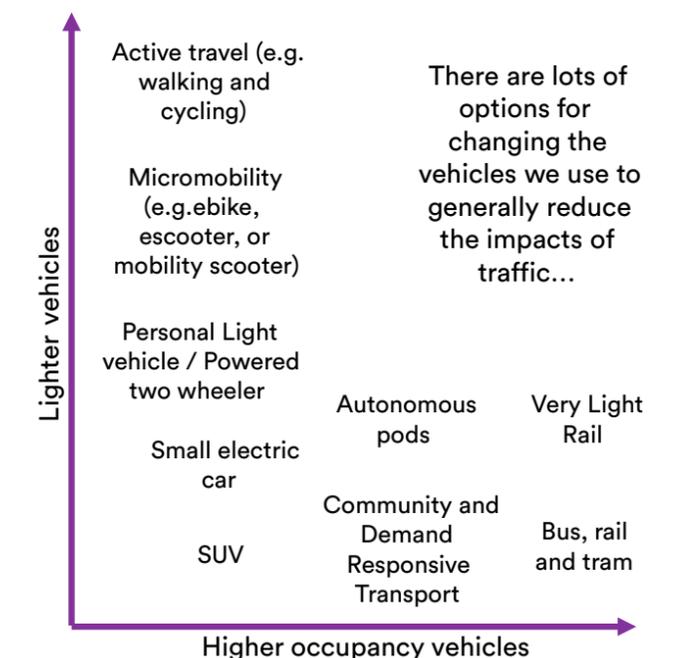
There isn't one recipe for success

Transport is different across the world and contributes uniquely to quality of life and prosperity in each places, both positively and negatively.

We have lots of options to consider but what works elsewhere might not necessarily translate well to the West Midlands; we need to find a new vision that works in our urban environment.

