Liverpool City Region Combined Authority

Local Transport Plan – Core Document

People, Places, Movement

Doing Things Differently: 2025 – 2040

FINAL CONSULTATION DRAFT

January 2026

Contents

Mayoral Foreword

1. Introduction to the Local Transport Plan 4.

2. Our vision for transport 7.

3. The need for action
– what "doing minimum" looks like 16.

4. Taking forward our vision and goals

– eight core principles 24.

5. Delivering the Local Transport Plan

Delivering Goal 1 47.
Delivering Goal 2 60.
Delivering Goal 3 86.
Delivering Goal 4 100.
Delivering Goal 5 111.

6. Monitoring and evaluating the LTP 120.

Appendices

Summary of the LTP's policies 128.

Transport Delivery Plan (see separate document)

Mayoral foreword

TO BE COMPLETED POST-CONSULTATION

1. Introduction to this Local Transport Plan

1.1 This is the Liverpool City Region's (LCR's) Local Transport Plan (LTP). The LCR is made up of the local authorities of Halton, Knowsley, Liverpool, St Helens, Sefton and Wirral.

1.2 As we explain in later stages, the LTP also looks further afield. This is because the movement of people and goods extend beyond the limits of the city region's boundaries, into Lancashire, Cheshire, North East Wales, Greater Manchester and across the North Of England. We are also an internationally important city region for passengers and for goods.

Liverpool City Region in context. Source: LCRCA

1.3 The LTP's purpose is to set out plans for transport services and investment to 2040. This LTP will help to inform and shape decisions for the future of travel in the Liverpool City Region. It helps us speak with one voice on transport. It explains how transport supports our other priorities as a city region. It will be important in helping draw down and allocate the funds needed to help deliver transport from Government, delivery bodies and third parties. It is consistent with Government guidance and is informed and shaped by a range of wider Liverpool City Region Combined Authority (LCRCA) policies and strategies.

1.4 When we talk about transport, we mean all forms of transport – walking, wheeling, cycling, e-scooting, e-biking, buses, coaches, trains, ferries, boats, ships, taxis, cars, vans and heavy goods vehicles. This LTP, therefore, is about the connectivity of not just people, but of the goods and materials that sustain people's needs and, literally, powers our economy and impacts on our everyday lives.

1.5 This LTP subsumes the following transport plans and strategies and updates them with this single, integrated plan:

- The Halton Local Transport Plan, 2011
- The Merseyside Local Transport Plan, 2011
- LCR Long Term Rail Strategy, 2018
- LCR Local Journeys Strategy, 2018
- The Combined Authority Transport Plan, 2019

1.6 In line with Government advice and best practice, the following supporting documents will remain extant as supporting plans and strategies. They will be

reviewed periodically in line with any new requirements and against the vision, goals, principles and policies set out in this LTP:

- LCR Bus Services Improvement Plan, June 2024 (BSIP)
- LCR Local Cycling and Walking Implementation Plan, 2019 (LCWIP)
- LCR Rights of Way Strategy, 2018 (RoWIP)
- LCR Road Safety Strategy 2021

1.7 The development of this LTP has followed a logical process:

- By understanding challenges, problems and opportunities affecting transport and movement. We set these out in a Vision and Goals document in spring 2022.
- We talked to people about the Vision and Goals document to understand their thoughts
- We set out to understand what transport and travel might look like in 2040 if we took no direct action and what challenges might arise from this
- We developed principles, policies and the actions needed in response to these challenges
- In autumn 2024, we consulted on a draft LTP with its guiding principles and policies
- In January and February 2026, we will consult on changes to the LTP and the draft Delivery Plan that is appended to this LTP, to capture views on the emerging delivery priorities.

1.8 The process we have followed has made clear that transport supports bigger ambitions around jobs, growth, the environment and our people. We start with a clear vision. Importantly, this vision is shared across other plans and strategies that influence and affect transport so that our approach is collaborative, and efforts are aligned. To keep this LTP concise, a series of supporting appendices summarise these earlier stages:

- LTP Vision and Goals document, 2022
- LTP Vision and Goals Consultation Report, 2022
- LTP Evidence and Research Report, 2023
- Draft Core LTP, October 2024
- Draft LTP consultation report, January 2025

1.9 An Independent Integrated Impact Assessment of the plan has been conducted, in line with statutory requirements for developing an LTP, but moreover, to ensure that the plan supports our clean commitments in this space as a city region. Ensuring that the transport plan helps to achieve a fully accessible and inclusive transport network is our starting point, and the independent assessment is important to inform, test and validate our approach. This Assessment has the following components:

- Sustainability Appraisal (SA)
- Strategic Environmental Assessment (SEA)
- Equalities Impact Assessment (EqIA)

- Health Impact Assessment (HIA) and
- Habitats Regulations Assessment (HRA).

1.10 The Integrated Impact Assessment is available to view and comment upon as a technical supporting document to this LTP. The assessment was undertaken as the LTP and the Delivery Plan were being drafted as part of an ongoing process. The conclusions and recommendations from this Assessment have shaped the LTP's policies and confirms that they perform well against the various criteria used in the Assessment. It should also be noted that the Equalities Impact Assessment is aligned with the Combined Authority's additional protected characteristic of socio-economic status, which is assessed as part of the full EqIA.

1.11 This LTP is appended by a Delivery Plan, which sets the focus of transport interventions over the lifetime of the plan over three main timeframes:

- **Current** – until 2027 (including the committed City Region Sustainable Settlement [CRSTS] funding programme)
- **Imminent** – between 2027 – 2032 (including the Transport for City Regions [TCR] funding programme)
- **Our future vision for transport** – from 2032-2040 (unfunded or less developed schemes and ambitions).

The LTP's remit covers not just capital funding, but revenue funds that are managed by, or under the influence of the LCRCA. The LTP will also influence operational decisions on how our transport network is run, managed and maintained.

1.12 This LTP will be kept under review to ensure policies remain relevant. Should legislation, further devolution or wider policy changes affect the relevance of the plan, we will review and update it in line with the flexibilities that exist in current legislation. The Delivery Plan in particular will be kept under regular review to ensure that it remains up-to-date and relevant.

2. Our vision for transport

Understanding the bigger picture

2.1 This LTP has a full understanding of the wider priorities for the city region. This reflects transport's role as an enabler to so many other activities and priorities. The process that we have set out has involved building our LTP from an understanding of the challenges and opportunities that exist, both across the LCR and further afield. We also understand the main changes and the main policies that influence transport at movement at the national, sub-national and local level.

2.2 For example, Transport for the North's Strategic Transport Plan provides a vision and a framework which this LTP aligns with. We know that there are significant uncertainties surrounding the future of transport; people's attitudes and habits change constantly; technology is advancing faster than ever, it seems, and we live in increasingly uncertain and volatile times.

2.3 This context is summarised in our 2022 Vision and Goals document and also in the 2024 draft Local Transport Plan that we consulted upon in late 2024. Challenges and opportunities identified don't just focus on the need to decarbonise, but also the need to support economic growth in a fair and inclusive way. The impact of transport on health, wellbeing and quality of life are also recognised, as is the changing nature of our city region, linked to ambitious growth plans. The LTP's vision and five overriding goals have been drafted in response, together with intervening policy changes at the national, sub national and local level.

National priorities

2.4 The development of the LTP was framed by the Government's five clear missions for the country:

1. **Kickstart economic growth**
   to secure the highest sustained growth in the G7 – with good jobs and productivity growth in every part of the country making everyone, not just a few, better off.

2. **Make Britain a clean energy superpower**
   to cut bills, create jobs and deliver security with cheaper, zero-carbon electricity by 2030, accelerating to net zero.

3. **Take back our streets**
   by halving serious violent crime and raising confidence in the police and criminal justice system to its highest levels.

4. **Break down barriers to opportunity**
   by reforming our childcare and education systems, to make sure there is no class ceiling on the ambitions of young people in Britain.

5. **Build an NHS fit for the future**
   that is there when people need it; with fewer lives lost to the biggest killers; in a fairer Britain, where everyone lives well for longer.

2.5 The Government has identified five strategic transport priorities to put transport at the heart of mission-driven government. They include:

- improving performance on the railways and driving forward rail reform
- improving bus services and growing usage across the country
- transforming infrastructure to work for the whole country, promoting social mobility and tackling regional inequality
- delivering greener transport
- better integrating transport networks

The Government's priorities map across, and align directly with the aims and principles set out in this LTP, as we set out in Appendices 1 and 2 of the draft LTP that we consulted upon in autumn 2024.

2.6 Closely related to the government's mission to boost the economy, ignite growth in every region and deliver the aims of the is the priority to devolve powers and funds to local leaders and communities. The 2024 English Devolution White Paper and associated Devolution and Community Empowerment Bill has strengthened the importance of this LTP in setting out a clear, locally developed vision for transport and crucially, as an influential framework to shape delivery across the constituent local authorities.

2.7 Devolution provides additional tools to support the delivery of measures on our Key Route Network, the delivery of micromobility schemes, and paves the way for greater influence over our local and wider rail network. This builds on the significant powers that the LCRCA already holds over transport, including the successes of the Merseyrail network that has been under local, devolved control since 2003. We will pursue every opportunity to pursue new and additional powers to help deliver our ambitious transport vision.

2.8 The city region's Integrated Settlement, that will come into effect in 2026/27 is especially relevant. This brings multi-year funding sources into a single devolved pot, and with greater flexibilities to move funding across themes and between capital and revenue streams. Our £1.6bn Transport for City Regions Funding, discussed in the next section, forms a very significant part of our Integrated Settlement. In turn, this LTP supports the management of the transport elements of the Integrated Settlement by providing a clear, robust, legally-mandated framework for transport locally, together with a delivery plan.

2.9 The finalisation of this LTP has been framed by an emerging Integrated National Transport Strategy (INTS) being led by the Department for Transport.

This strategy which will set the high-level vision and direction for how transport should be designed, built and operated in England over the next 10 years. Its core aims are to:

- put people who use transport and their needs at its heart and
- empower local leaders to deliver integrated transport solutions that meet the needs of their local communities.

2.10 The focus on people and on their needs is closely reflected in this plan, and in the goals, principles and policies that follow. These include aspects relating to placemaking, road safety, personal safety, an inclusive and fair transport system and a simple ticketing and payment system. Integrating all forms of transport to allow seamless journeys is vital. So too is the need to engage people and work with people to deliver its objectives, recognising that transport is ultimately shaped by the perceptions, choices and decisions that people make in how they move, and also in how goods and services move.

2.11 The government's related Plan for Change focused the above missions and set more detail on how they will be delivered, and which have significant transport-related implications. For example, headline targets include building 1.5 million homes in England and fast-tracking planning decisions on at least 150 major economic infrastructure projects. The 10 Year Health Plan sets out how the government will reinvent the NHS through 3 radical shifts:

- hospital to community
- analogue to digital
- sickness to prevention

2.12 To support of the above, the Devolution and Community Empowerment Bill places a health improvement and health inequalities duty upon the Combined Authority. This is welcome, as reflected in the very clear focus on health, safety and wellbeing in this plan. We know that transport is both a cause of poor health and that good transport can and should improve public health.

2.13 The Government is committed to producing new, formal guidance on the production of LTPs, anticipated to follow the launch of the INTS later in 2025. This LTP has been developed in advance of this guidance. This recognises the need for a clear, updated strategy to support the Mayor's ambitious transport programmes, discussed in the following section. Future revisions to this LTP will have regard to any national guidance or best practice.

2.14 Importantly, guidance was published by the Department for Transport in August 2025 on using carbon analysis to inform transport strategies and schemes. However, quantifying, and removing carbon emissions from transport has formed a starting point in the development of this LTP, linked to legislative requirements in the Climate Change Act and a clear local mandate.

Local priorities

2.15 The development of transport policy is a devolved matter. This LTP directly supports the Mayor's manifesto commitment to develop a modern, successful region supported by a corresponding London-style network that makes travel quicker, cheaper and more reliable, as part of his wider vision.

The Mayor's Priorities
Source: https://steverotheram.com/wp-content/uploads/2024/04/Taking-Back-Our-Future-Web.pdf

2.16 We are clear as a Combined Authority on what we need to achieve. We recognise the significant contribution that transport makes to the delivery of our corporate objectives and indeed, how transport affects every facet of life. The Combined Authority's Corporate Plan (2024-2028), and its predecessor, both of which are wider in scope than transport, have informed the development of this LTP. The new Corporate Plan's vision is simple:

"…for the Liverpool City Region to be the best place to grow up, grow a family, and grow a business – where no-one is left behind"

2.17 The Corporate Plan recognises that the city region has seen improvements in its transport network. It commits to continued innovation to deliver improved mobility through a modern, integrated and publicly controlled public transport system. It recognises the strategic need to increase connection and promote mobility across the region for our communities and businesses and the social, economic and climate benefits that a future low carbon transport system brings. The LTP is wholly supportive of this.

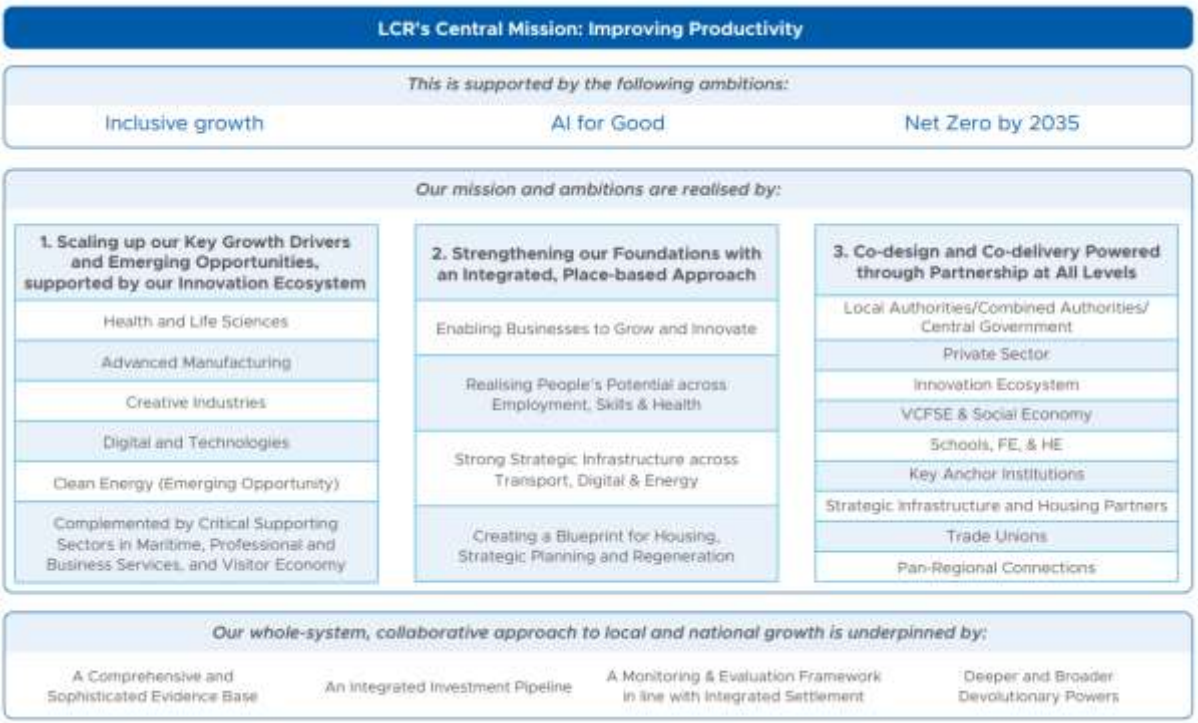
2.18 The Combined Authority has a duty to prepare a statutory Local Growth Plan (LGP). The process of developing this LTP has informed the transport components of the Liverpool City Region Growth Plan (LCRGP), and the LTP is entirely consistent with the Growth Plan's themes, especially those on clean inclusive growth. The Growth Plan covers a 10-year period up to 2035. It outlines how the Liverpool City Region will boost productivity and contribute to inclusive growth.

