# TRANSPORT
## vision

Connecting people in
Sheffield and beyond

Sheffield

Sheffield
City Council
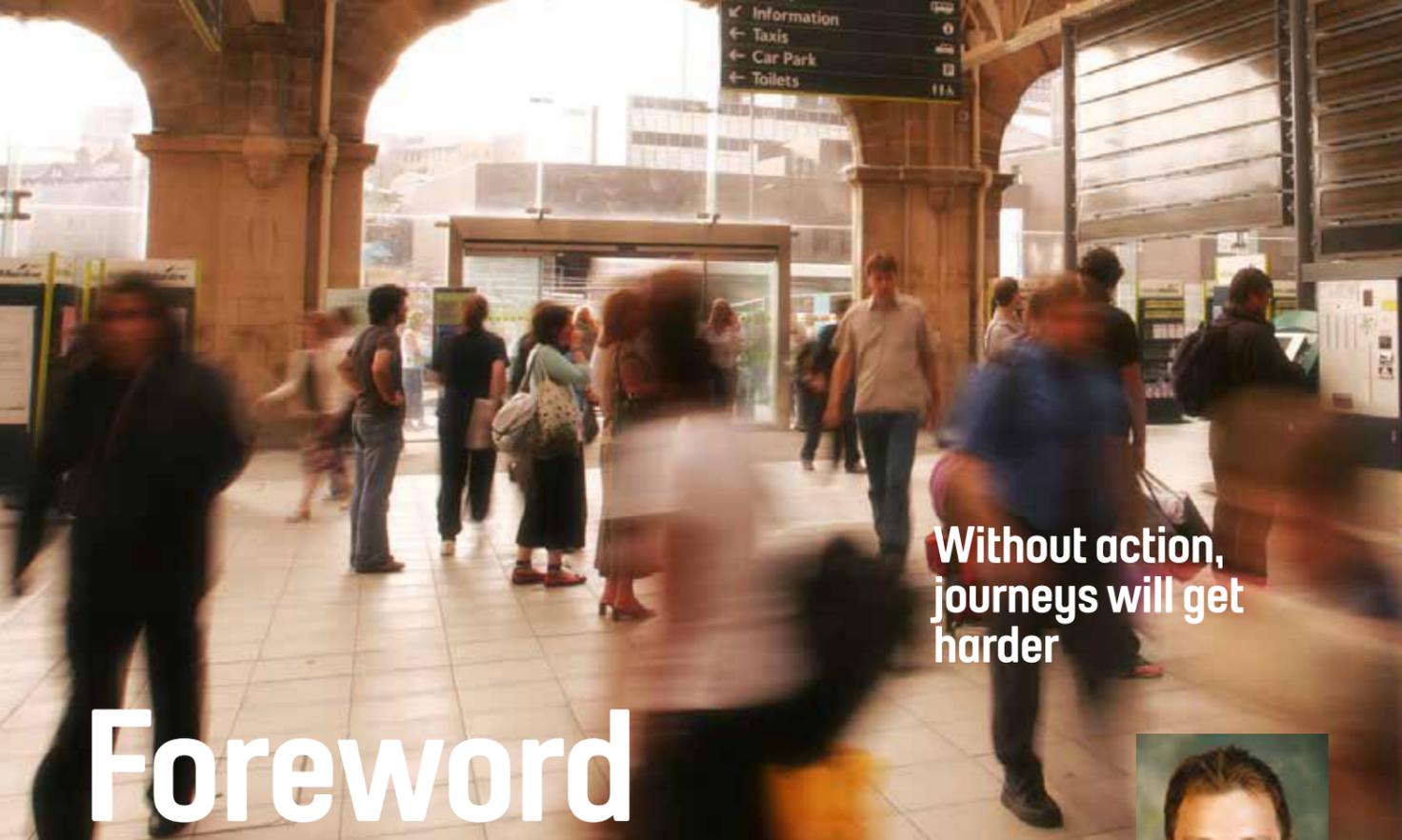
# Foreword

## Without action, journeys will get harder

**Councillor Jack Scott**
**Cabinet Member for Transport and Sustainability**

I am pleased to present our Sheffield Transport Vision. This is the first of two stages to present and consult on the way forward to connect people to places and the things they do in and around Sheffield. We aim to complete these two stages early in 2018 with the publication of the full Sheffield Transport Strategy.

We have a number of challenges to solve if we are to improve the quality of life, environment and range of opportunities for the people and businesses of Sheffield, and those who visit our city. We need to improve our economy and the range of opportunities for our residents whilst providing enough housing for the future. Even with better use of technology for communication, people and goods will still need to move around. It is important this movement is accommodated in the most sustainable and inclusive way, minimising any negative impacts and improving the user experience.

New investment is starting to reshape our city. Without a change in our approach these opportunities will be constrained by a lack of transport capacity and poor connectivity. Doing nothing is not an option. Without action, journeys will get harder, making the city

unattractive, unhealthy and potentially unsafe. People will be disadvantaged and their opportunities reduced.

We need to provide the ability for people to change their travel habits, engaging with them in a personal and meaningful way. This must be supported by easier and more flexible payment methods and a range of options depending on journey purposes, time of day and personal choice. This will also have to be accompanied by a different approach to managing demand in some areas, including the allocation and charging of road space and parking. Capacity will be increased, but to move more people and goods efficiently, not simply more vehicles.

We need to maximise the positive and reduce the negative impacts on people to facilitate inclusive growth in a fair city. We have to understand the impact that transport has on lifestyles, sometimes negative, from noise, air pollution and climate change, but often very positive in the way it opens up access to jobs, employment and health opportunities. We need to plan for, and be agile to, the changes that future technology may bring, even if we are not currently certain of what these might be.

Our vision for transport in Sheffield is shown below. The way we propose to deliver this vision is shown on the following pages and will be articulated in greater detail in the full Sheffield Transport Strategy. I look forward to working with you to deliver this Vision and the critical role transport plays in creating a safer, cleaner, and better quality of life in Sheffield over the coming years.