Ho Chi Minh City, Vietnam

Copenhagen, Denmark

Tokyo, Japan

Curitiba, Brazil
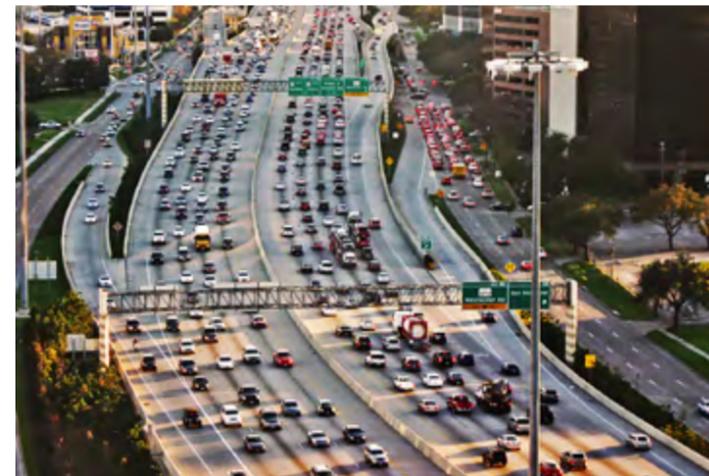
Houston, USA

Kampala, Uganda

Change over time

Avoid, Shift and Improve

"Avoid, shift, improve" provides a useful framework for considering the sorts of changes that we need to make.
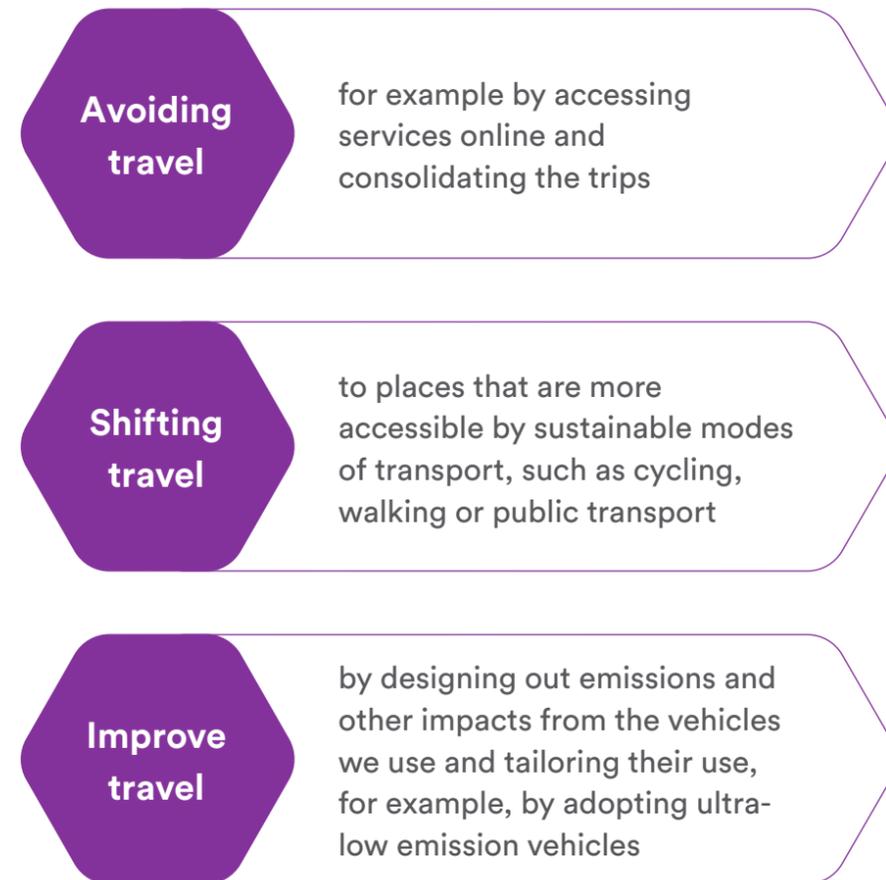
What could change before 2030?

We can progress actions that have an impact before 2030 to meet our commitments to decarbonise and deliver rapid transformative improvements to address the other Motives for Change. However, there will also be actions we could take now that will take time to build and will have transformative impacts beyond 2030.

And the long term?

Avoiding travel	for example by accessing services online and consolidating the trips

Avoiding travel	through digital connectivity

Avoiding travel	though land use changes to existing and future areas to put homes, work, services and amenities closer to each other

Shifting travel	to places that are more accessible by sustainable modes of transport, such as cycling, walking or public transport

Shifting travel	by consolidating how goods and services are delivered; shifting shorter journeys to walking and cycling and longer journeys to public transport (including demand responsive services) and supporting communication tools to make mode shift easier

Shifting travel	by redesigning streets and the public realm to encourage walking and cycling; by building new rail and rapid transport infrastructure to increase the journeys that could be made by public transport

Improve travel	by designing out emissions and other impacts from the vehicles we use and tailoring their use, for example, by adopting ultra-low emission vehicles

Improve travel	by using more efficient personal vehicles or micromobility when needed

Improve travel	by switching to Ultra Low Emission Vehicle techologies; and improving the efficiency and impacts of travel using connected and autonomous technologies

Change in different places

The places within our region are very different; what works in a modern estate with driveways and cul-de-sacs might not work in a terraced street with no off-street parking, and what makes sense in a city centre might not make sense in a village's high street.

There is not a "one size fits all" approach to tackling our transport issues. A range of solutions will need to be considered, and engagement with local communities and businesses will be an essential element of any new plans. However, These examples provide an illustration of how innovation may support change.

City and town centres

Vibrant centres which support a diversity of activities and people.

- Deliveries by cargo bike or small electric vehicles
- Public transport efficiently connects to the region
- Digital working spreads transport demand more evenly throughout the day
- Space for active travel prioritised
- Reduced traffic makes for quieter and safer environment

HOW?

- Building more homes near public transport
- Embrace changes in lifestyle and working patterns
- Resident testing of transport innovations
- Data sharing opens up more personalised transport services

Local high street

Designed for local activities.

- Street design prioritises accessibility regardless of age or ability, green space, walking and public seating
- Local shops and services, and co-working spaces reduce the need for longer journeys
- Street connectivity is supported by active and shared travel, including bike and scooter hire, car clubs and ride hailing all accessible via one app

HOW?

- A shift to public transport, walking and wheeling reduces traffic
- Explore local trips wherever possible
- Repurpose space for people instead of cars and parking
- Reserve parking for those who need it
- Co-locate deliveries with lockers and local bus/train stops
- Local shops deliver bulky or heavy shopping via cargo bike or small electric vehicles

Rural living

Connected and convenient.