2.19 The LCRGP focuses on growing our most productive sectors fastest and strengthening our foundations to enable growth across these areas and the wider economy. There are a number of key growth drivers identified:

- Health and Life Sciences
- Digital and Technologies
- Creative Industries
- Advanced Manufacturing; and
- Emerging opportunities in clean energy industries

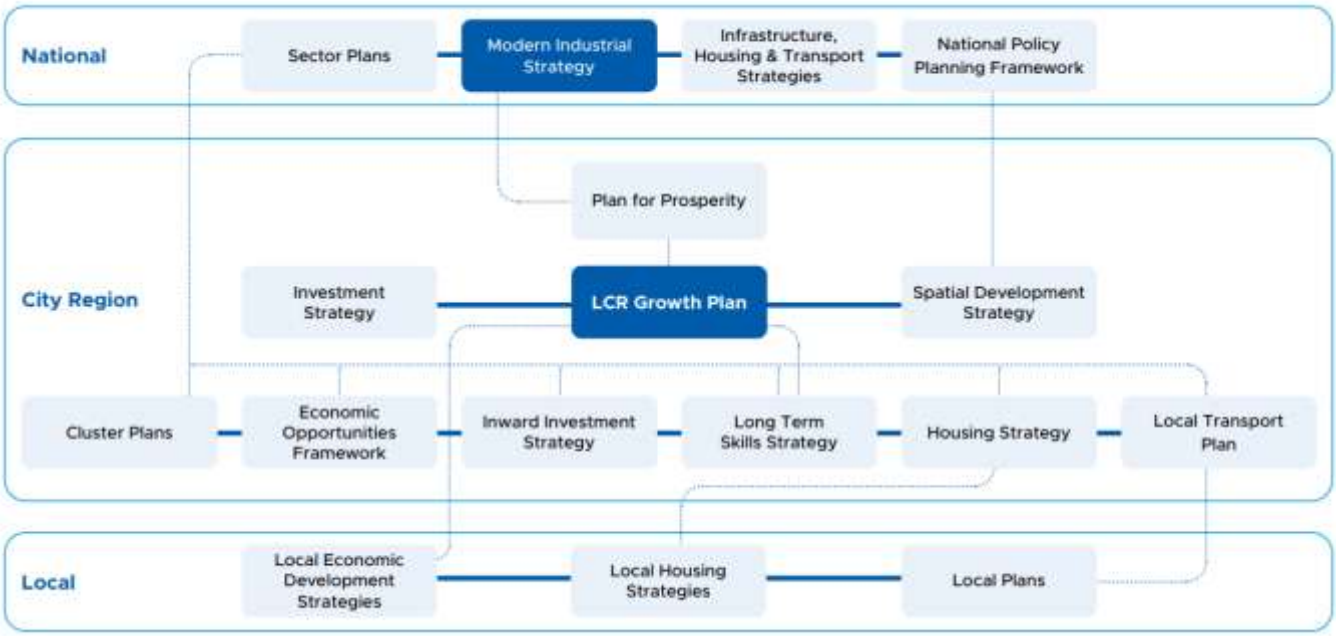
2.20 These are then underpinned by our enabling sectors:

- Professional and Business Services;
- Visitor Economy; and
- Maritime, and the centrality of the Port of Liverpool and its position as the pre-eminent western global gateway for the UK.



The LCR Growth Plan in Summary
Source: Liverpool City Region Combined Authority

2.21 Alongside these, the LCRGP demonstrates the importance of strengthening the foundations of our economy, through an integrated, place-based approach, which recognises the interconnectedness of Business Support, Employment, Skills and Health, Strategic Infrastructure and Housing, Strategic Planning and Regeneration. Good transport is vital to support growth and access for all. The diagram below shows the relationship between the LCRGP and other strategies, including this LTP, in delivering our shared aims:



The policy hierarchy in the Liverpool City Region Growth Plan – Source: Liverpool City Region Combined Authority

2.22 The supporting LCRCA Plan for Prosperity, which continues to frame local economic policy, is also closely aligned and commits to delivering growth and prosperity in ways that support a cleaner, better connected, more sustainable and resilient city region.

Figure 1: Plan for Prosperity Outline

Realising our vision	• A Fairer City Region. • A Cleaner City Region. • A Stronger City Region.
Capitalising on our distinctive proposition	A place of Pioneers: our deep, holistic and distinctive innovation offer.
Achieving our strategic priorities	• An inclusive city region where levelling up means no one and no place is left behind. • Pioneers of the Green Industrial Revolution. • A global, confident and outward looking city region.
Strengthening the pillars of our economy	• Maximising impacts of innovation for people, places and businesses. • Turning people's potential into prosperity. • Thriving, sustainable and resilient places. • Integrated infrastructure for a connected city region.

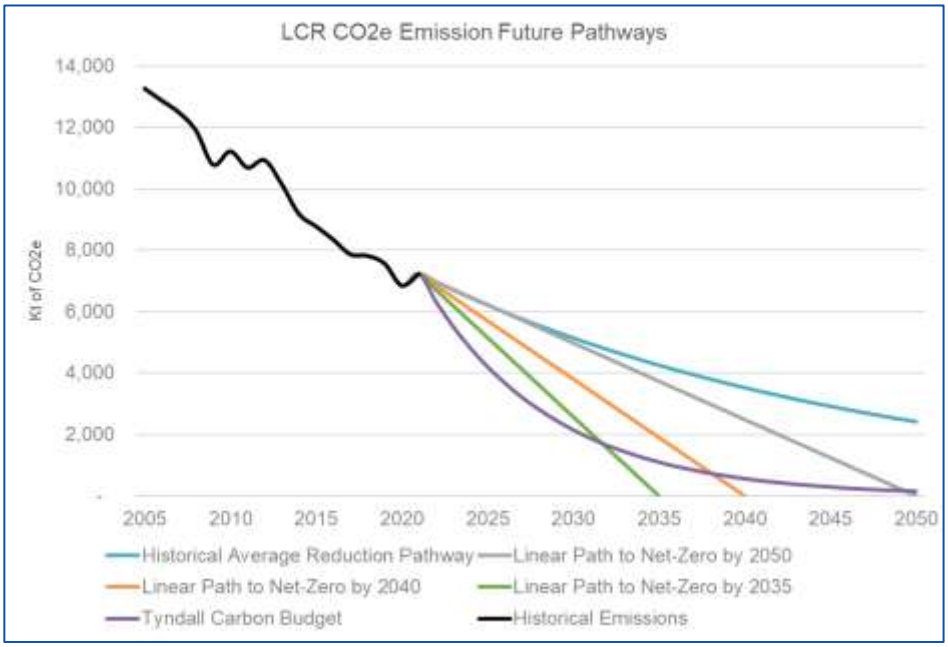
The Plan for Prosperity's core aims Source: Liverpool City Region Combined Authority

2.23 Our related Economic Opportunities Framework reaffirms these principles. It summarises the LCR's key strengths and locations that provide, or have the potential

to provide, a catalytic impact on our economy. The message around transport is consistent with this LTP – we must align connectivity between strategic transport corridors, economic opportunities, and achieve full digital connectivity to ensure that we can maximise our strengths to reflect the changing nature of work. Infrastructure is an economic enabler to support the shift to a low carbon economy, delivering new skills and opportunities.

2.24 We are clear that transport plays a crucial role in the strategic infrastructure which supports our growth sectors to thrive. Improving connectivity and unlocking opportunity across the LCR is a crucial aspect of the LCRGP, and this Local Transport Plan very much supports this approach, particularly in relation to *Goal 1: Support good, clean job growth and opportunity for all*.

2.25 At a local level, our Corporate Plan and related supporting strategies commit to accelerate the city region's net zero target to 2035. This is five years ahead of the 2040 target that framed initial work on the LTP. The scale of the change needed is clear from the graph below. This is addressed in more depth under *Goal 2 - Achieve net-zero carbon and an improved environment*.

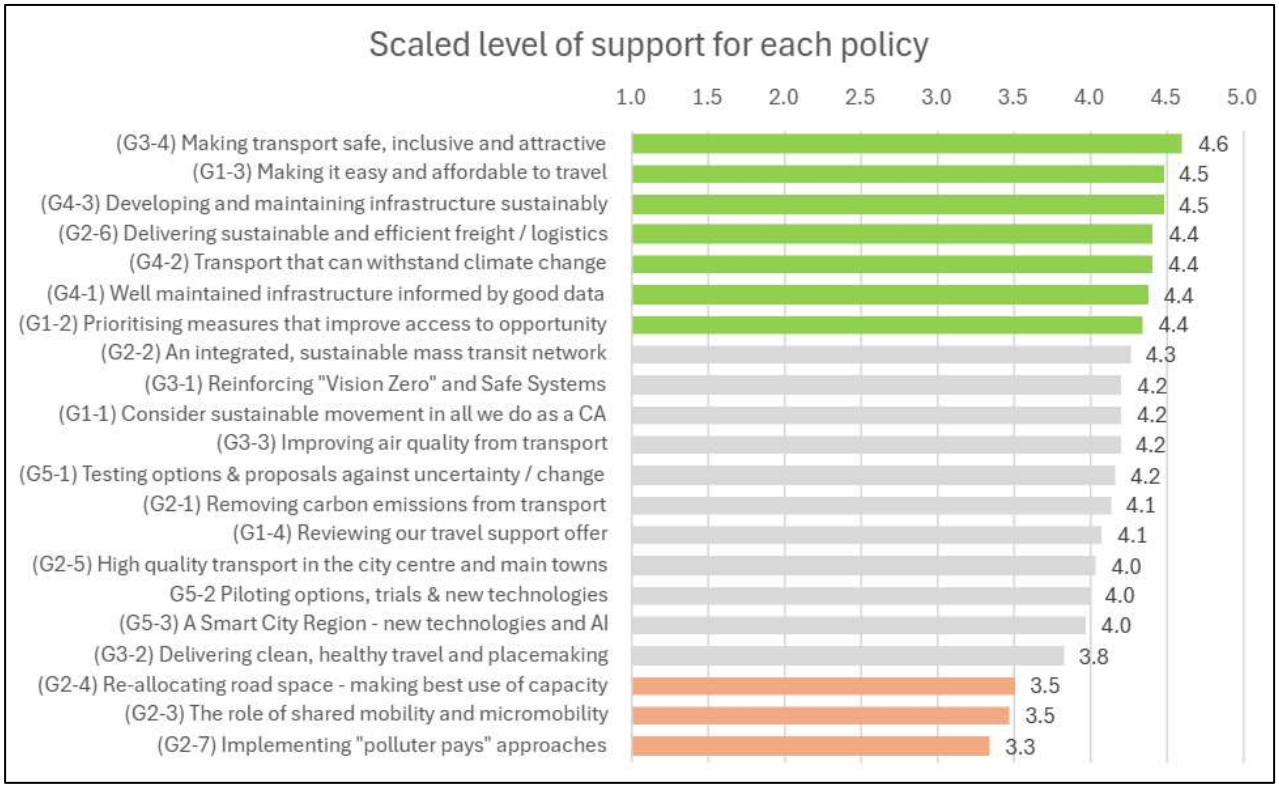


LCR carbon reduction pathway to 2035, 2040 and 2050
Source: LCRCA

Building on public support for our vision

2.26 Positively, and as we set out more detail in the *LTP Vision and Goals Consultation Report, 2022*, the consultation we carried out in 2022 showed that many people relate to, and support our draft vision. This is important to acknowledge, as people want to see change. People also recognise that is not always straightforward to deliver a cleaner, fairer transport system especially. Issues of cost, quality, and availability of transport have been raised as concerns.

2.27 A second round of consultation was undertaken on the draft plan's principles and 21 draft policies over the autumn of 2024. This round of consultation received views from over 1,000 citizens through a range of methods. In summary, consultees broadly welcome the draft LTP's approach and what it seeks to achieve for the city region. Many helpfully identified where references and definitions could be improved and clarified and have resulted in changed in emphasis to this plan. Positively, all of the draft policies have enjoyed positive support overall, validating the approach that we are setting out and which is essential to aid delivery on the ground. The full report on the second round of consultation is available at the following link.



Levels of support on a 1 (low) - 5 (high) scale for the draft LTP's 21 policies following second round of consultation in Autumn 2024. LTP policy numbers are shown in brackets Source: LCRCA

2.28 Importantly, the consultation highlighted the very clear messages that arose on the importance of **personal safety**; Goal 3 of the plan has been expanded to make the improvement of safety an overt part of the need to improve health and quality of life.

2.29 The responses to this consultation exercise have informed and confirmed the following Vision and Goals for the LTP.

THE VISION	
Clean, safe and accessible transport for moving people and goods	
GOAL 1	Support good, clean job growth and opportunity for all
GOAL 2	Achieve net-zero carbon and an improved environment
GOAL 3	Improve health, safety and quality of life
GOAL 4	Transport infrastructure that's well maintained and resilient
GOAL 5	Plan and respond to uncertainty and change and be innovative

The Local Transport Plan's revised Vision and Goals

3. The need for action

3.1 In developing this plan, we have looked at what the future might look like in by 2040 if we let changes outside of our control determine the future. We developed four scenarios to understand what the 2040 might look like from wider social, environmental, economic and technological change. **2040 forms the end date of the plan, but we must reduce carbon emissions to net zero by 2035 - five years sooner, and 15 years ahead of the UK's legal deadline.**

What might 2040 look like?

3.2 The use of scenarios by Transport for the North (TfN) applied a pioneering approach to the development of its Strategic Transport Plan. This was based on a scenario-planning approach promoted by the Government Office for Science's "Futures Toolkit" . It recognises that the future is uncertain and that policy need to be able to withstand a range of possible outcomes.

3.3 Our scenarios are consistent with those developed by TfN but have been nuanced to reflect the circumstances of the LCR.