## OUR TRANSPORT VISION FOR THE CITY OF SHEFFIELD

**Imagine a Sheffield where everyone can access opportunities without transport or movement constraints. Residents, businesses and visitors in our thriving city can safely move themselves and their goods or products with confidence and without delay. The negative impacts of transport including air quality and noise are minimised, and safety and quality of life is improved in the city as a result.**

**Reliable and clean journeys for everyone in a flourishing Sheffield.**

## What does this document do?

This document is the first stage of the Sheffield Transport Strategy - our Transport Vision. It looks forward over the period to 2034 to understand what issues the city may face when considering the challenges of sustainable and inclusive growth. It will define the broad actions we will take to minimise the negative impacts of growth and to maximise the opportunities. It also sets out what we may need to do differently to realise our ambitions and how we will respond to changes in technology. Consultation will allow feedback to inform the development of the Sheffield Transport Vision before it is finally adopted.

Following this Vision, the full Sheffield Transport Strategy will explore the issues in more detail to set out how our broad actions will be more clearly defined and implemented in each area of the city. This will lead to an aspirational but deliverable plan of action, starting immediately, including how this will be funded.

**DRAFT TRANSPORT VISION** December 2017 → **CONSULTATION** January 2018 → **APPROVAL & ADOPTION** March 2018 → **DRAFT TRANSPORT STRATEGY CONSULTATION** April 2018 → **FINAL TRANSPORT STRATEGY** June 2018 → **LONGER TERM DELIVERY PROGRAMME** → **EARLY WIN SCHEMES**

## The Transport Vision in Context

Sheffield plays a leading role in the wider Sheffield City Region (SCR) and Northern Powerhouse. As such, it is important we draw from, and influence, wider evidence and policy.

At a local level, the city is developing a clearly defined plan of action to set out economic, housing and land use plans to meet our aspirations over the coming decades.
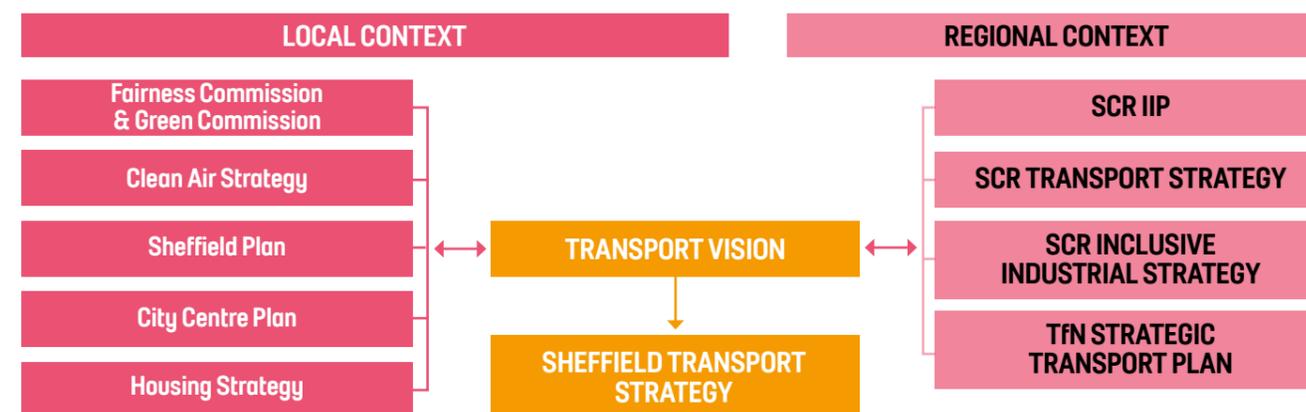
Our plans provide a powerful impetus to ensure that transport and connectivity can support wider objectives.

The SCR and Transport for the North also have an extensive evidence base which has informed their own infrastructure and investment plans. We will draw from their evidence and consultation feedback for the SCR Transport Strategy which will be developing in parallel and will present a clear plan for city region and wider transport connectivity.

Pan Northern alignment is important because of the scale of investment needed for some of our more significant plans including High Speed Rail and Trans Pennine connectivity. We will align with those plans to ensure Sheffield remains

a competitive city and we maximise the opportunities this alignment can offer.

We support the Northern Powerhouse concept which seeks to increase the critical mass of northern cities, with better connectivity being vital to increasing economic "agglomeration" (accumulated and connected) benefits. The Northern Powerhouse Independent Economic Review spells out the North's opportunity for growth on a mass scale (850,000 new jobs by 2050).

| LOCAL CONTEXT | | REGIONAL CONTEXT |
|---|---|---|
| Fairness Commission & Green Commission | | SCR IIP |
| Clean Air Strategy | | SCR TRANSPORT STRATEGY |
| Sheffield Plan | TRANSPORT VISION | SCR INCLUSIVE INDUSTRIAL STRATEGY |
| City Centre Plan | | TfN STRATEGIC TRANSPORT PLAN |
| Housing Strategy | SHEFFIELD TRANSPORT STRATEGY | |

# WE ARE SHEFFIELD

# Why do we need to change?

Sustainable modes (cycling, walking and public transport) should be seen as the first options for travel

Sheffield is already changing - the city's economy is getting stronger with new development including, for example, in the city centre and Advanced Manufacturing Innovation District. We have had some significant investment announcements including Boeing, McLaren, a city centre High Speed Rail station, and we know that many other businesses and investors are thinking about moving to Sheffield.