- Sustainable travel brings convenience, health benefit, and reconnects people to nature
- Travel intensity is reduced by access to services online or nearby
- Active travel, taxis, and demand responsive transit provide cleaner and more agile local connections
- Rural mobility hubs host zero carbon community car hire and park and ride to quickly reach destinations
- Information is readily available to sustainably support lifestyle choices

HOW?

- Door delivery to reduce travel
- Charge points for electric bikes or scooters for longer journeys

Older urban neighbourhood

Social streets

- Streets are designed for people to connect, including safe spaces for children to play

- Online shopping is delivered by cargo bike or electric van.

- Bike lanes and public transport make it easy to travel further when necessary

- Car ownership reduces and shifts to electric vehicles, with positive impacts on mental and physical health, and frees up space for other activities

HOW?

- Car sharing, public transport and active travel replace owning a car for many

- Electric vehicles become the norm, with easy access to charge points

- Pedestrians are prioritised over other modes

Modern suburban neighbourhood

Safe for living working and playing.

- Attractiveness is enhanced with spaces designed for health, wellbeing and recreation

- Working and shopping from home frees up time for family, friends, and accessing local centres

- Community car clubs and less travel remove the need for car ownership

- Cost savings can be invested locally

HOW?

- Embrace sustainable travel

- A '20 minute neighbourhood' reduces the need for long journeys, improving air quality and safety

- Less traffic, quiet routes, and separated cycleways encourage active travel

Main road

Supporting a broad range of mobility choices.

- Walking, cycling, wheeling and public transport prioritised and connected to support personalised travel choices

- Quieter, cleaner and more accessible streets support more dynamic workplaces and leisure activities

- Vehicles able to communicate with each other improves safety

- Pot holes are detected and fixed before they appear

HOW?

- Shared and autonomous vehicles with WiFi complement buses and trams

- Remote working and efficient transport frees up space for walking and cycling

Making change happen

With the right mix of policies and measures, we can create an even better West Midlands. One that is fairer, greener, and healthier as well as a great place to live, work and visit.

The pace and scale of changes needed of our travel behaviour to decarbonise are unprecedented but offer us the opportunity to address many of our wider issues so that we can build back better from the COVID-19 pandemic in a way that delivers Inclusive Growth.

We are not proposing a specific plan of action within our Green Paper. It is through our conversations with the public using our Green Paper that we will identify actions to change in the way we govern and invest in our transport system to respond to our Motives for Change.

Through these conversations we will need to consider how travel behaviour, the way we govern our transport system and citizens and businesses experience of the transport system are interlinked.

If people want the West Midlands to meet the proposed objectives associated with our Motives for Change, this will involve people changing their behaviour - doing less of one thing and more of another.

Those who currently create the biggest harmful impacts will need to make the biggest changes. However, there is a real opportunity at the same time to level-up those who are less mobile while still reducing impacts of transport overall.

We can equitably redistribute transport impacts AND level up mobility of the most disadvantaged

Figure: Transport related impacts per person versus (Generally) increasing affluence and car use — Lowest quartile to Highest quartile; Current average impacts per person; Future average impacts per person.
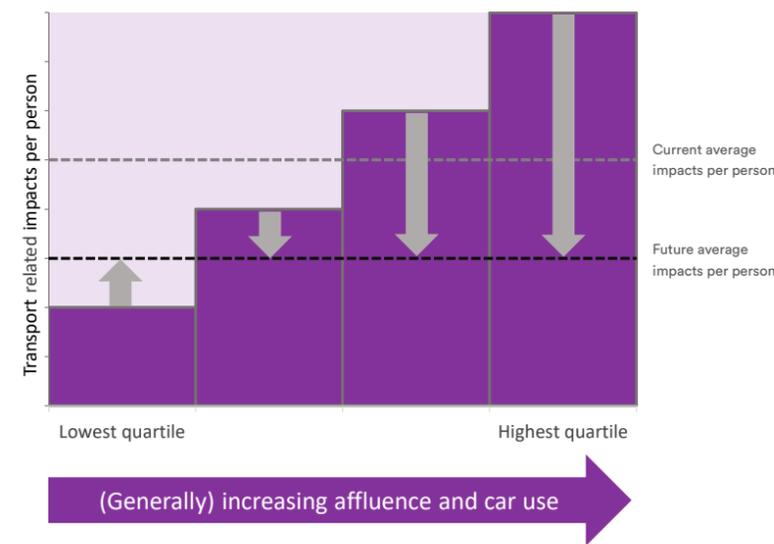
Impact of high level policy option testing (comparing modelled transport in 2036 to 2016)

Testing of policy options shows that whilst investment in and improvement of sustainable forms of transport will improve access to opportunities for those without cars, it is unlikely to have a significant impact on car travel if done on its own. Measures that in effect restrain car use would be required to shift behaviours in a way that significantly reduces car travel.