Aspects that have informed future transport scenarios
Source: Transport for the North's Strategic Transport Plan

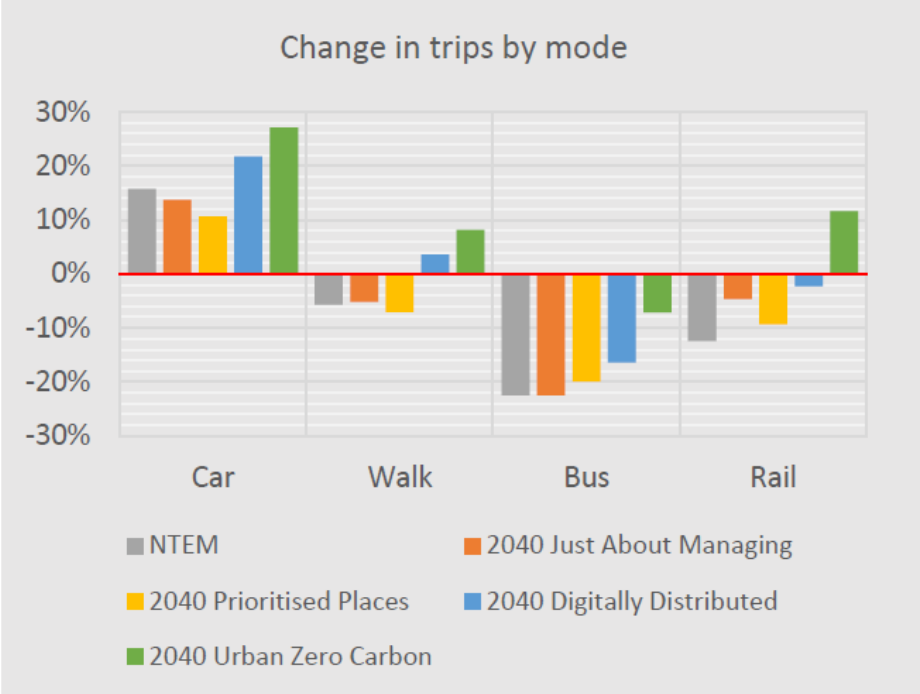
3.4 The scenarios are narratives about what the future might look like – they are not preferred scenarios or necessarily desirable. They act as a "do minimum", as they do not assume any significant transport interventions or policy change, beyond social and economic changes included in their description.

3.5 Our four scenarios are summarised below:

Name of future travel scenario	Narrative in summary
Just about managing	A business-as-usual model where population and economic growth is weak. Travel use remains car-based, public transport demand is weak and climate change effects start to be felt.
Prioritised Places	Economic growth is moderate and homeworking rates grow. People increasingly move to more rural and coastal areas and work/life balance is important. Electric vehicle take up is relatively high and people adopt shared forms of travel
Digitally Distributed	Green growth has boomed and electric vehicles and new forms of mobility are growing, making the movement of people and goods much more efficient. More people work from home and live in cities and towns.
Urban Zero Carbon	The LCR is part of a thriving green economy and people choose to live in towns and cities where public transport use is high as are levels of walking and cycling. Technology makes it easy for people to mix and match how they travel, and transport is much more efficient.

What "doing minimum" looks like in 2040

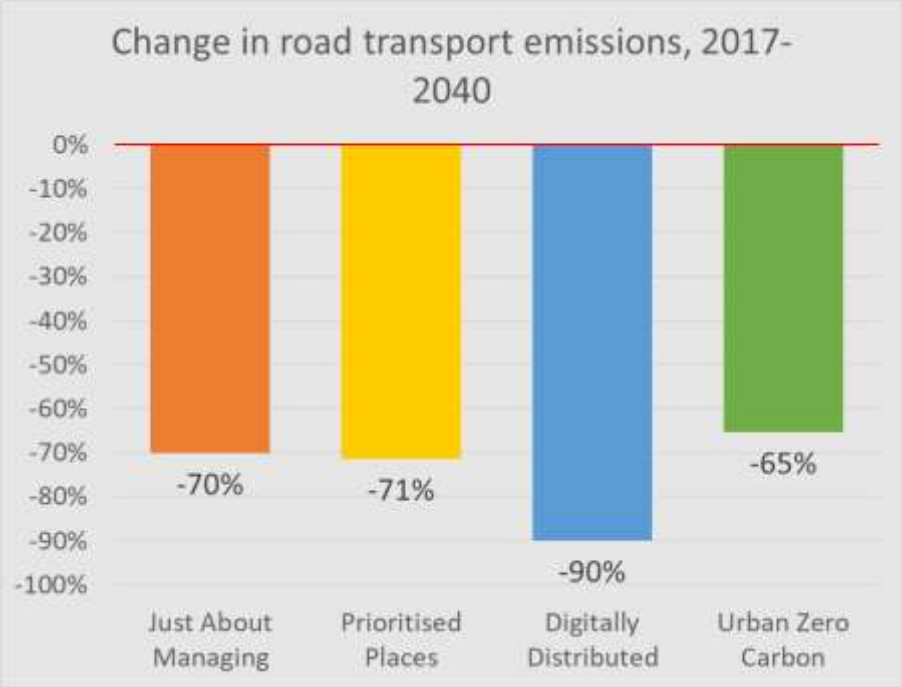
3.6 Using our strategic transport model, we have analysed the four scenarios to understand what their impact might be in transport and movement terms by 2040 – and they are challenging. They predict increases in number of trips, including light vans and cars overall, with shares of sustainable modes typically falling, especially under the "just about managing" scenario.



Changes predicted by 2040 under the four future travel demand scenarios
Source: Mott MacDonald for LCRCA (NTEM = National Trip End Model (DfT) v7)

3.7 This suggests that by 2040, without intervention, we will create a city region where the use of the car is more dominant on our streets and in our communities, where people have less choice because of lower levels of public transport, walking and cycling, with poorer journey times as a result of growing congestion. Although traffic will transition from being powered by petrol and diesel to cleaner sources, such as electricity and clean hydrogen, we run every risk of creating a city region that is characterised by "cleaner congestion" rather than being a city region that is attractive, vibrant, fair and easy to navigate by all. The idea that car ownership is essentially forced onto people is also at odds with our Corporate Plan vision around fairness, especially if more of our residents and workers need to pay to own and run a car out of necessity.

3.8 We have also looked at what these scenarios might mean in carbon reduction terms as the "do minimum", recognising the clear mandate that exists nationally and locally to decarbonise all our activities. Again, the carbon analysis of the four future transport scenarios paints a challenging picture. Put simply, "do minimum" will not support the complete decarbonisation of transport by 2040, let alone the revised city region target of achieving net zero 2035. The closest we expect to achieve net zero by 2040 is a 90% reduction under the Digitally Distributed scenario. This is the scenario in which green growth has boomed and electric vehicles and new forms of mobility are growing, making the movement of people and goods much more efficient and where more people work from home and live in cities and towns.



Predicted changes in carbon emissions by 2040 of the four "do minimum" transport scenarios. Source: LCRCA

3.9 **Under this "do minimum" future, our vision and goals will not be realised**. Accordingly, this Plan sets out the measures to deliver the change needed.

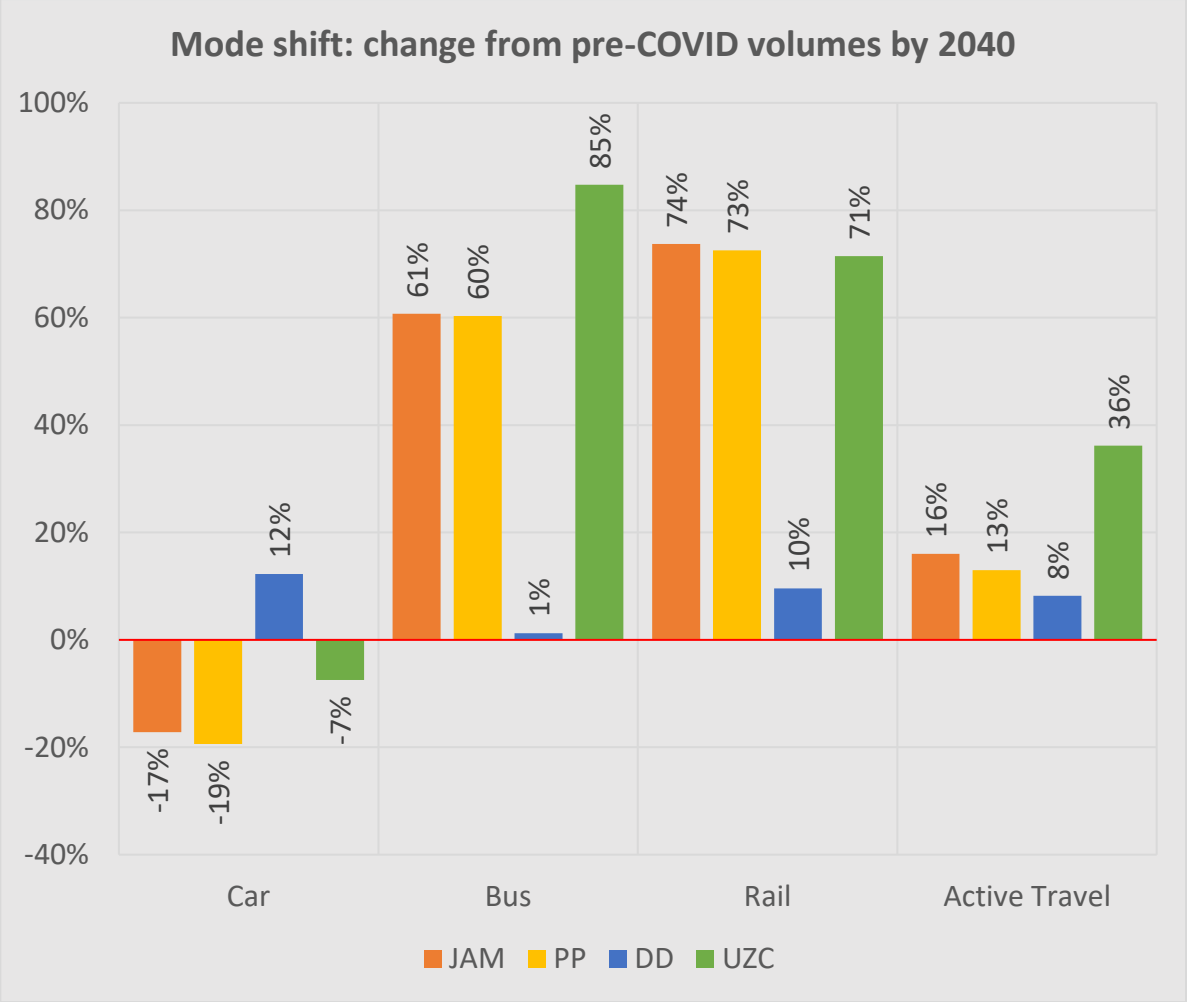
3.10 The estimated scale of modal shift needed across the LCR and **over the life of the LTP to 2040** is as follows:

To achieve net zero by 2040 locally

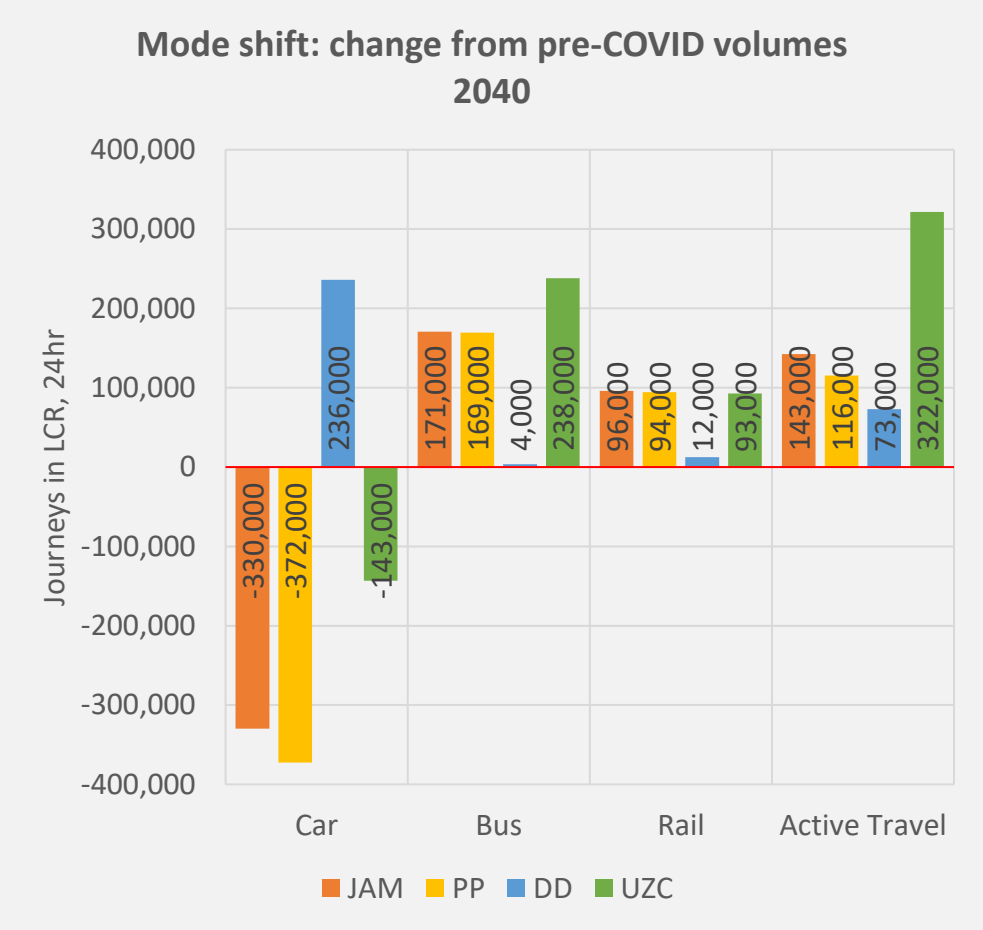
- Current projections estimate that only 63%-75% of the car fleet will be zero emission vehicles and this must change, through increased uptake and/or mode shift
- Levels of car trips will likely need to have reduced by between 7% and 19% relative to pre-COVID levels of demand
- This is equivalent to taking between 143,000 and 372,000 daily car trips off the road

If an average person takes 433 individual car trips a year (including non-car users), this will need to be reduced to between 361-385 trips

- Bus trips will likely need to increase by 60%-85%
- Rail trips will likely need to increase by between 71%-74%
- Cycling and walking trips will need to increase by between 8%-36%



Predicted degree of mode shift needed by 2040 to decarbonise transport
Source: LCRCA



Changes in numbers of journeys needed to reach net zero under each scenario. Source: LCRCA