Despite these positive messages, the economic growth we have seen in Sheffield has not resulted in a less polluted and more equal city. More people are employed and skill levels are rising, but too many people are still missing out on employment and other opportunities. **We need to find a way of evolving as a city whilst improving the environment and quality of life for our citizens. Transport has a key role in enabling this, but it is people that will make it happen.**

We need to achieve the right mix of transport options, or issues including traffic congestion, air pollution, a lack of opportunity and businesses that become inefficient will only be exacerbated. On a wider scale, transport can have a detrimental impact on longer term climate change. Without action, and a change in approach, these problems are only going to become worse and investors may no longer look to Sheffield. **With wise investment, we can unlock a far greater potential improving the quality of life for our residents and visitors alike.**

**Doing nothing is not an option.** We already have a number of issues to face. Capacity on the motorway network and junctions with the local network exceed their design capacity, leading to Highways England raising objections where they have concerns about developments impacting on the motorway network. In addition, Sheffield is in breach of EU Air Quality Limit Values and a key contributor is road traffic.

**AS ACTIVITY ACROSS THE CITY CENTRE INCREASES, FURTHER PROBLEMS WOULD BE EXPERIENCED QUITE QUICKLY. FOR EXAMPLE, AS SOON AS 2024:**

ONE THIRD LONGER TRIPS

RESULTING IN FEWER PEOPLE TALKING THE BUS AND POTENTIALLY A CUT TO SERVICES ( A CIRCLE OF DECLINE)

BUS SERVICES REDUCTION?

MANY AREAS OF THE CITY COULD BECOME UNPLEASANT TO LIVE, WORK OR PLAY IN AS A RESULT OF CONGESTION AND POOR AIR QUALITY. THE COST OF MOVING GOODS AROUND THE CITY WOULD INCREASE.

TRAVELLING ON THE INNER RING ROAD IN PEAK HOURS MAY TAKE **20% LONGER**

MOST JUNCTIONS ON THE INNER RING ROAD, AND OUTSIDE THE RING ROAD, WOULD BE OVERWHELMED BY TRAFFIC, MAKING GRIDLOCK EVENTS ALMOST ROUTINE AND VARIABILITY MUCH GREATER. THE WORKING DAY FOR MANY PEOPLE WOULD BE EXTENDED AS A RESULT OF LONGER COMMUTING TIMES.

## What do we want to achieve for Sheffield?

Our Fairness and Green Commissions have laid a framework for the kind of city we want to be. They provide context and perspective from the City Council about the future of the city, our values, our assets and opportunities. The decisions we will make over the coming years will be grounded in our political values in order to create a city that is economically productive, socially inclusive and sustainable. Supporting this, a number of other key documents form our Evidence Base, providing the case for change, and indicating which transport interventions are likely to provide the greatest impact and the best return on our investment in order to achieve success.

For there to be 'transport for all' we need an integrated, affordable and high quality public transport system that provides good access for young people, and a reduction in the isolation experienced by people who are unable to use public transport.

MORE NEW, GROWING AND PRODUCTIVE BUSINESSES

MORE AND BETTER QUALITY JOBS

MORE SHEFFIELD RESIDENTS EARNING MORE WITH THE EDUCATION, SKILLS AND HEALTH TO GET ON

A HOUSING MARKET THAT PRIVIDES QUALITY, CHOICE AND AFFORDABILITY ACROSS THE CITY

PHYSICAL, DIGITAL AND ENVIRONMENTAL INFRASTRUCTURE TO DRIVE GROWTH AND JOBS

A CITY CENTRE THAT IS THE BUSINESS AND CULTURAL CENTRE FOR THE URBAN AREA

Sustainable modes (cycling, walking and public transport) should be seen as the first option for travel.

Looking at a wider perspective, rebalancing Britain's economy away from London and south east England is one of the main challenges facing the UK - hence Transport for the North's (TfN) aim to improve rail journey times, not just with the capital but also with other northern England cities. Northern Powerhouse Rail (NPR) seeks to deliver 30 minute journey times from Sheffield city centre to Leeds and Manchester city centres, and to Manchester International Airport. The NPR network also includes Liverpool, Hull and Newcastle.

Freight and distribution is important to an intensified urban centre and retail offer. Without efficient freight movement, business in the city will suffer. There will be a need to minimise the impact of local deliveries and consolidation will become more important at a business and personal level.

Also important will be improving connections and reducing journey times to Doncaster Sheffield Airport. Journeys to Liverpool and Hull for sea

## It is important that our plans include all sections of the community

## We want to enable 25,000 new jobs over the next twenty years

## A 'connected city' has excellent digital and physical connectivity, with safe, efficient and sustainable transport

links to Ireland and continental Europe are also significant as part of a wider trans-northern England network:  Existing journey patterns within the Sheffield City Region will continue to be of importance.  As a gateway between the North of England and the East Midlands, connectivity between Sheffield, Nottingham, Derby and Lincoln will remain critical.

### Sheffield People

Sheffield is a major and growing city. It has a population of around 570,000 people, an increase of 8% since 2005, which is projected to reach 633,200 by 2037; growth of a further 11%. The demographics of the population are changing too.  For example, projections suggest a 45% increase in population over the age of 65 by 2037, which in itself may lead to new travel behaviours and needs. We have a large student population of around 50,000 and their needs and expectations must be balanced against those of longer term residents.

Sheffield is very diverse, both in terms of its people and places. From the parks of Norton to the industry of Brightside, from the housing estates in Southey Green to the villages of Bradfield, from the leisure facilities at Meadowhall to the job opportunities at Sheffield Business Park. It is important that our plans include all sections of the community, including those who come to work and stay in our city from elsewhere. It is also important that we connect people to opportunities, and to each other, in order for them to become more successful and to have a good quality of life. The availability and cost of transport can often be a constraint, reducing the potential contribution that people can make in a city. A full Equality Impact Assessment will be carried out on our Transport Strategy as it develops, to ensure our fairness objectives are achieved.

### Sheffield Places and Communities

We are developing our Local Plan (the Sheffield Plan), identifying key challenges and opportunities which the city faces up to 2034.  We want to enable 2,500 new jobs per year to be created over the

next 20 years. Sheffield needs around 2,150 new homes per year to support forecast population growth and realise this increased economic activity. The Sheffield Plan will establish the planning framework to stimulate and shape the city's evolution, adding development capacity with transport policies that support this.