Scenario		Access for those without a car	Amount of car travel everywhere	Amount of car travel to/from centres
1.	Do minimum	-	▲▲	▲▲
2.	Significantly improve public transport	▲	▲▲	▲▲
3.	2 + enable micromobility	▲▲	▲▲	▲▲
4.	Restrain car access to centres only	-	▲▲	-
5.	Restrain car travel across the region	-	▼	▼▼
6.	5+2	▲	▼	▼▼
7.	5+3	▲▲	▼	▼▼

Symbol	Change relative to levels before the COVID-19 pandemic
-	Little/no change
▲ / ▼	Notable increase/decrease
▲▲ / ▼▼	Significant increase/decrease

Green indicates a change is good for the Motives for Change.

Red indicates a change is bad for the Motives for Change.

As car travel increases, the impacts of traffic increase (carbon, physical inactivity, air pollution, noise, road accidents, on-street parking).

As access without a car increases, this helps those who are less mobile access more opportunities but does not necessarily reduce car travel.

We know that our current approach of investing in the alternatives to the car is critical, but alone won't be sufficient to generate the level of behaviour change needed.

The challenge with improving alternatives such as public transport, walking and cycling, and micromobility, is that there is a limit to how much mobility, comfort, and convenience these can offer in contrast to the car today. This limits the extent to which people are likely to switch from cars to alternatives if the level of mobility that the car provides remains as it is today.

Without that switch, consumer spending on alternatives to the car will remain relatively low, which will reduce the extent to which those services and products can be improved.

Evidence suggests that to change behaviours without compromising what people can access, simultaneous measures would be required to:

- reduce barriers and costs to travel by the alternatives to the car; at the same time as

- restraining the use of cars using physical measures (such as allocating less space to cars), and regulatory measures (such as increasing the price of car use or restricting access to particular roads).

A conversation about change

Our Green Paper is starting our journey to develop a new Local Transport Plan for the West Midlands. Given the challenges we face, we will need to engage with the public and key stakeholders to shape its direction, particularly around difficult and complex decisions.

The Green Paper will be used to engage with four key groups using a range of techniques:

- **General public** – deliberative engagement and consultation

- **Private organisations** – targeted events with representative organisations

- **Transport service providers** – targeted events with key operators and public agencies

- **Transport and place policymakers and planners** – transport summit and ongoing co-development of LTP

Please visit https://www.tfwm.org.uk/who-we-are/our-strategy/green-paper-2021/ for further information about this green paper, including how to respond to it and engage.

Also, please visit https://www.mytfwmcommunity.co.uk/ if you want to register to be a part of our Market Research Online Community and have your say in a range of conversations about transport.

As part of the development of the new Local Transport Plan, we intend to develop a new framework for policy. The framework will cover both the form of the LTP (noting that the LTP can be set out in more than one document covering different aspects of policies and implementation plans) and how we are held to account on delivering it.

We intend to develop the new LTP in stages:

- An initial overarching vision, objectives and strategy, alongside an initial implementation and funding plan; and

- Supplementary system-wide and place-based policies, alongside detailed refinement of the implementation plan to reflect actions required.

The development of supplementary system-wide and place-based policies will enable more detailed policy making and planning and focussed engagement with partners. The development of system-based policies will allow us to develop policy with key delivery partners such as public authorities with relevant powers/duties and service providers.

The development of place-based policies in specific parts of the West Midlands will allow us to work with relevant local authorities to tackle specific challenges in these areas.

2021 Q1	Agreeing objectives and identifying options
2021 Q2	Assessing options and drafting Green Paper
2021 Q3	Drafting local transport plan
2021 Q4	Finalising local transport plan

Transport for
West Midlands