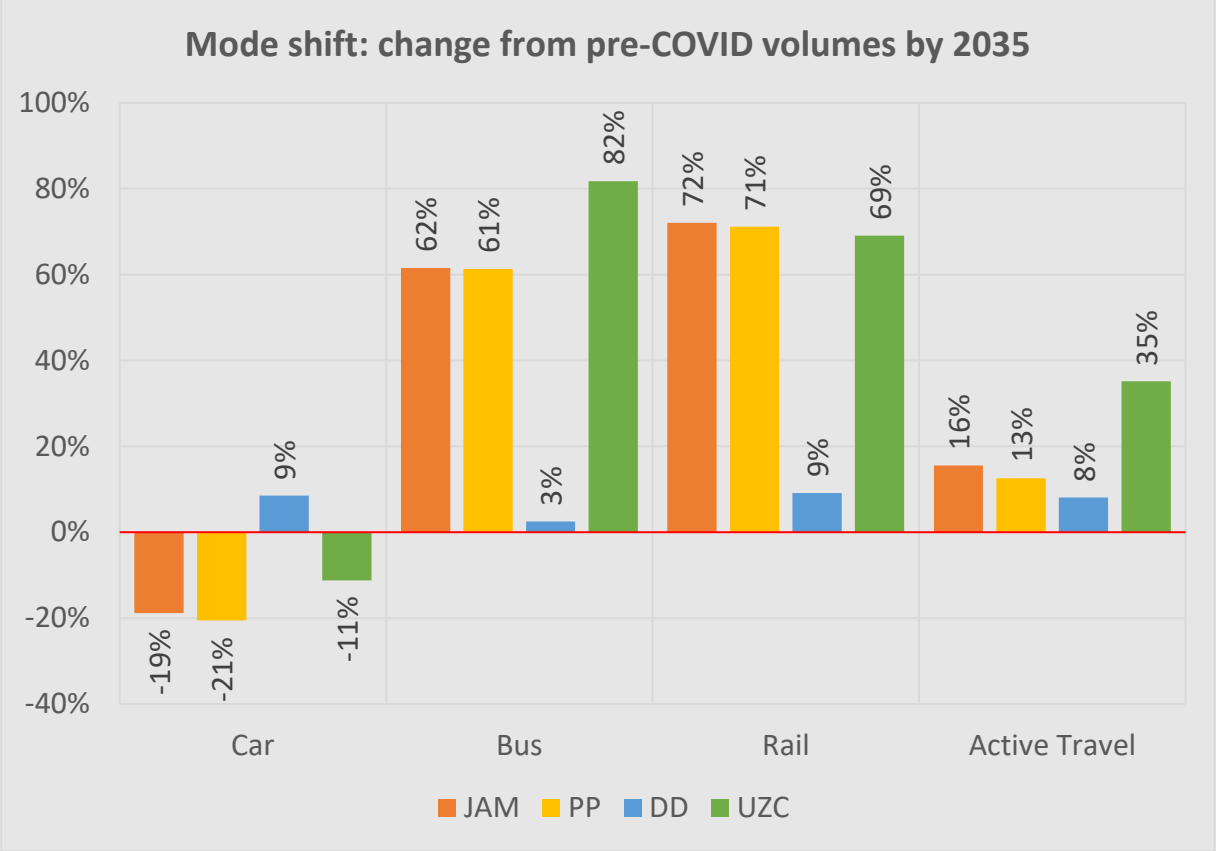
3.11 The estimated scale of modal shift needed across the LCR **to achieve the LCRCA's decarbonisation target by 2035** is as follows:

To achieve net zero by 2035 locally

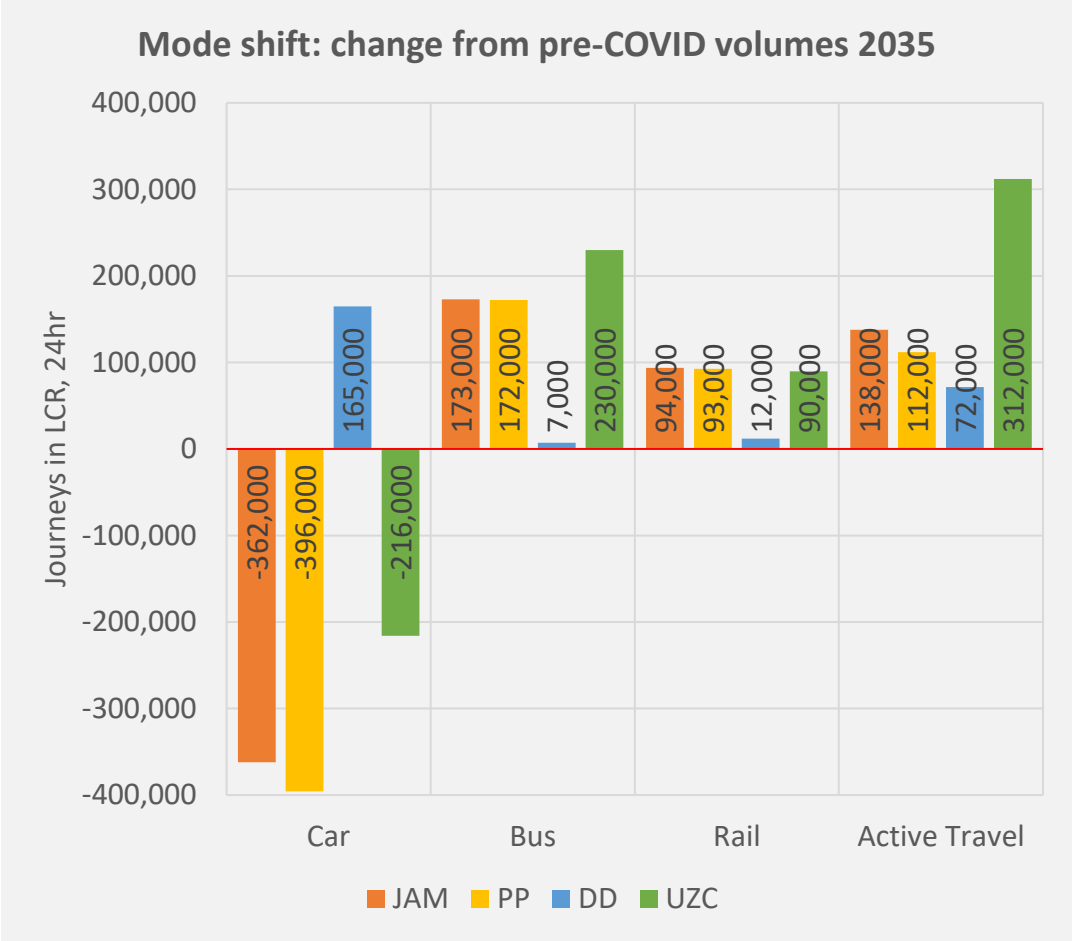
- Based on an estimate that only 63%-75% of the car fleet will be zero emission vehicles by 2035 this must change, through increased uptake and/or mode shift
- Levels of car trips will likely need to have reduced by between 11% and 21% relative to pre-COVID levels of demand
- This is equivalent to taking between 216,000 and 395,000 daily car trips off the road

If an average person takes 433 individual car trips a year (including non-car users), this will need to be reduced to between 346-372 trips

- *Bus trips will likely need to increase by between 61% and 82%*
- *Rail trips will likely need to increase by between 69% and 72%*
- *Cycling and walking trips will need to increase by between 8% and 35%*



Predicted degree of mode shift needed by 2035 to decarbonise transport
Source: LCRCA



Changes in numbers of journeys needed to reach net zero under each scenario. Source: LCRCA

3.12 Looking at the change needed by 2035 compared to 2040 shows little difference between them. In simple terms, by 2040 car trips per person per year needed to reduce to 352-488, whereas by 2035 this needed to reduce to 346-472, though there are some variances in the modelled figures as the same degree of population and economic change will not have occurred by 2035. However, there now is a much sharper difference in what needs to be achieved by 2030, given the much steeper rate of reduction in carbon from transport that now needs to be tackled.

4. Taking forward our vision and goals: eight core principles

4.1 The **five goals above are high level outcomes** for what we want to achieve through this LTP and for the city region as a whole – or put another way, our promises for the city region. Our analysis in the preceding section shows that if we don't act, we won't realise these goals. Action is needed through this LTP to address this.

4.2 Accordingly, **a series of principles have been developed** that support the goals and the delivery of more detailed **policies and interventions** that follow in section (5) on Delivering the LTP.

Five LTP Goals →

THE VISION	
Clean, safe and accessible transport for moving people and goods	
GOAL 1	Support good, clean job growth and opportunity for all
GOAL 2	Achieve net-zero carbon and an improved environment
GOAL 3	Improve health, safety and quality of life
GOAL 4	Transport infrastructure that's well maintained and resilient
GOAL 5	Plan and respond to uncertainty and change and be innovative

Eight Core Principles

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LTP Policies

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LTP Delivery Plan

Eight Core Principles

Principle 1: A vision led approach
Principle 2: All LTP Goals are of equal importance
Principle 3: Transport decisions based on clear need and evidence
Principle 4: Transport must support placemaking
Principle 5: Prioritise safe, clean, healthy travel in all we do
Principle 6: Guided by our commitment to inclusivity, accessibility and social value
Principle 7: Work with others to promote and deliver the LTP
Principle 8: A rolling programme of innovative transport investment

4.3 The eight core principles are explained in more detail over the page.

Principle 1: A vision-led approach

4.4 This addresses the need to move from a "predict and provide" approach to transport planning to a "vision and validate" model. Transport-related plans, proposals or business cases to address an evidenced problem must be based on a "vision and validate" approach. This will be linked to delivering the vision and outcomes in this LTP - ***clean, safe and accessible transport for moving people and goods***.

4.5 "Predict and provide" has typically created new road capacity, improvements to traffic flows or the creation of additional car parking. This approach facilitates traffic growth and many of the issues that this LTP has identified as challenges and concerns. Worse, the new highway capacity created is quickly used up by additional vehicles that were previously deterred, and the journey time and congestion benefits are then lost. This leads to a vicious cycle, whereby further solutions are sought to deal with the congestion, delay, inconvenience and dangers created. This is often detrimental to bus and rail users and people walking, cycling and wheeling, as their needs are unlikely to have been considered in the traffic growth assumptions made.

4.6 The "vision and validate" approach begins with a vision as to how and area should look, feel or function. This then allows measures that manage demand for private vehicle trips to be tested and planned and for the alternatives to private transport to be facilitated. This seeks to break the vicious cycle of "predict and provide". It recognises that land, natural resources and funds are finite, and that private vehicle dependency must be reduced. Put simply, it accepts that we cannot continue to build our way out of the problems that we have created.

4.7 This approach is gathering weight and stature, and is being embedded into a range of national, sub national and local policy frameworks. For example, Government guidance to National Highways advocates moving away from transport planning based on predicting future demand to provide capacity, to a vision-led approach. This is to deliver outcomes communities want to achieve, and to provide the transport solutions to deliver these outcomes.

4.8 Similarly, Transport for the North's Strategic Transport Plan embeds a complementary "decide and provide" approach, to achieve the vision and outcomes sought. The plan notes that future transport investment programmes must support rapid decarbonisation of our transport system and enhance social inclusion and health, whilst also strengthening economic performance. An integrated transport network that's fit for the future is required, to prepare for significant increase in public transport and rail needed to enable growth.

4.9 Most recently, the Government's National Planning Policy Framework (NPPF) endorses a 'vision-led' approach to transport planning. This acknowledges that transport infrastructure plays a vital role in creating sustainable communities and supporting economic growth. It notes that planning for travel too often follows a simplistic 'predict and provide' pattern, with insufficient regard for the

quality of places being created or whether the transport infrastructure which is planned is fully justified. Challenging the default assumption of automatic traffic growth, where places are designed for a 'worst case' peak hour scenario, can drive better outcomes for residents and the environment.

4.10 This LTP is wholly supportive of, and is consistent with, these new approaches to a "vision and validate" model in place of the traditional "predict and provide" approach. This principle must guide all that we do in delivering the plan and its interventions

Principle 2: All LTP goals are of equal importance

4.11 The LTP's goals are deliberately at a high level – they set out the broad outcomes that we want to achieve. The policies that are associated with each of the goals will be turned into specific commitments. In turn, these will guide how we allocate funding, deliver the right interventions and schemes or make the case for interventions or new powers with Government and other partners.

4.12 This principle makes explicit that *all* the LTP's goals are of equal importance and support one another. *All* five goals must be addressed and supported to deliver the vision and outcomes we've set. It is no longer a case of seeking to balance economic growth against environmental consequences, or to view growth and environmental protection, or greater levels or fairness as opposites - they are not.

4.13 This approach to clean, healthy, inclusive growth is the approach is set out our Plan for Prosperity and Liverpool City Region Growth Plan. We must deliver good connectivity and well-maintained transport to support inclusive, high-value growth and prosperity, social inclusion, affordability, safety, access, health in a city region seeing the effects of climate change. We can do this by planning for transport in different ways than in the past. This is by shifting the balance from private motorised transport to zero carbon transport that is accessible to all, regardless of age, income or where people live and create a better place to live, invest in, work and visit.

Principle 3: Transport decisions must be based on clear need and evidence

4.14 The starting point in this LTP is ensuring that we deliver transport schemes, services and measures that support wider city region priorities, rather than starting with specific solutions in mind. We will ensure that transport enhancements and interventions are targeted around clear need and the LTP's priorities. This includes, by association, the related needs and priorities of the LCRCA's suite of policies such as the Liverpool City Region Growth Plan, the Plan for Prosperity, the Innovation Prospectus, Spatial Development Strategy, the Investment Strategy and the Climate Action Plan and in any

related, successor documents that have common aims developed over the lifetime of this plan.

4.15 Options will be considered from the basis of problem-based analysis, rather than from the point of view of a defined project, solution or scheme. The use of data will be critical to understand the problems that exists, and the ability of solutions to tackle these. Where data is weak or non-existent, evaluated trials and pilots may be the best approach as per *Policy G5-2: Piloting options, trials and new technologies in a climate of uncertainty and change.*

4.16 Transport solutions and proposals must be proportionate to the problem that exist. This means that all options must be considered. This includes consideration of a mix of capital and revenue interventions in the round and as a package. For example, a ticketing, bus-based or behavioural measure may be more appropriate than the delivery of a capital scheme to improve access to an area. Making best use of what we have now will often deliver lower cost, and less carbon intensive results than building new. This recognises that we benefit from an extensive, established transport network (our highway network especially) as a starting point.

4.17 Proposals must also be tested against future uncertainty as part of the risk management process, especially against the four future travel scenarios that have informed the development of this plan. Schemes or interventions that stack up against uncertainty and a range of futures will enjoy additional assurance, by demonstrating that they are robust and future-proof.

4.18 The collection of new or improved data in response to a transport intervention will be critically important. This is to both evaluate impact, but also to improve the evidence base to shape future interventions. For example, the delivery of innovative smart ticketing and smart traffic sensors not only provide significant benefits to the travelling public but allow valuable real-time data on movement and travel patterns to be collected and analysed.