The draft Sheffield Plan vision is that **'In 2034 the city will have thriving neighbourhoods and communities, be globally successful, with a distinct urban and rural identity underpinned by a strong and sustainable economy'.** One of the aims in support of this vision is for a 'connected city' which has excellent digital and physical connectivity, with safe, efficient and sustainable transport.

The nature of development in Sheffield will be distinct from other districts.  The city has a built-up urban area, framed by the large area which falls within the Green Belt or Peak District National Park.  This will influence, and in some areas even constrain, opportunities for expansion.  To achieve the levels of growth required by our economy a different approach will be required to

maximise the opportunities the city can offer. For example, the city centre population has increased from less than 3,000 to 27,000 in the last two decades. This urban intensification changes the nature of demand for travel considerably (and the modes or types of travel used), often in a positive way.

The recent Government confirmation that High Speed Rail will serve the city centre (at the existing Sheffield Station) opens up possibilities for associated development, particularly in the city centre, driving wider jobs growth and higher employment density. **We must maximise access to the city centre and Rail Station from all areas of the city with an efficient and effective transport networ**k, which in turn will enable connectivity to markets and suppliers and improve direct fast connectivity to London.
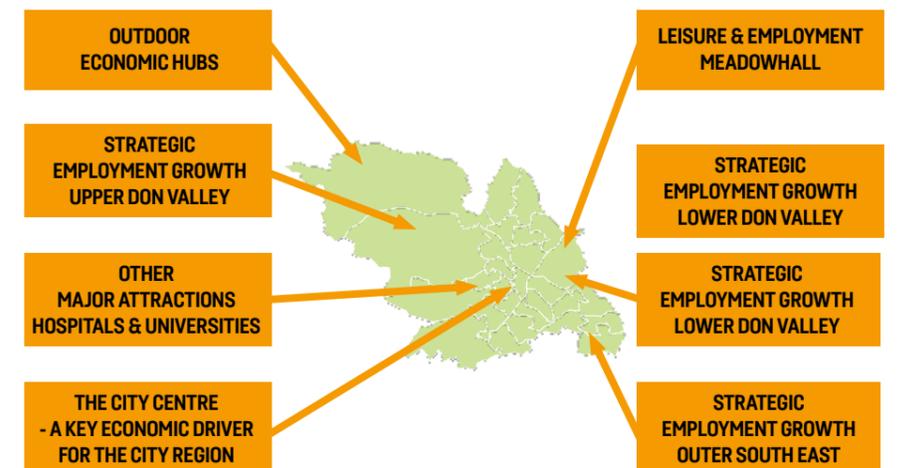
Sheffield's distinctive setting and expansive green spaces combine with its cultural and leisure offer to make it a magnet for tourism. International students and visitor numbers are vital to this expanding market. Getting transport right is important to ensure the city is accessible and well connected,

and  helps make Sheffield a vibrant and attractive destination. It is also vital for attracting investment, and supporting and growing the city's retail, leisure and cultural offer.

### Activity in and around Sheffield

Sheffield is a key driver of the City Region economy. There is significant

travel into the city from across the city region, for work, for study (particularly the universities), for health (hospitals) and for leisure. Around 60,000 people already commute into Sheffield on a daily basis for work, with more than one third of these from neighbouring Rotherham. Key destinations and areas expected for further growth are shown on the map below:

OUTDOOR ECONOMIC HUBS

STRATEGIC EMPLOYMENT GROWTH UPPER DON VALLEY

OTHER MAJOR ATTRACTIONS HOSPITALS & UNIVERSITIES

THE CITY CENTRE - A KEY ECONOMIC DRIVER FOR THE CITY REGION

LEISURE & EMPLOYMENT MEADOWHALL

STRATEGIC EMPLOYMENT GROWTH LOWER DON VALLEY

STRATEGIC EMPLOYMENT GROWTH LOWER DON VALLEY

STRATEGIC EMPLOYMENT GROWTH OUTER SOUTH EAST

**JOURNEY TO WORK TRIPS** WITHIN SHEFFIELD DISTRICT

**SHEFFIELD** NET IMPORTER OF JOBS

Cars take up more space on the road per person than public transport and cycles

A healthy population will have a greater level of participation and productivity

Currently, 28% of all trips to work with a destination in Sheffield come from outside the district; and 22% of all trips to work starting in Sheffield go outside the district. This suggests that although about 75% of journey to work trips are within the Sheffield District, inward and outward commuting is significant and Sheffield is a net importer of jobs.

An increase in the number of jobs and houses will increase the demand for travel and movement particularly for those key locations shown on the map on the previous page. In addition, the impact of City Region and Northern Powerhouse interactions is likely to lead to greater movement between areas as travel barriers are reduced.

Cars take up more space on the road per person than public transport, which will lead to increased congestion, more delays and greater travel costs if we leave the transport network as it is. Traffic growth figures are predicated on the car and its ownership patterns being the case. As shared and autonomous vehicles start to become more likely, and the pattern of freight and logistics activity evolves, we must remain agile to the changes this will bring, and the different solutions that may be necessary.

There will of course be other 'day to day' activities we will continue to deliver - such as maintaining and improving the transport network through specific partnership initiatives, our winter maintenance regime and planning for major events to minimise any negative impacts of additional traffic.

### A Healthy and Inclusive Sheffield

It is important that people in Sheffield who live longer should also remain physically and mentally healthy for longer. Recent reports by the Director of Public Health explain that currently in Sheffield unfortunately this is not the case.

There remains a significant difference between the health of people living in the most and least deprived communities. Furthermore, estimates state that around 20% of deaths per year in Sheffield could be prevented, with direct causes including factors such as obesity, lack of physical activity, and environmental threats such as pollution from traffic. **Reduced traffic concentrations and lower or zero emission vehicles (at the point of use) would improve Sheffield's air quality. Increased access to opportunities through better transport connectivity would also improve the prospects of those who are most deprived.**

Aside from the starkness of these statistics, the report reminds us that there is also a considerable economic consequence of premature deaths and preventable physical and mental illness. This extends further than the pure cost of treatment and care, such as the costs associated with loss of productivity. A healthy population will have a greater level of participation and productivity.

One of the challenges we face therefore, is to find ways of capturing the health benefits gained from investment in transport schemes as well as economic outcomes. For example, increased walking and cycling would support healthier lifestyles. Public transport trips include a walk at either end. Easy access to services can help reduce anxiety, promote attendance at appointments and improve wellbeing.
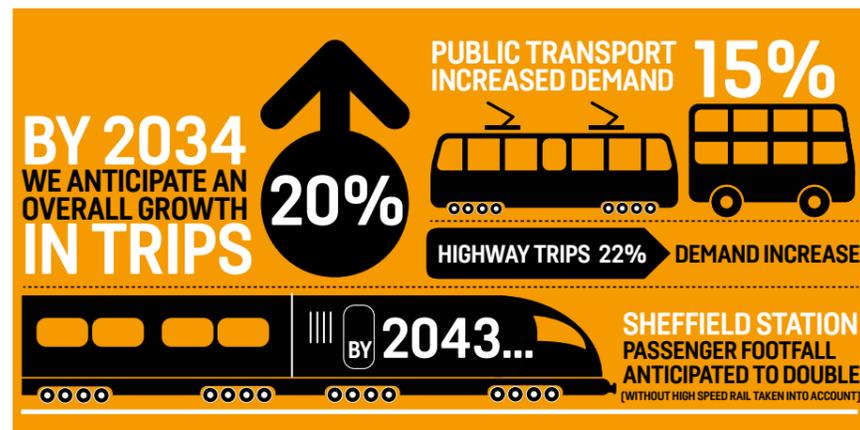
Sheffield has been identified by the Government in its newly-released UK Air Quality Plan as an area in exceedance for Nitrogen Dioxide (NO2) gas. This means **we will need to tackle vehicle emissions in order to become compliant with the European health based limits for this air pollutant in the 'shortest possible time'.**

At this time, the Government is not prescribing the way in which we must reduce vehicle emissions. The type of measures that we may have to introduce in Sheffield, in order to improve air quality in the 'shortest possible time', will need to be considered through a Local Feasibility Study, funded by the Government.

In March this year, the Council approved its Growing Sustainably report. This committed the Council to develop a gap analysis for each of the proposed five priority themes, one of which was Air Quality, in order to identify Sheffield's strengths and opportunities for the city which would then form a detailed action plan.

Air Quality issues are so important that we are currently developing a separate Sheffield Clean Air Strategy (CAS) which will acknowledge the National Air Quality Plan and reference the recommendations from the DEFRA funded 2013 Sheffield Low Emission Zone Feasibility Study. This indicated that in the short term, diesel vehicles and in particular Buses, Taxis and Goods Vehicles need to be retrofitted or replaced to achieve a minimum of Euro VI standard, and in the longer term we need a shift away from diesel fuel to alternative low emission fuels such as electric, gas / biogas or hydrogen.

Our **Clean Air Strategy** will be directly aligned with work on the Transport Strategy. Once the Sheffield Clean Air Strategy is endorsed we will then be seeking to update our Air Quality Action Plan (AQAP) to reflect this.

**BY 2034** WE ANTICIPATE AN OVERALL GROWTH **IN TRIPS**

**20%**

PUBLIC TRANSPORT INCREASED DEMAND **15%**

HIGHWAY TRIPS **22%** DEMAND INCREASE

BY **2043...**

**SHEFFIELD STATION** PASSENGER FOOTFALL ANTICIPATED TO DOUBLE [WITHOUT HIGH SPEED RAIL TAKEN INTO ACCOUNT]

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## Sheffield needs to be future ready

### Climate Change

Research by The Centre for Low Carbon Futures, which includes the University of Sheffield, has sought to identify the most effective and efficient way to decarbonise a city. The report highlights opportunities to reduce both energy bills and carbon footprints. The work highlights the potential contribution that transport can make in this respect. There are two main themes; modal shift to reduce the impact of private car travel; and the decarbonisation of existing vehicles through the adoption of alternative methods of propulsion (e.g. hybrid, electric or CNG).

There are benefits beyond the actual cost savings that would be delivered through the adoption of identified measures, including increased local employment, and the obvious benefits of the carbon reduction itself. It is estimated that the cost of investment in transport measures would achieve payback within 6.5 years making sound business sense.

The list of possible measures was extensive, but the best performing measures to reduce carbon emissions included Park & Ride schemes, smarter travel choices, cycling and demand management as well as investment in more fuel efficient and hybrid vehicles. This research will be integrated into our emerging evidence base and analysed further in the formation of the full Sheffield Transport Strategy.

As well as reducing any negative impact of transport, it will also be important to ensure that we develop our future transport infrastructure to be resilient to climate change. In recognition of scale of the challenge, the Council are developing a Green City Strategy which will identify the priorities to ensure that the city mitigates its impact on the climate as well as how we can increase our resilience and adapt to the expected impacts associated with climate change.