4.19 Linked to *Goal 5: plan and respond to uncertainty, change and innovation*, we must also be bold in how we use data to not only understand problems and understand impacts, but to shape and deliver solutions. Artificial Intelligence (AI) will increasingly grow in importance over the lifetime of this LTP with its ability to support us through more efficient movement of passenger and goods traffic, in helping to reduce harm and risk from travel, or in providing the right information about the choices that are available to people.

Principle 4: Transport must support placemaking

4.20 A core aim of this LTP is to ensure that transport movement and investment support the principle of placemaking. This is about creating new developments, regeneration schemes, streets and places that are well designed and prioritised for people to enjoy safe spaces and places that are prioritised for walking, cycling and wheeling and not general traffic. This will support the conditions for new and better jobs, homes and places that are vibrant, attractive and interesting for everyone.

Crowds enjoy the atmosphere at the Pier Head Liverpool for Eurovision. Source: LCRCA

4.21 The Authority's non-statutory Local Journeys Strategy from 2018 is superseded by this LTP. Its strong, pioneering messages, however, around creating a sense of place in transport and regeneration schemes and supporting a shift to active travel as the first choice are reaffirmed through this principle and throughout this plan.

4.22 For too long, planning for growth in car, van and lorry trips has meant that our city, towns, and workplaces are often dominated by roads and traffic. This in turn leads to expanses of tarmac and concrete, car parking, driveways, road signs, subways, flyovers, overbridges, guardrails and general street clutter. This is also often to the detriment of open space, green spaces, historic buildings and trees and vegetation. Similarly, helping general traffic to travel from A to B in the shortest possible time and as easily as possible has created streets dominated by fast traffic, becoming dangerous, off-putting and uninviting, especially from an inward investment and regeneration point of view. Other forms of more sustainable transport are often made slow, difficult, unviable, or even dangerous as a result. As our evidence shows, car ownership and usage has grown, and cars and vans are used for the majority of trips - including very short trips - and levels of bus, rail, walking, cycling and wheeling have typically fallen.

4.23 If we allow the "do minimum" in section 3 to prevail, we will need to dedicate more space to general traffic use and create additional space on- and off-road for the parking of vehicles. This is not desirable as it is incompatible with our vision and goals. We need to do the opposite and repurpose our urban areas as many other European towns and cities have successfully done:

4.24 The Netherlands in particular has demonstrated what is possible when people and placemaking are put at the heart of policy development. Following the end of World War II, incomes in Amsterdam rose which led to a huge uptake in car ownership. Plans were drawn up to create a much more car-centric city, and some were implemented. These, however, were met with resistance from certain quarters, and slowly change began. From the turn of this century the city really began to alter its movement hierarchy. Modern-day Dutch cities may be synonymous with active travel, but not so long ago it was filled with traffic. It didn't happen overnight, but equally the following images show an area of Utrecht transformed in a relatively short period of time.

A street giving priority to people, place and public transport in Utrecht, the Netherlands. Source: LCRCA

Utrecht in the Netherlands has prioritised the movement of people and mass transport in ways that enhance its architectural and visual quality. The canal was created from a former inner ring road. Source: LCRCA

4.25 Dusseldorf in Germany provides a similar example of how a car dominated area can be transformed into pedestrianised landscape. Polluting concrete highways have given way to active travel corridors, complemented by enhanced greenery, creating a more pleasant and welcoming environment.

4.26 But we no longer have to look to Europe for examples of best practice. We have many excellent examples being unveiled across the city region and many proposals at design stage by our partner local authorities that form a welcome, and radically different approach to movement and placemaking:

The recent reallocation of roadspace to create a safe, high quality gateway at Lime Street in Liverpool. Source: LCRCA

Above and right: Visualisations of the redevelopment of Bootle Town Centre. Source: Sefton Council

Visualisation of reimagined street in Anfield, Liverpool
Source: Liverpool City Council

Emerging Spatial Development Strategy (SDS) cover. Source: LCRCA

4.27 Changing how development is planned and accessed emphasises the close links between the LCRCA's emerging Spatial Development Strategy (SDS) and this LTP. The SDS, our statutory land-use plan, provides a framework for how we will develop land across the city region. It will inform the future local plans in each of the six local authorities, to guide where and how future housing, commercial, retail and commercial development should be accommodated and planned. It will also apply in the consideration of planning applications. The SDS emphasises that new development is fully accessible without the need to use cars for essential trips is central to making sure that development is both accessible for all and not dominated by private vehicles.

4.28 Good planning policies and decisions on new developments, designed around the needs of good connectivity by sustainable, low carbon forms of travel, form vital and complementary approaches promoted by this LTP. The Transport Hierarchy that's set out in *Principle 5: Prioritise safe, clean, healthy travel in all we do* is common to, and underpins the draft Spatial Development Strategy. Notably, *Objective 4 - Placemaking, Communities and Housing* of the emerging SDS is important in supporting sustainable placemaking. We need to reduce reliance on the private car to do this.

4.29 By aligning this LTP closely with good planning policies and decisions, we can create sustainable, prosperous places and communities by:

- ensuring that transport helps deliver high-quality homes that meet our range of needs, creating new, regenerated, revitalised and resilient communities;
- supporting high quality design standards to produce buildings and places that are attractive, future ready, inclusive, safe, energy efficient and enable healthier and happier lives;
- shaping development so that it responds to and respects the city region's distinct character, to create places where people want to live, work, visit and meet; and
- enhancing and preserving our valued built heritage, architectural and cultural assets.

4.30 This LTP's delivery plan focuses on the principle of placemaking in the identification and design of its capital projects and schemes and in how transport is managed and maintained. This is about making our city region attractive and vibrant, and more importantly, designed around the needs of people – people of all ages, all backgrounds, and of all abilities.

4.31 Closely associated with the principle of placemaking is having a good mix of services and facilities to meet everyday needs. This is so that long trips, and car-based trips especially, are not needed to reach everyday facilities. Having everyday services and facilities within a short walk or wheeled journey, plus having easy and safe access to longer distance bus and rail services helps create attractive and interesting places to live, work, and visit. This also helps to ensure that people are not socially excluded from everyday, essential facilities. Securing strong synergies between this LTP, the SDS and the planning policies and decisions of our six local authorities is vitally important in support of this.

Principle 5: Prioritise safe, clean, healthy travel in all we do

4.32 To be a net zero carbon-emitting city region, our evidence shows that measures to achieve significant growth in bus, rail and active travel and a big reduction in vehicle trips must form a core part of the LTP's approach. We call this "modal shift". This delivers not only our net zero carbon objectives but also the goal of a clean, liveable, safe and healthy transport system by the plan's end date of 2040 that's not characterised by "cleaner congestion". This is closely related to the "placemaking" principle of this LTP – a liveable city region that's not dominated by roads, dangers and traffic.

4.33 We know that no congestion is clean or risk-free, as emissions from brake and tyre dust are still dangerous to health, even if vehicle engines are emission free. And even if congestion could be emission-free, it has negative impacts of congested streets on people's lives and the economy, being expensive and wasteful, unattractive, and stressful.

4.34 Achieving this big reduction in car and van trips means that we need to improve the alternative transport choices and their uptake. We don't want to minimise or curtail the right travel choices and reducing the need to travel is not our starting point. Restrictions during COVID-19 from 2020 highlighted the big challenges socially and economically of not being able to move freely or leave our homes. There is no reason to restrict clean, healthy low carbon travel choices and every reason to make them more attractive, more safe and more convenient. This is consistent with advice in the National Infrastructure Commission's 2022 report - "Getting Cities Moving":

"Enabling more people to make more trips in cities is a good thing – trips support economic growth and quality of life – and this is what urban transport networks need to aim to do…"

"…The aim of urban transport policy should not be, as sometimes is suggested, to get people to travel less….the aim should be to shift demand from cars to forms of transport that can move people around urban areas more efficiently. By shifting, not reducing, demand, cities can keep the productivity benefits that flow from employment density without increasing congestion…"

4.35 An important principle to deliver this degree of shift and the wider vision and goals will be ensuring that we prioritise clean, healthy travel in all we do. We will do this through a hierarchy of travel approach – the weight that we give different forms of travel and in how we allocate and prioritise road space in response. This approach is intended to widen people's choices in how they travel. It also forms the starting point in planning and designing the solutions needed in response to transport problems.

The sustainable transport hierarchy
Source: LCRCA

4.36 This movement hierarchy approach also recognises differences in engines and emissions, whereby movement by a zero-emission vehicle is preferable to movement by a conventional petrol- or diesel-powered vehicle. The hierarchy applies not only to the movement of people, but equally to the movement of freight as set out in more depth in *Policy G2-4*. Put simply, the movement of freight by train or boat is better than by truck, just as a cargo bike is better than a van where possible. Measures that allow this to occur should be prioritised.

4.37 Walking, cycling or wheeling are at the top of the hierarchy as the default for short trips especially, with a focus on 'last mile' links to connect local areas, places where buses and trains meet, and plug missing links to the high standards required in guidance such as Local Transport Note 1/20. We deliberately use the term "walking, cycling and wheeling" as a more inclusive term than "walking and cycling". Wheeling includes people using walking aids, wheelchairs, walking aids, legal e-scooters, scooters, buggies and prams.

4.38 The movement hierarchy complements our approach to land use planning, through the Sustainable Movement Hierarchy advocated in the emerging SDS. Together, they will ensure a consistent approach to new development proposals and the prioritisation and management of movement in ways that support our challenges and priorities as a city region.

4.39 Put simply, we must make sure that walking, wheeling and using the bus and rail networks are not only the most important considerations in how we plan movement and new schemes, but that these are also made the most convenient, safe and attractive options in how they are designed and prioritised. This will equally benefit people who need to drive a vehicle, van or HGV for a specific journey or due to specific needs, as the approach seeks to reduce overall levels of congestion and delay, benefitting everyone.

4.40 The principle of a hierarchy is not new; hierarchies in previous LTPs have classified roads across the city region by type – freight, public transport and local traffic especially. This approach is now considered crude and no longer relevant. The reality is that routes - irrespective of their definition - have different characteristics, demands and priorities in different areas. For example, a bus route may start as a wholly segregated bus station within the city centre. It may then extend through local communities with narrow streets, past schools, colleges or industrial areas. The route may then follow sections of busy urban dual carriageways or travel through motorway junctions. The needs and priorities will be different at these different stages, and the movement hierarchy will guide how we plan works, schemes and maintenance in response to local circumstances, rather than by a broad typology of an end-to-end route.

4.41 Every mode of transport has strengths and weaknesses, depending on the type or length of the trip being made. There are some areas of the LCR where connectivity is weaker, limiting access to opportunities and making mode shift unattractive. We must address this - including in cases where the offer at evenings and weekends is poor. This is about improving levels of active travel

and public transport connectivity, including perceptions and myths about public transport and active travel. Poor levels of connectivity – poor levels of service or poor service frequencies to and from specific areas – hinder the ability to realise the change that we need to see. This often means that there is no choice other than to use a car or take a taxi. As we set out in more detail throughout the plan, people become isolated or excluded and miss out on new opportunities and life – in other words, they experience unacceptable transport-related social exclusion.

4.42 When we implement the hierarchy, we need to be careful not to artificially compartmentalise different forms of travel. The reality is that people don't fall into simple categories as "cyclists", "car or van drivers", "bus users", "lorry drivers", "ferry users" or "rail users", for example. People use different forms of travel depending on their circumstances and may be a driver, pedestrian, and a bus user all on the same day. Our priority must be to make it easy for people to mix and match the best forms of clean, zero carbon transport at the upper end of hierarchy especially, to make their journey. A journey may begin on foot or by being wheeled, before transferring to a bus. The next leg may be made by train and then by legal e-scooter or bike. Our aim will be to plan transport and investment in a way that facilitates this, and makes this combination of journeys quicker, easier and more convenient than using a private vehicle or other modes at the lower end of the hierarchy for the entire trip. Thinking about travel choices in the round is vital, so that networks feed and support one another, integrate more, and duplicate less.

4.43 We must also think beyond traditional forms of travel in the hierarchy (e.g. cars, buses, trains, push bikes, HGVs, ferries or ships). We must reflect the role of new mobility in filling gaps in the transport network and providing viable alternatives to private cars. Technology is changing quickly; car clubs, e-scooters, drones, autonomous vehicles, e-bikes, ride sharing apps and payment systems that increase affordability and equality of access are important parts of the mix. New modes of travel and new technologies can also replace unnecessary trips, or trips made by private car, as well as addressing gaps in the "first and last mile" of a longer trip. This mix of options must include the role of AI, linked to high-speed broadband and 5G connectivity as an essential utility, providing that we address digital exclusion for people who feel isolated from new technology.

4.44 Importantly, the principles in the movement hierarchy mean that we accept that maintaining or improving journey times by car or by private vehicle will not be the overriding priority that this used to be. Indeed, car-based journey times may become slower, or be made less direct or less convenient that they may have been previously.

4.45 This approach is consistent with our legal duties under the Traffic Management Act (TMA). Part 2 of the TMA requires local authorities to secure the expeditious movement of traffic and take action to secure the more efficient use of their road network. Importantly, "traffic" includes not only motorised traffic but people, and people wheeling. In the past, the focus on delivering these duties has typically been by removing traffic bottlenecks by

building in more highway capacity to keep traffic flowing freely and minimise inconvenience for general road users, but often at the expense of the movement of public transport users and people who are walking or wheeling. As we have already described, this trend has helped to encourage growth in car ownership and in the numbers of car trips made – a vicious circle. It has also exacerbated many of the challenges identified in this plan – emissions, congestion, danger and lack of fairness and opportunity for all.

4.46 Instead, the LTP advocates that the city region's TMA duties are best delivered by proactively reducing traffic levels, and through delivering a movement hierarchy that helps switch more people onto clean forms of travel. Helping to move people (who fall within the definition of "traffic") by walking and wheeling in place of short car trips will also reduce traffic and congestion levels for short trips and make more efficient use of the road network, in accordance with our legal duties.

4.47 This will also benefit road users making essential trips, whether through need, protected characteristic or circumstance, that can only be made by car, van or HGV as their journeys will be more efficient, less congested and be subject to fewer delays. This is a different approach than in the past, and will be fairer and beneficial for all, however they ultimately choose to make a particular trip, or leg of a trip, by reducing the dominance and dangers of traffic.

Principle 6: Guided by our commitment to inclusivity, accessibility and social value

4.48 Ensuring that the Liverpool City Region's transport offer and associated infrastructure is fair, accessible and inclusive is central to the delivery of the LTP.

4.49 We will be guided by the commitments outlined in the LCRCA's Social Value Framework and Equality Strategy by maximising the creation of social value within design and delivery of the LTP and in how we embed equality, diversity and inclusion. In our recruitment and procurement processes we are also committed to the principles of Fair Employment and we will continue to champion accreditation by employers, suppliers and contractors across our city region.

4.50 The Social Value Framework seeks to connect all our communities to opportunity, both physically and digitally. Social Value captures the difference an organisation's project can make to the community or communities it operates in, considering the impact of the 'triple bottom line' of people (social), planet (environment) and use of resources (economy). It supports organisations or projects to make decisions which consider this wider definition of value to increase equality, improve wellbeing and increase environmental sustainability.

4.51 We will maximise the creation of Social Value through the LTP by championing and demonstrating best practice. This includes identifying the

creation of Social Value at the start of project design, developing robust delivery plans and delivering consistent measurement processes. This is to ensure the creation of Social Value is maximised, delivered on time and positively impacts the city region. The delivery of Social Value will be assessed using the LCRCA Social Value Measurement Approach.

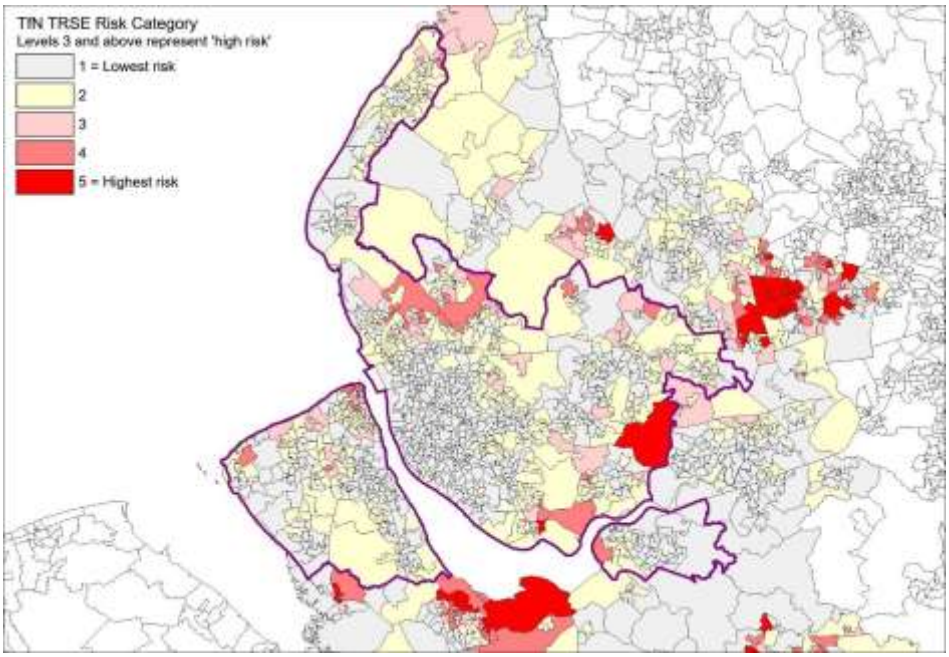
4.52 Examples of delivery include providing employment opportunities, such as full or part time employment or apprenticeship positions to local or disadvantaged people, paying employees working on a contract or project real living wage if not already doing so, delivering engagement sessions in schools and colleges on sector specific subjects, disclosing scope 1, 2 and 3 carbon emissions, or volunteering in local community groups or charities. The LCRCA Social Value Annual Report showcases examples of how social value has been maximised and delivered across all activities.

4.53 The Equality Strategy outlines how we will meet the requirements of the Equality Act 2010 by eliminating discrimination, harassment and victimisation, advancing equality of opportunity and fostering good relations. In addressing gaps and solutions to the transport network, we will be guided by the use of Equality Impact Assessments (EqIAs) to understand impact on people with protected characteristics under the Equality Act 2010. We will undertake EqIAs routinely, keeping them under regular review and updating based on user engagement and data updates. EqIAs will identify how projects and proposals that relate to transport and priorities of the LTP positively promote equality of opportunity and foster good relations, and also identify potential discrimination or adverse impacts. The LTP has also been independently, and positively EqI Assessed as part of its Integrated Impact Assessment.

4.54 The LCRCA's definition of protected characteristics also extends to socio-economic disadvantage and tackling transport related social exclusion is a high priority. As we touch on later in the plan, Transport for the North define transport related social exclusion as being unable to access opportunities, key services, and community life and facing major obstacles in everyday life through barriers to accessing key destinations. These barriers include the cost and time entailed in using the transport system, and the impacts of stress and anxiety linked with using the transport system. Together, these impacts can contribute to a vicious cycle of poverty, isolation, and poor access to basic services. Key causes arise from a fragmented, unreliable and high-cost public transport system, along with poor walking and wheeling infrastructure leading to a car dominated society with high levels of social exclusion. Feeling safe across both public transport and active travel is also a crucial aspect.

4.55 This has a disproportionate impact on those people with disabilities (both physical and hidden) and long-term health conditions, those with caring responsibilities, those from low-income households in insecure work and those from lower socioeconomic backgrounds. We estimate 8.7% of the LCR's population (130,000 people) to be at high risk of transport related social exclusion. Almost of half of LCR neighbourhoods are in top 20% most deprived nationally, a third are in top 10% most deprived nationally. Related to deprivation are issues of digital exclusion, explained in more detail in

section 5.1. Additionally, 30.2% of households in LCR have no car, compared to 23.5% in England. This increases to 40.1% of households in Liverpool having no car. Low car ownership in itself is not a concern, but inequality as a result of a lack of access to opportunity is a much bigger concern to us.



Areas at Risk of Transport Related Social Exclusion.
Source: Transport for the North

4.56 The key to addressing this is to provide significant investment across local public and sustainable transport services to make them more integrated and accessible and provide a genuine alternative to the car especially. This is both in terms of cost - across modes and boundaries - and physical access, to provide viable and reliable access to opportunities, crucially outside of peak periods and outside or trunk commuter routes. We must also transform car-dominated areas into places that allow active travel for everyone as their first choice of travel.

4.57 We must accelerate the programme to make the LCR's rail stations accessible from street to train to fully accommodate active travel needs such as walking and wheeling. So too with access improvements across the city region's highways and public spaces, including as part of any routine maintenance schemes, and new development proposals, wherever possible.

A fully accessible active travel route between Bidston and Moreton, Wirral Source: LCRCA

4.58 The pioneering sliding step and level boarding approach pioneered by the city region on the new Class 777 Merseyrail trains must become the norm for all new rolling stock and rapid transit construction or refurbishment projects in the LCR and beyond.

Paralympian, Baroness Tanni Grey-Thompson boarding a fully accessible Merseyrail Class 777 train - Source: LCRCA

4.59 Support packages to break down barriers to the use of independent and fully inclusive travel will be taken forward; these will include measures such as travel buddying, mentoring, travel training, cycle and wheeling training and confidence-building. These should replace the provision of traditional, segregated door-to-door services that do not sit easily with the principles of inclusion and equality of access.

4.60 Making all of our transport services and infrastructure physically and cognitively accessible is central to breaking down these barriers, as well as supporting other LTP Goals in equal measure. Indeed, "making best use" - improving the usability and accessibility of existing transport networks, especially our rail network - can provide greater benefit and value for money than building a new facility or station outright.

PAS 1899 – Specification for accessible electric vehicle charging - Source: OZEV, Motability and BSI

4.61 Wherever possible, electric vehicle charging infrastructure will be required to meet the requirements of PAS 1899 so that they can be used easily and independently by drivers with physical disabilities.

4.62 It is also crucial that the public is well informed about policy changes and involved in the process of co-design and delivery. The structured consultation that's underpinned this LTP, and the changes made to the plan in light of consultation responses, demonstrate our commitment to this principle. The design and delivery of our services will be facilitated through a co-design approach to ensure that service users, people with lived experience and local communities are able to influence and shape our services to ensure they are inclusive and accessible. This co-design approach will be implemented into the statutory engagement process and impacts captured as part of the regular reviewing of the Equality Impact Assessment and Monitoring and Evaluation processes. Transport measures on the existing transport network that remove physical and cognitive barriers will be prioritised and incorporated into the commissioning and design of all schemes and programmes.

4.63 In conclusion, we will ensure that equality, diversity, inclusion and social value are all embedded throughout procurement, commissioning and delivery of schemes and measures that are commissioned or supported through the LTP process. In particular, Equality Impact Assessments will be required as part of the development of schemes to ensure equality considerations inform design and delivery decisions. Scheme sponsors will also be required to consider how Social Value could be delivered as part of the procurement of services. Maximising the delivery of Social Value will be considered in all aspects of a project's lifecycle.

Principle 7: Work with others to promote and deliver the vision goals, principles and policies of the LTP

4.64 We know that movement is influenced by many things, including the influence of a wide range of organisations and their decisions. Therefore, the LCRCA cannot deliver this plan alone. We must promote and champion the vision,

goals, principles and policies in this plan with others, building on the engagement and public support that we have built to date.

4.65 Our partners will include constituent and adjoining local authorities, central government, government bodies, Transport for the North, incumbent and new transport operators, developers, industry and business, Chambers of Commerce, the health sector, charitable and not-for-profit bodies, activist groups, and our communities.

4.66 Our own personal travel needs and habits have a direct bearing on the success of the LTP and the change in travel that's needed. Indeed, as we set out in the preceding section, we need to reduce the numbers of car-based trips that people make from 433 individual car trips a year to between 346-372 trips by 2035. This is, quite literally, a journey that we must make with people and with our communities.

4.67 Providing travel information and advice, reassurance, support and incentives is vitally important part of the package needed to support modal shift from private car to sustainable alternatives to meet the priorities in this LTP. Travel plans for schools, colleges, workplaces and tourism attractions will be critically important tools here in ensuring that people and end users are engaged in the process.

4.68 As this is a plan that looks to 2040, the views and aspirations of today's children and young people are central to our thinking. The LCRCA's Youth Combined Authority was established in 2022 and is made up of more than 20 young people from all over our city region. The YCA has a keen interest in transport related projects and will be an important sounding board in finalising this draft plan and shaping future schemes and ambitions.

4.69 We recognise that we must work hard to communicate and "sell" the benefits of new measures that encourage modal switch, including in the development of specific proposals, including as part of the engagement and consultation process. This will include the use of easily understood graphics, mock-ups, social media clips and animations as opposed to complicated technical drawings or plans. The recent virtual reality walkthrough, produced to aid consultation on the proposed Baltic Rail Station, is a powerful example of de-mystifying

Virtual reality tour of the proposed Baltic rail station
Source: LCRCA and You Tube

complex plans and communicating the benefits to residents, business and other future users.

4.70 So too are the persuasive, and clear videos developed by the LCRCA's Active Travel Commissioner in conjunction with local authority partners. These communicate the benefits of active travel schemes, and critically, debunk myths that can overshadow the benefits.

Source: Simon O'Brien and the "Art of the Possible"
Source: LCRCA and You Tube

4.71 But honouring our inclusivity principle in the preceding principle, we reiterate that our engagement with people must go beyond top-down campaigns and initiatives to grassroots and community-led initiatives that deliver and promote the aims of the LTP. Wherever possible, co-design and community design processes will be utilised by the LCRCA and its partners in developing solutions to problems. Sustrans' By Ours project in the LCR is a prime example of residents, businesses and schools working together to improve local streets and design a vibrant and prosperous neighbourhood. Design panels will also be used to engage people and a range of users with different interests in schemes or designs as they progress through the consultation and design stages.

4.72 We will undertake detailed work to understand and overcome the barriers people face in changing how they travel, whether actual or perceptual barriers, including people who are not current users of the bus, rail and active travel networks.

4.73 The LCRCA will also work will other bodies and agencies to align and deliver of schemes and measures that support the aims of the LTP and wider policy priorities such as clean air, better health and greater levels of activity. We will work with public and private sector partners to seek to embed clean, healthy, zero emission transport as first choice forms of travel from the very start of a concept or a proposal, rather than as an afterthought. This will ensure that the principles set out in the LTP inform other relevant policies and decisions as we redevelop our town centres, regenerate communities or plan how services are provided. Masterplans, workplace or school travel plans can be an effective way in which to do this.

4.74 The role of the complementary Spatial Development Strategy for the city region will become increasingly important in influencing local plans and planning decisions and in helping to deliver the aims of the LTP. As a result, we will engage with, and respond to plans, proposals, planning policies and planning proposals coming forward in the constituent local authorities. We will respond in a way that encourages, and shape and deliver planning proposals that support the vision, goals, principles and policies of this plan.

Principle 8: A rolling programme of innovative transport investment

4.75 This LTP provides the narrative, rationale, framework and strategic case for interventions that will go on to be identified, promoted, funded or developed by the Combined Authority, the constituent local authorities, by developers or by statutory bodies or agencies. These will be both capital and revenue-based interventions, recognising that new schemes have maximum impact when supported by behavioural, financial and other incentive measures.

4.76 As well as including policies to guide our priorities against each Goal, the LTP sets out a Delivery Plan as an Appendix. The Delivery Plan's priorities are structured into three parts:

- **Current** – until 2027
- **Imminent** – between 2027 – 2032
- **Our future vision for transport** – from 2032-2040

4.77 The level of detail and precision in our delivery plan will become more high-level and less specific as we look to the future. In the immediate term, our delivery plan for capital projects takes the form of our agreed City Region Sustainable Transport (CRSTS) programme between 2022-2027. We were awarded £710 million by Government to deliver this programme. We also have additional funds available from other grants, tunnel toll income, from charitable organisations or from land and property developers (e.g. via section 106 and section 278 funding agreements) through the planning process for new development.

4.78 This LTP is also framed by new, and very welcome devolved funding processes that will apply from the 2026/27 financial year, to shape its medium-

term programme. The LCR will receive an Integrated Settlement, comprising various funds from different government departments over a multi-year period. This includes a £1.581 billion Transport for City Regions (TCR) award between 2027-2032. In allocating this funding, the Chancellor recognised that connectivity is an absolutely critical factor in unlocking the potential of towns and cities, a position that's fully supported throughout this LTP.

4.79 There are, however, other funds that are not yet known or confirmed. This means that we must be open to change and adaptable and make sure that our delivery plans are still delivering the aims that we have set out. Similarly, solutions that may have been relevant and feasible in the early days of the plan may become outdated or through new technology and innovations. Our Delivery Plan will be kept reviewed at regular intervals to ensure that it's up to date and relevant, and we will keep our data and evidence updated as well, so that we plan from a fully informed position.

4.80 As noted, in addition to the capital funds outlined above, transport is supported and facilitated by other revenue-based funding from:

- The LCRCA's Mayoral Precept
- The Transport Levy
- Income from the Mersey Tunnels Tolls and in future, from franchised bus services or from any new approaches to delivering the local devolved Merseyrail concession
- Ad hoc revenue support and revenue-based competitions (e.g. for zero emission fleets, electric vehicles or for active travel), though such funds are expected to be replaced by devolved monies in the integrated Settlement over the lifetime of the LTP

and which are equally important in supporting the delivery of services and in turn, the aims of this LTP. Funding priorities will be guided by the vision, goals, principles and policies in the LTP.