### Provision for the Future

Sheffield needs to be future ready. The difficulty with planning for the future is that we can rarely predict with certainty, particularly when looking nearly 20 years ahead. Our approach will be to remain agile to change when planning our investment. Implementation 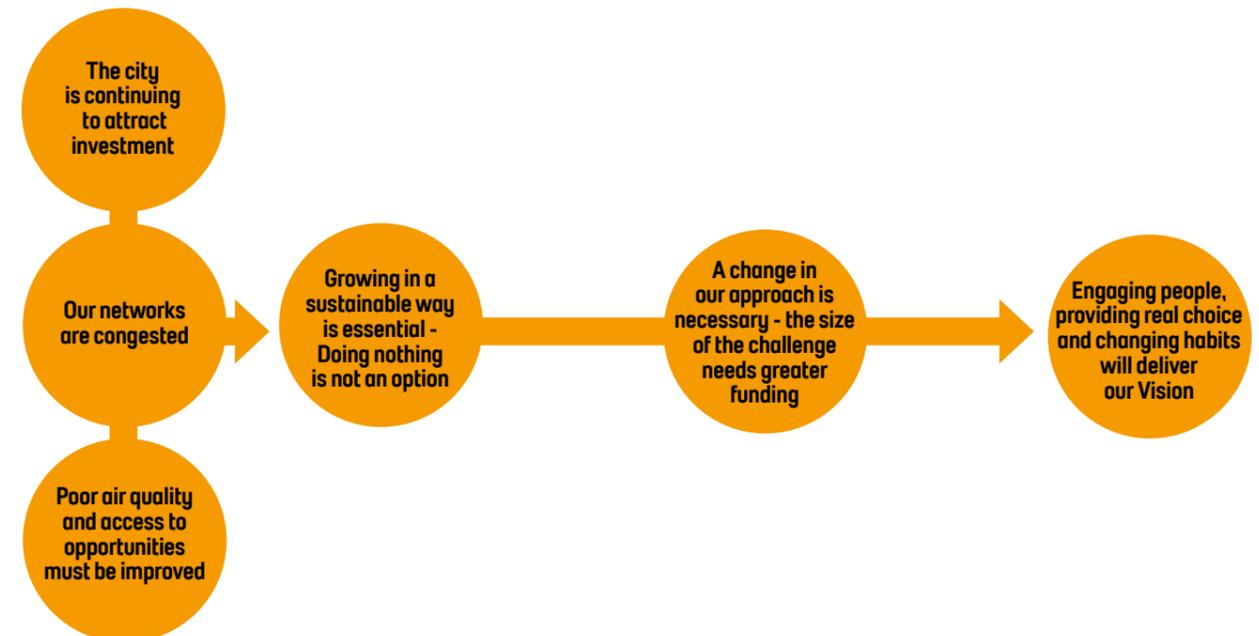Plans will be fixed in the short term to give certainty of delivery, but in the medium and longer term we will ensure that the most effective solutions available at the time can be chosen.

The role of digital technology is changing the way people interact, shop, travel and work – and particularly the way they pay for services in a more flexible way. Greater choice is expected, tailored to more personal requirements and we must ensure this is incorporated in our thinking as far as possible. **The way people and businesses consume goods is changing rapidly, including the growth in a 'click and collect' culture, which is changing the way deliveries are made to stores and households on a far more regular basis and with smaller vehicles.**

The potential for autonomous and more 'connected' vehicles will also present a far greater range of challenges and opportunities in the future which cannot be reliably predicted now. Sheffield is open to innovation but on terms that meets the city's outcomes and aspirations.

We must also be mindful of the possible impact of large scale maintenance or infrastructure projects. The planning and phasing of our programmes will take this into account, in order to avoid conflict between schemes, to minimise the impact of necessary works and to maximise the potential of bringing schemes together if they have complementary outcomes.

The city is continuing to attract investment

Our networks are congested

Poor air quality and access to opportunities must be improved

Growing in a sustainable way is essential - Doing nothing is not an option

A change in our approach is necessary - the size of the challenge needs greater funding

Engaging people, providing real choice and changing habits will deliver our Vision

# Our Aims and Objectives

Taking the expected trends and evidence into account, alongside the aspirations of the city, a number of clearly defined aims and objectives have been established.

Supporting these Aims, a number of contributory Objectives have also been established which will inform the prioritisation of investment. These will be quantified in the full Sheffield Transport Strategy.

**To underpin sustainable growth and a city that is open for business, Sheffield's transport system will deliver the connectivity to support a thriving city:**

- Provide the accessibility, capacity and connectivity to the wider city region, to other cities and to ports and airports to support economic growth, prioritised to meet the needs of business and in particular the key growth sectors, to exploit improvements in regional road and rail connectivity.

- Improve the attractiveness, reputation and resilience of the city as a location for investment and living by supporting and enhancing the unique identity and the quality of the cityscape and the city's transport system.

## Our Aim is that, by 2034, Sheffield's transport system will

**Underpin sustainable economic growth and a city that is open for business**

**Support and enhance the health, wellbeing and quality of life for its residents and visitors**

**Be inclusive and open up the city's opportunities to all**

- Address barriers to participation in the economy of the city, in particular improving access to jobs, training and services.

- Provide good access to residents and visitors to the city's events, cultural offering and outdoor spaces, in particular in the city centre, supporting expansion of the cultural and evening economy and also to outdoor spaces including the Peak District National Park.

- Be agile to technology change to capitalise on opportunities to realise Sheffield's city vision.

**To support and enhance the health, wellbeing and quality of life for its residents and visitors, our strategy for the transport system will strive to contribute to the creation of residential, civic, leisure and green spaces that are safe, accessible, attractive, healthy and inclusive:**

- Improve health, well-being and opportunity for the city's most disadvantaged by providing interventions that improve access to services and opportunities for those sectors of the community.

- Safeguard and create neighbourhoods, streets and places that people enjoy being in and that are conducive to active travel.

- Improve local air quality across the city and reducing the contribution towards, and negative impacts of, climate change.

**To be inclusive and open up the city's opportunities to all, our transport system shall live up to the city's aspiration to be the fairest in the UK:**

- Enable access to social and economic opportunities to improve people's lives, reduce barriers to participation and to support economic growth through improved productivity, across the city and beyond.

- Be safe and accessible for all, addressing, amongst other things, road and personal safety, air quality and incorporating measures to improve the service provided to those with characteristics protected under the Equality Act (2010).