4.81 Our LTP latter years' delivery priorities will, by necessity, be at a higher-level and be less specific, but will be updated on a rolling basis as circumstances change. Updated delivery programmes will take the form of new appendices to this plan. This approach will help ensure that the LTP remains current and relevant over its lifetime, and will help to give the evolving pipelines of schemes and priorities more formal status as supporting parts of the adopted LTP.

4.82 Importantly, the way that the benefits of transport schemes nationally are calculated can often favour schemes in the south and south east of the country, and where value for money is often higher because it will benefit a larger or more affluent workforce or population, for example. Similarly, for too long, the benefits of transport schemes have been based on their benefit to drivers or to motorised transport rather than to people. This can make the case for funding transformational, game-changing transport schemes in areas like the North of England harder. For this reason, we welcome, and continue to work closely with partners such as Transport for the North, the Urban

Transport Group, the Department for Transport and the Treasury as part of the Green Book review. This is to ensure that appraisal tools better reflect the myriad benefits and value that placemaking and transformational schemes such as the expansion of Liverpool Central Station and Northern Powerhouse Rail, highlighted under section 5.2 will deliver in support of this LTP.

4.83 As per *Principle 6: Guided by our commitment to inclusivity, accessibility and social value*, all activity as part of the LTP will be underpinned by the organisation's commitments to equality, diversity and inclusion (EDI) and maximising the creation of Social Value. This includes our approach to investment as outlined in the Investment Strategy Refresh document and which will be informed by this LTP.

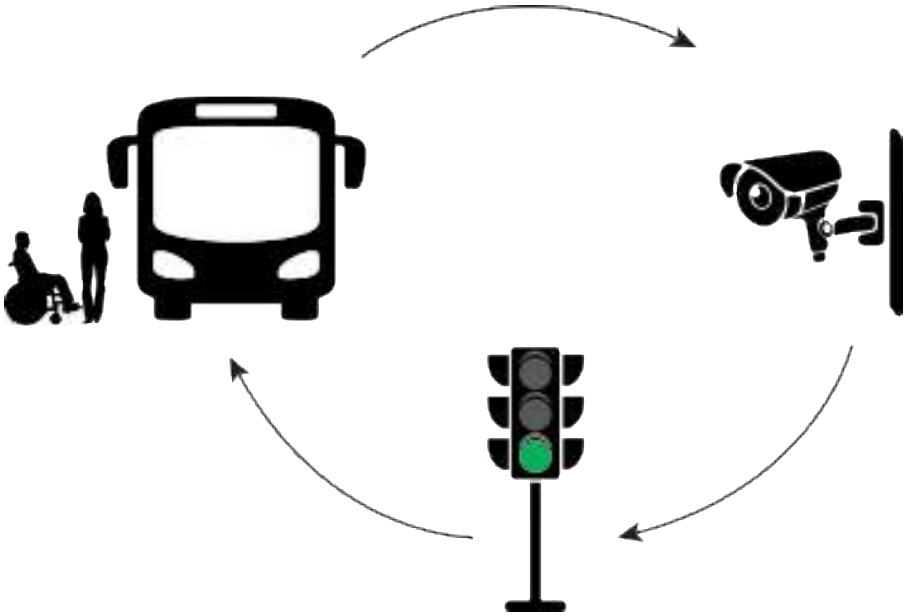
4.84 The development of schemes will also be guided by our ambition to be an innovative city region as set out in our Innovation Prospectus. This means utilising data and technology where appropriate to foster a "Smart Cities" approach. A Smart City is a place where traditional networks and services are made more efficient with the use of high-quality data and digital solutions for the benefit of its inhabitants and business. In the Liverpool City Region, we have an opportunity to transform our transport system through innovative and creative digital solutions that allow transport and movement to be planned and operated in real time, in response to specific circumstances or to respond to an emergency. We want to make the LCR a "Smart City Region".

4.85 This will include the management of traffic (using road, rail, air and water) in new and more efficient ways utilising live data and real time information. There is also significant potential for better data and technology, including artificial intelligence, automated vehicles and pods to transform the movement of goods and freight. The LRCRA is committed to using "AI for good", with appropriate safeguards in place, to deliver better services, start new businesses and position the region as a leader in its implementation. Such approaches will become more prevalent over the life of the LTP, as technology is rapidly advancing in this area. The global artificial intelligence transportation market is forecast to reach $6.3 billion by 2027.

4.86 There are many cases of innovative approaches already being utilised. In Santander, Spain battery-powered wireless sensors are being used for real-time monitoring of air quality, with devices installed on public vehicles such as buses, taxis, and police cars. This allows for periodic monitoring of the air quality, of which the benefits are two-fold. Instantly, they inform public health alert systems which warn residents of the potential exposure to harmful pollutants. Then, over time, they can provide useful data to inform longer term strategic decision-making regarding air quality issues and identifying potential solutions.

4.87 In Cagliari, Italy, the installation of pedestrian and vehicular monitoring equipment, such as smart bus stops, Wi-Fi sniffers, traffic cameras, and traffic lights**,** aims to improve road transport movement. The system detects passengers by identifying users getting on and off buses via cameras. Wi-Fi sniffers then identify people waiting at bus stops and connecting to Wi-Fi. As

shown in the graphic below, the pedestrian data is then combined with that of traffic flows, enabling real-time management of traffic light timings, to prioritise public transport movement. This approach is very much aligned with *Principle 5: Prioritise clean, healthy travel in all we do* through a transport hierarchy. An evaluation of this scheme has also suggested it has the potential be scaled up, possibly covering whole metropolitan areas.



Simplified diagram shows pedestrian and vehicular monitoring equipment
Source: LCRCA.

4.88 Being innovative also goes beyond the utilisation of technology; it is a philosophy to be bold and a willingness to do things differently. The LCRCA will support trials and testbed of measures that support the aims of this LTP. This is why our delivery programme needs to be flexible and is not being set in stone in the period leading up to 2040.

4.89 The eight principes above run through, and influence all policies under the specific goals that follow in the next section.

5. Delivering the LTP

The vision: Clean, safe and accessible transport for moving people and goods

To plan and deliver a future-facing, clean, safe and accessible transport system built to last. It will focus on moving people, goods and freight around the region in a way that delivers our local ambitions. Particular focus will be on a net zero carbon emitting city region by 2035.

GOAL 1: Support good, clean job growth and opportunity for all

Opportunities vary from person to person. Access to healthcare, town or retail centres, fresh food, employment, education, training, open spaces and leisure are all things that can impact someone's quality of life and local productivity. Transport can support this. This means equal opportunities for all to access affordable transport systems that connect people to jobs and services – all while keeping the environment in mind.

5.1 Delivering Goal 1

5.1.1 This goal supports the economic wellbeing and prosperity of the city region. This is in ways that are fair and inclusive, where everyone has the same opportunity to meet their potential as set out in our Liverpool City Region Growth Plan and in our Plan for Prosperity. Transport supports how we move things and deliver them to our companies. It facilitates and improves access to new homes, town centres, jobs, services, education, leisure and other opportunities.

5.1.2 But poor quality, congested or costly transport services, or no transport at all, are barriers to growth and prosperity. In extreme cases, people may not be able to sustain jobs. At the same time, we need to reduce car dependency as a city region and ensure that people never feel forced into buying or running a car to make their living and to live their lives to their full potential.

A shared purpose

5.1.3 We do not deliver transport for its own sake or as a measure of success in itself. We plan and deliver transport to do other things for the good of the city region - supporting good growth and productivity, better skills and education, better health and creating a better quality of life for all. But at the same time, the themes in this LTP must also be applied across our other strands of activity.

Policy G1-1

Consider sustainable transport and movement in all we do as a Combined Authority

The Combined Authority will consider the transport implications of all its policies, plans, and programmes from the outset, to ensure that its full range of activities and influences support the vision and goals of this plan.

We will ensure that our wider activities, plans and proposals help to deliver the aims of the LTP, and in particular, *Principle 5: Prioritise clean, healthy travel in all we do*. This is so that we to embed walking, cycling, wheeling and clean public transport as the first choices of travel for people of all ages and abilities, and in ways that improve quality of life for all. It will also ensure that everyone can access education, work and life chances easily, safely and fairly and that goods and services can move easily, safely and sustainably.

Good accessibility and sustainable transport considerations, as set out in the LTP, will be central to our investment functions in how we secure, allocate and prioritise monies within our control and influence.

5.1.4 We must ensure that we focus our transport services and investment around the needs of our people, on where the need is strongest and do this in ways that support the vision and all five goals. We also recognise that as an established Combined Authority, other things that we do, outside of our transport responsibilities have a big impact. These include: regeneration plans, economic development policies, the promotion of the Freeport, work to improve people's employment chances and skills, devolved funding and our planning policies all influence travel demand and how people travel in good, and in bad ways.

5.1.5 This means that we must think about and manage the transport impacts of all that we do from the start and not as an afterthought. The LTP will guide and inform how we commission and fund activities and provide the strategic "case for change" in any relevant business case or funding negotiations.

5.1.6 One of the main determinants of travel choices relates to the location and accessibility of development – homes, shops, workplaces, schools and facilities. Decisions around the location of education or health services have a big bearing on the achievement of the goals, principles and policies set out in this plan.

5.1.7 Our Spatial Development Strategy (SDS) will influence how we plan strategically for housing, economy and employment, leisure and commercial, infrastructure, community facilities and natural and historic environment. It will also set out principles, tests and criteria for new development. The SDS and

LTP have been developed together, meaning that they share common aims around core issues such as:

- Tackling climate change and increasing resilience to its effects
- Promoting health and wellbeing
- Supporting growth and inward investment opportunities and creating an inclusive economy
- Promoting Liverpool City Centre as a world-class destination and regional economic centre
- Ensuring businesses and communities are well connected, supported by cleaner and greener travel and digital infrastructure
  with place-making at the heart of new development

5.1.8 As the city region changes and grows in response to new development, we will ensure that the principles and policies of the LTP guide and influence how this development will be located, laid out and serviced. The emerging SDS's identification of main areas of growth and focus include Liverpool City Centre, the Inner Urban Area and main towns and centres. Importantly, these areas are typically well served now by core bus and rail services and have significant potential to be very well connected by walking, cycling and wheeling.

5.1.9 Spatial priorities, including strategic housing and employment locations identified by the SDS will inform investment priorities in the LTP's delivery programmes. This recognises the need to support clean, sustainable access options to these locations, enabling them sustainable access principles to be embedded from the start and avoiding the need to travel by car especially, to support the shared goals of the LTP and the SDS.

5.1.10 The focus on supporting housebuilding across the city region, linked to the government's ambition to build 1.5 million homes in England is especially important. Linked to the National Planning Policy Framework, and methodology for assessing local housing need, the LCR will see a significant increase in the numbers of new homes to be planned for from previous planned averages. Good transport links will be essential to support the development of high quality, accessible, sustainable and inclusive new homes and to ensure that Transport Related Social Exclusion (TRSE), discussed in the following section, is avoided from the start.

5.1.11 As such, the aim will always be to ensure that all new development and economic assets are either fully accessible, or made fully accessible by active travel and clean sustainable transport options from the start, rather than being designed so that they are dominated by, or worse, solely accessible by private transport. The use of resident, school and workplace travel plans, linked to the planning approval process will be important tools to help secure sustainable travel patterns into the future. This LTP retains longstanding guidelines that aspire to enabling people to live within 400m of a bus service and 800m of a rail service. The Department for Transport has recently published a Connectivity Tool to help assess levels of connectivity. This looks

at how well an area is connected to everyday services by walking, driving, cycling and public transport. It can also plot new transport routes to understand how these would affect an area's connectivity. This tool supports the delivery of the LTP's vision and goals, and will aid any related studies concerning future identification of locations and the allocation of land for development in the finalisation of the SDS and in associated Local Development Plans.

5.1.12 The identification of development locations and priorities will be updated as the SDS is finalised over the LTP's short term delivery period, and will guide priorities in future iterations of the rolling delivery plan.

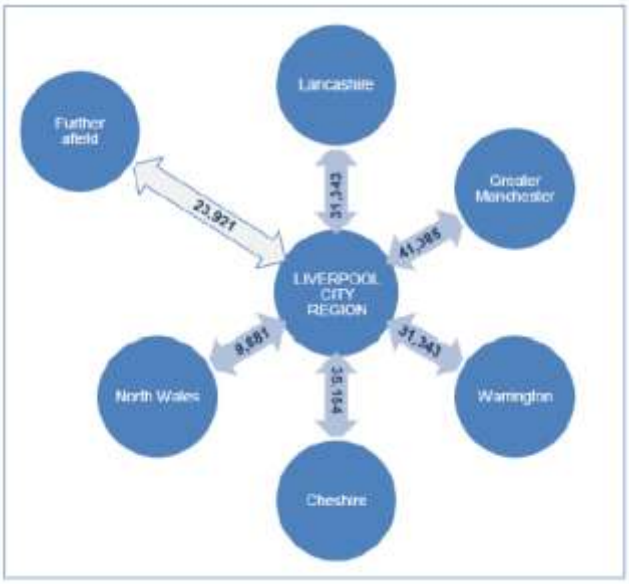
5.1.13 The emerging SDS is also supported by a Strategic Infrastructure Plan (SIP). This identifies existing, funded, planned and aspirational strategic infrastructure needed to support SDS priorities and growth aspirations to 2040. The SIP also considers future infrastructure requirements up to 2045. The SIP will be a 'live' document and will be used to plan for the delivery of strategic infrastructure throughout the SDS plan period. The SIP will be used to inform Combined Authority policy, investment decisions and input to planning proposals for new development. The LTP will help inform future revisions to the SIP so that we are consistent and clear in the types of, and location of different forms of infrastructure needed to support new growth and development.

5.1.14 Equally, we must ensure that *existing* services, jobs, schools, colleges and leisure opportunities are accessible to all – not just people with access to a car or to a lift, which is neither inclusive or supportive of the LTP's vision and goals. A modern, low carbon infrastructure system will be the underpinning enabler to deliver these ambitions. Looking beyond our planning tools, the devolved funding through our Integrated Settlement that we'll manage from 2026/27 is essential to support the LTP's principles. This principle is also reflected in our 2023 Investment Strategy that's in the process of being updated to strengthen this approach.

5.1.15 Through the LTP, we reaffirm our commitment to adopt an approach to infrastructure that delivers clean, sustainable growth and shared prosperity for all our communities and businesses. We will transform our energy, transport, and digital infrastructure to deliver sustainable economic growth, protect the environment, improve public health, attract investment, and link people and businesses to opportunities across the city region and beyond. The LTP will support the transport investment and interventions to deliver this vision, whether to improve levels of connectivity, or help shift the balance of how people and goods move, through specific schemes or services. We will ensure that there is a clear focus on clean, safe, healthy travel and access for all in all that we do.