# Approaches
# A Significant Change

**We cannot simply accept growth in private car trips**

**Some routes will have greater road space allocated to public transport and cycles**

**To achieve economic growth in a sustainable way, we will need to change how we enable and manage movement around the city.** Some of this will come from reducing the need to travel (for example - through the use of technology to access services, the role of technology in the way transport is provided, or by better location of housing and employment). But the remaining success will have to come from changing how travel is made. We cannot simply accept growth in private car trips as this is unsustainable.

We know new development will produce additional demand for travel. We can meet this demand by engaging people to embrace changes to their travel and:

**INCREASE THE USE OF PUBLIC TRANSPORT, CYCLING AND WALKING: A MORE EFFICIENT USE OF ROAD SPACE**

**REDUCE THE NUMBER OF EXISTING TRIPS: AND**

**CHANGE HOW WE ACCOMMODATE NECESSARY CAR TRIPS**

## Transport Network Review

We need networks (services, roads, rail, and paths) that allow people to change their travel habits.

In getting the most out of our transport network, we will have to consider significant changes - a different approach. Currently in many areas we try to fit all road users in the same space (cars, pedestrians, taxis, cyclists, goods vehicles, buses, trams, etc.). This often leads to a network that doesn't provide the most efficient or effective solution.

We will use a range of policies and schemes to create a transport network that has greater network coherence. The strategy will clarify how capacity and efficiency of movement will be improved and how travel behaviours will be influenced. We will decide this using a range of evidence including known current issues, future traffic flows and vehicle types, the impact of technology, development proposals, design criteria, and business and community needs.

In practice this will mean that certain routes will have greater road space allocated to public transport, some will have more space (or segregated space) for cycles. Key corridors for private car trips will have fewer constraints.

Provisions for pedestrians and cyclists would respond to the level of danger posed by the motorised traffic using the street, so as to provide a city which is accessible by foot and by bicycle. For example, in the city centre plan this could be illustrated by the different approach taken on the Inner Ring Road, Norfolk Street, Pinstone Street and Fargate.

**INNER RING ROAD** — Through traffic

**NORFOLK STREET** — Local traffic

**PINSTONE STREET** — Public transport & local traffic

**FARGATE** — Pedestrians

## Sustainable Modes

We must provide **better and more effective choice** to enable Sheffield people and visitors to the city to use sustainable modes whenever they can, rather than having to plan or pay for their journey in advance. Different choices will serve different journey purposes, and different solutions will work in different areas of the city.

We will encourage and enable **better integration** so that stages of the journey link well. This includes physical and digital networks through the provision of improved infrastructure and the way the various services link together, but also the virtual networks that exist through information provision and how services are paid for. For example, imagine a shared Mobility Account, where you use your contactless card to pay for whichever service is most appropriate for your journey, knowing that choosing a single fare on public transport or changing modes won't result in paying a premium. This provides real choice at the point of a travel decision.

A key aspect of making travel easier is **helping users to understand the choices** available to them. This can also help in 'pushing' people towards a certain route choice, mode or method of payment, if it is seen to be their best choice.

We will achieve the changes described above through a number of possible approaches. This includes prioritisation of sustainable modes (public transport, cycling and walking) on roads where large flows of people can be moved by these modes. For example bus services would only stop to pick up and set down passengers, rather than also being held up at traffic signals, speeding up journeys.

We will make better use of technology to maximise available capacity within existing infrastructure, making best use of what we have. Examples of this will include responsive traffic signals to keep traffic moving, wider availability of 'real time' travel information and the use of flexible public transport services when demand is lower.

We continue to work in partnership with SYPTE and operators to make the bus a more attractive choice – delivering improved journey time reliability and bus speeds on our network to encourage people to switch from car to bus.

Should our partnership arrangements with bus operators not deliver on our wider bus service ambitions we will, if necessary, lobby the Sheffield City Region Mayor (to be elected in 2018) to review the way bus services are delivered. This would consider whether other operating models available to the Mayor, including Enhanced Partnerships and Franchising, would lead to better outcomes, including those for Air Quality.

## Our Options for changing travel

### Road Classifications
- Identification of street hierarchies and types
- Streamlined, clearly defined routes that connect to key destinations, trunk roads and motorways
- Area or corridor based network changes to improve traffic management and increase uptake in sustainable modes
- Specific solutions for the City Centre - supporting the delivery of the City Centre Plan and allowing effective deliveries

### Demand Management
- Alternatives such as Park & Ride to reduce car trip distances
- Road space re-allocation to increase capacity and move more people and goods
- Effective management of parking including the possible use of Red Routes and a Workplace Parking Levy
- A high degree of public transport priority to move smoothly through junctions and other pinch points
- Consideration of Road or Area User Charging to influence demand and release funding
- Align demand management methods to deliver benefits for other priorities (e.g. Clean Air Zone & Climate Change)

### Future Technology
- More flexible payment methods based on Smart technology (cashless)
- Combined travel payment methods to reduce the penalty of changing mode or service
- Integrated travel and communications applications to increase choice
- Monitor the progression of new vehicle and fuel types to identify their possible contribution
- Consider the infrastructure required for disruptive technologies including autonomous vehicles should these become adopted

### Integration
- Better alignment of modes with clearly defined interchange hubs
- Timeables and frequencies that make moving through the network by more than one mode easier - linked to flexible payments
- Core routes that have the most frequent bus and tram services. For those travelling beyond, integration with a network of accessible, high quality feeder bus, taxi and demand response services
- Management of deliveries - including the consideration of consolidation centres or combined procurement
- If necessary, consider other bus operating models available including Enhanced Partnerships and Franchising

### Mass Transit (Bus and Tram)
- Secure the existing Tram and Tram Train network, by improving the quality of infrastructure and rolling stock
- Examine key constraints on the network in order to provide additional capacity to allow expansion
- Prepare robust business cases for extensions to the existing network by Tram or Tram Train - Examples may include Waverley, Stocksbridge/Claywheels and Hallamshire/Endcliffe
- Consider use of other mass transit modes (e.g. Bus Rapid Transit) either as an early introduction, or where demand does not justify tram

### Rail
- Improvement of rail journey times, particularly on Midland Mainline and Liverpool - Norwich services
- Progression of identified infrastructure schemes including electrification, and Northern Hub Hope Valley
- Planning the future of Sheffield Station to become ready for HS2 and NPR services
- Additional stops on services passing through Dronfield and Dore & Totley Stations
- Frequency uplifts on local rail services and increased capacity at station car parks to promote Park & Ride
- Establish the busiiness case for new local rail stations, including Waverley

### Active Travel - Hearts & Minds
- Segregated cycle routes, separated from traffic depending on the speed, volume and type of that traffic
- A dense local network of instinctive routes designed for short trips, including to public transport hubs, schools, other community facilities and workplaces
- Pedestrians will continue to have access across the whole network. We will design our streets to enable people whose mobility may be impaired to travel easily
- Ensure positive messages for young people and at key life decision points helps to promote sustainable travel
- Provide a range of supporting training, education and promotion activity to encourage the use of active modes
- Support the introduction of a dockless cycle hire scheme in the city

### Funding
- Explore funding opportunities that can be generated from within the city, such as WPL, providing these fit with our wider policy objectives
- Continue to actively participate in funding opportunities from central government to enable our priorities to be delivered
- Maintain a strong pipeline of schemes through devolved investment funds to ensure our identified schemes are in a state of readiness to allow applications to be made efficiently
- Identify and pursue additional funding opportunities linked to Infrastructure, Housing, Environmental or Social Funds

## Conditional Outputs - How we will measure success

We need to be able to ensure that tensions between competing aims can be addressed, to enable projects to be prioritised, and to test the effectiveness of interventions. For this a more defined sense of what we are aiming for is required.

To address this need, we have identified a number of indicators against which we can measure performance. These are 'stretch' targets to aspire to as far as is affordable and cost effective, whilst still being realistic. These support directly or indirectly the wider aspirations for the city as a whole, be it regeneration, supporting economic growth or improving health outcomes.

These indicators are summarised below and will be detailed in the main Transport Strategy:

- By 2034 increase the number of people within 60 minutes of main employment centres by any mode by 10%.

- By 2034 significantly increase the number of people within 30 minutes by public transport of main employment centres.

- Meet and surpass statutory air quality limit values – initially by reducing the maximum measured concentrations of Nitrogen Dioxide (NO2) at monitored locations to 40 ug/m3 annual mean

- To comply with Climate Change Act requirements (and contribute towards any city-wide carbon emission reduction target - to be defined for transport by other work

- Improve road and personal safety and public perception of these – Reducing the numbers of people killed or seriously injured on Sheffield's roads in line with national trends and improving the Key Benchmark Indicator (KBI) for Safety on Roads from 61% to 66% by 2034.

- To maintain the proportion of movements into and around the city centre made on foot and quadruple the share of movements by bicycle by 2034 from 2016 levels

## Our options for changing travel

At this stage, we have identified a number of possible approaches that we believe will have a positive impact on the aims and objectives we have set. This range of policies, initiatives and project types that may be deployed is illustrated on page 16 and it is important to stress that this deployment will be flexible to ensure they are appropriate for each area of the city.

Our implementation programme will be an integral part of the full Sheffield Transport Strategy identifying, with the help of public consultation during this stage, where transport investment is most needed in the short, medium and long term to support economic, environmental and equality improvements. It will also identify the estimated costs. The recommended programme of transport infrastructure schemes will use a range of the approaches set out in the options above. The programme will align with other funding horizons, particularly those of the government, but also taking advantage of short term opportunities.

- Short Term - Including 'quick wins', scheme preparation, prioritisation, scheme case making, legacy issues - over the next three years;

- Medium Term - Scheme Delivery, Funding changes, integration with Network Rail and Highways England funding programmes (RIS2 and CP6 to 2024); and

- Longer Term - Significant projects and those with longer lead in (CP7 2024 and beyond).

The programme will identify important transport corridors where significant improvements to transport infrastructure and/or public transport services are required to provide better citywide connectivity to existing and new areas of housing and employment. It will include ambitious yet deliverable plans, set in the context of an area wide network, to achieve the greatest impact against our objectives. For this reason, strict prioritisation will be critical.

## Locally generated funding

This programme will be much bigger in scale and cost much more compared to our recent transport infrastructure programmes. Extra funding will need to be identified. We have the opportunity to remake Sheffield's transport infrastructure by creating new capacity and using our existing highways better.

We will continue to explore all existing and future external funding sources. However, the levels of investment required to deliver our ambitious goals mean it will be necessary also to create a further Sheffield specific transport funding stream, generated at a local level.

A range of funding options are to be explored with strategic partners in order to understand the acceptability of measures such as the forms of levies to help address air quality issues and fund improved public transport. Only by matching Government and Sheffield City Region investment with locally sourced funding streams will we have the leverage we need to show Government that we are serious about our economic ambition and the scale of finance required. From this platform we can pursue the additional Government investment likely to be necessary to make real our proposals.

## Building support – changing hearts and minds

Public consultation will help us to understand the city's appetite for the scale and type of ambition in the Vision. This will allow us to develop the full Sheffield Transport Strategy that will set out in greater detail what we propose to change and where. Further public consultation on the Strategy in 2018 will help us develop a short, medium and long term programme (including greater detail of the next 6-9 months) that will ultimately deliver our vision with real engagement and the support of our communities.

**Draft Transport Vision**
**December 2017**

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**Consultation**
**January 2018**

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**Approval & Adoption**
**March 2018**
→
**Draft Transport Strategy Consultation**
**April 2018**

↓

**Final Transport Strategy**
**June 2018**
→
**Longer Term Delivery Programme**

→
**Early Win Schemes**