Thinking and working beyond administrative boundaries

5.1.16 A key point is that the LCR is not an island or a cul-de-sac; cross border journeys for people and freight are of critical importance in their impact and importance. Cross-boundary travel amounts for 37% of commuting trips. The fact that many local Merseyrail lines and bus routes extend beyond our administrative boundaries to Cheshire West and Chester, Warrington and West Lancashire reflect this reality.



Commuting trips to and from the LCR
Source: LCRCA and Census 2011(ONS)

5.1.17 The LCR is a gateway to and from the rest of the world. In 2019 there were 648,000 passengers using the Irish Sea ferry routes to Liverpool. By 2022 this had increased to 801,000. Pre-COVID Liverpool John Lennon Airport recorded 5 million passengers in 2019, and by October 2024, had reached this level and continues to grow. Liverpool Cruise Terminal experienced a record year in 2025, with a significant increase in traffic from the previous year, bringing with them a growing number of passengers to the city region. Cruise calls are estimated to have a significant positive impact on the local economy, with July 2025 alone generating an estimated £2.5 million in the city region.

5.1.18 Our tourism offer and visitor economy fundamentally depend on good access to, and within the city region. Good transport also helps disperse visitors to attractions across the LCR. Our Destination Management Plan (DMP) 2025 - 2030 highlights that in 2023, our visitor economy generated over £6.25bn, welcoming more than 60 million visitors and supporting over 58,000 jobs. This accounts for over 10% of local jobs and businesses and contributing 12% to the region's Gross Value Added (GVA). Through its commitment to a high quality, integrated and simple-to-use sustainable transport offer, this LTP supports the DMP's guiding principles, including sustainability and reducing the carbon footprint of the LCR visitor economy to contribute towards our net zero ambitions. This includes opportunities to promote sustainable aspects of the LCR visitor economy offer in the destination's marketing, including assets such as Lime Street mainline station, the Merseyrail network and the city region's coach terminals.

5.1.19 As set out in the LCR Strategic Housing & Economic Development Needs Assessment (2023), the city region is influenced by a number of major employment locations surrounding it. These include Chester, Warrington,

Preston and Manchester. The LCRCA will continue to work with neighbours and wider regional authorities and transport bodies over the lifetime of this LTP to help deliver transport improvements across the North, including improving inter-regional accessibility and supporting increased connectivity and economic integration for example with the Greater Manchester City Region, with the potential for agglomeration benefits.

5.1.20 Similarity, fast, frequent, and reliable connections between our economic centres for goods, people and business to other parts of the UK and to our international gateway The 2023 Northern Powerhouse Independent Economic Review (NPIER) identifies the economic prize of closing the productivity gap between the North and the UK would mean a northern economy that is £118bn pa larger by 2050. The LCRCA will work closely with bodies such as the Government, Transport for the North and Great North partnership and the in pursuit of these aims, in a way that aligns with *Policy G2-2: Delivering an integrated, sustainable mass transit network, tackling capacity problems and improving connectivity*

5.1.21 The LCRCA works closely with Transport for the North (TfN) as the sub-national transport body with a statutory role to collectively represent the region's 16 million citizens. Improving connectivity and delivering a joined-up transport network across the North is one of the main objectives of TfN's Strategic Transport Plan (STP).

5.1.22 Within the STP, TfN state a clear vision that's supported by this LTP:

"*By 2050 the North of England will have become a thriving, socially inclusive region. Our communities, businesses and places will all benefit from sustainable economic growth, improved health and wellbeing and access to opportunities for all. This will be achieved through a transformed, zero-emission, integrated, safe and sustainable transport system, which will enhance connectivity, resilience and journey times for all users. Our vision is supported by three clear strategic ambitions the North wants to achieve*."

5.1.23 Equally, the LCRCA will work with closely bodies such as the Mersey-Dee Alliance, Transport for Wales, especially on the Network North Wales plans, with Welsh Government, The Great North partnership and adjoining Northern local authorities and Combined Authority areas to deliver joined-up, sustainable travel options across our borders. This will include not only the co-development of cross boundary schemes and enhancements, but also simplified ticketing and travel payment systems.

Targeting action in response

Policy G1-2

Prioritising measures and services that improve people's access to opportunity

We will use our evidence to guide and prioritise measures that address gaps or weaknesses in the transport network and that act as real or perceived barriers to businesses, visitors and residents across the city region. Improving sustainable access for all will be the starting point in any intervention.

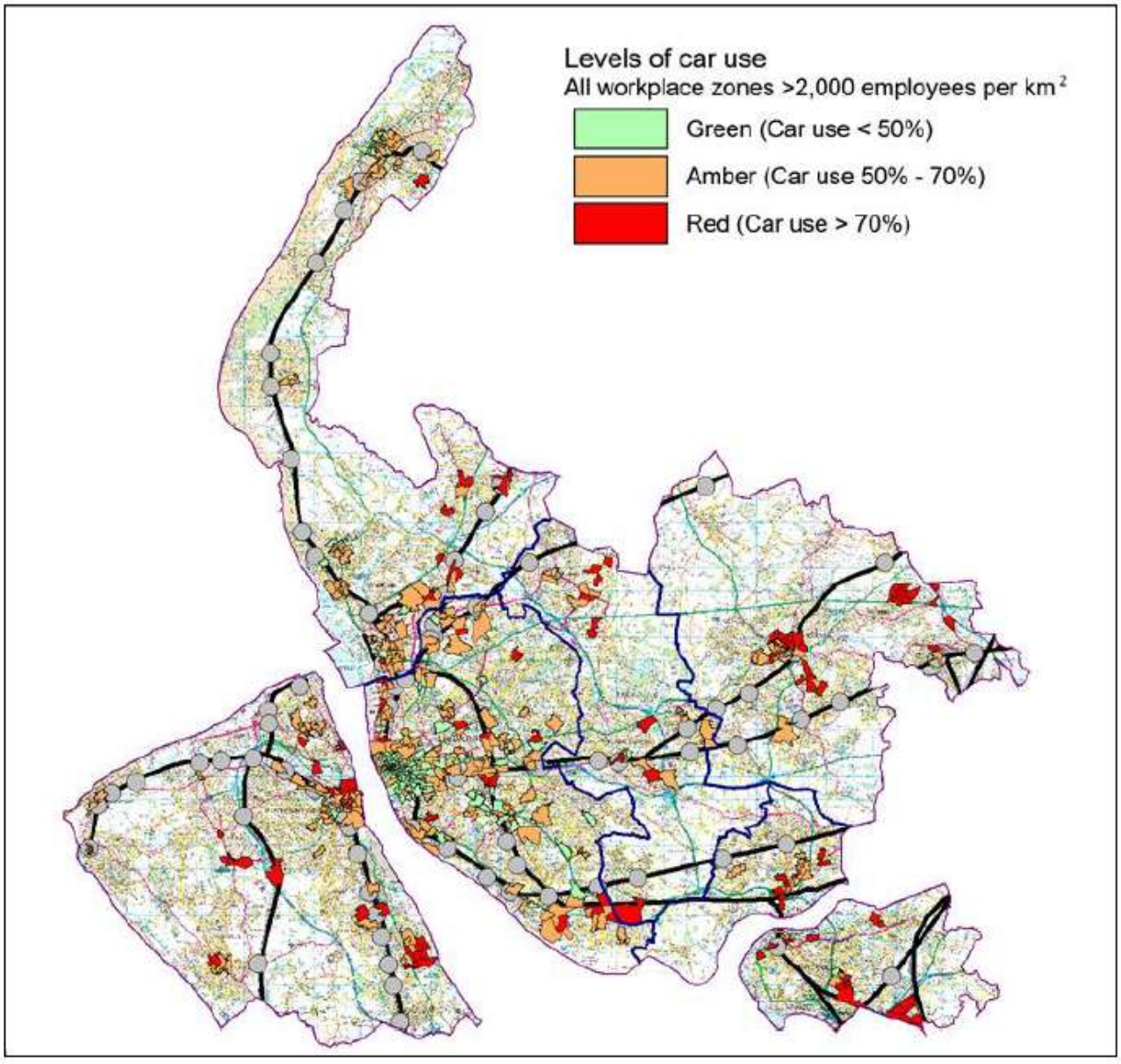
Our spatial priorities in our constituent partners' development plans and our emerging Spatial Development Strategy, including strategic housing and employment sites being promoted, will be especially important considerations in the specification of enhanced, integrated active travel, bus and rail links.

A re-mapped, franchised bus network that integrates with the local rail network and with other transport modes and services will be critical to support this policy and to help deliver the wider goals and principles of this plan.

5.1.24 As we've set out previously, poor quality transport services, or no transport at all, acts as a barrier if it is not easy or safe to get to a place of work easily or cheaply – and we know that people have turned down offers of work due to the cost, availability or inconvenience of public transport. Transport for the North estimates that 8.7% of the Liverpool city region's population live in areas defined as being at high risk from Transport Related Social Exclusion (TRSE), whereby inequalities in our transport system contribute to poverty and economic deprivation, inequalities in health and wellbeing, and social isolation.

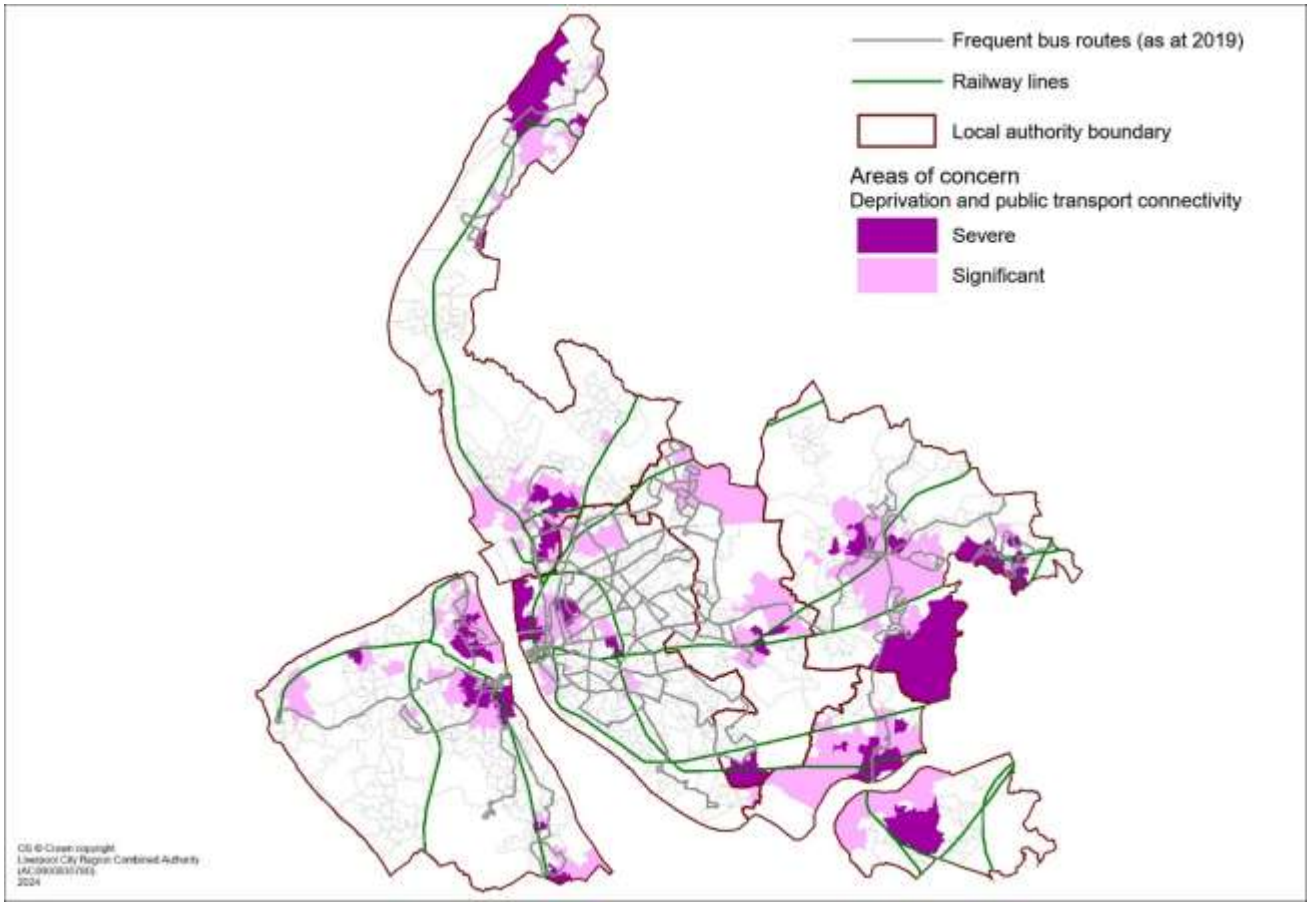
5.1.25 Poor levels of access to workplaces in turn create lead to higher levels of car usage and the challenges that this plan sets out to tackle. The map over the page shows where pockets of workplaces with particularly high levels of car use are likely to exist. Liverpool City Centre appears to perform better in terms of lower car use, but there are many areas of concentrated car use elsewhere that we must target.

Car use to workplaces and workplace concentrations



Car use to workplaces and workplace concentrations
Source: Census 2011, BRES 2010 to 2020, ONS (LCRCA)

5.1.26 The following map shows areas with higher levels of deprivation, and where public transport is weaker than the car offer. This means that people without access to a car may not have as many opportunities or may be forced into running a car that places a big burden on their household finances because there is no alternative.



Map showing relative deprivation and public transport connectivity
Source: LCRCA

5.1.27 Poor levels of access mean that people will either choose not to travel, travel in ways that are sub-optimal (e.g. on foot along dark streets late at night) or else use their own cars to make trips. This will not support our inclusive growth, safety, decarbonisation or environmental goals. We also need to bear in mind that jobs in retail, manufacturing, distribution and in the visitor economy are more likely to be shift-based or involve travel late and night or early in the morning when options are more limited. The ways in which we will enhance the reach and quality of public transport services are set out in more detail under *Goal 2 - Achieve net-zero carbon and an improved environment* but we must make clean transport choices easy, and affordable and competitive, especially in the current cost of living crisis. The cost of travel featured strongly in the priorities that our consultees raised in the consultation on the Vision and Goals in 2022.

Policy G1-3

Making it easy and affordable to travel sustainably

We will develop new ticketing and payment products to help make integrated bus and rail travel in the city region transport simple, flexible and affordable. This will be aided by new powers and controls available through bus franchising and through the further devolution of our rail services.

The aim over time will be to extend the convenience of integrated ticketing to other forms of travel, including legalised e-scooters and e-bikes and new forms of mobility. This will be accessible by smartcard, mobile phone app or contactless debit card.

Our new ticketing products will include the ability to 'cap' the costs of travel so that passengers pay no more for their journey than they need to, and not face penalties if they need to change bus, or from bus to a train service. It will also make it simpler in time to mix and match different forms of transport, to fully integrate bus, rail and ferry services and to blend new forms of travel such as legalised shared e-scooters and e-bikes.

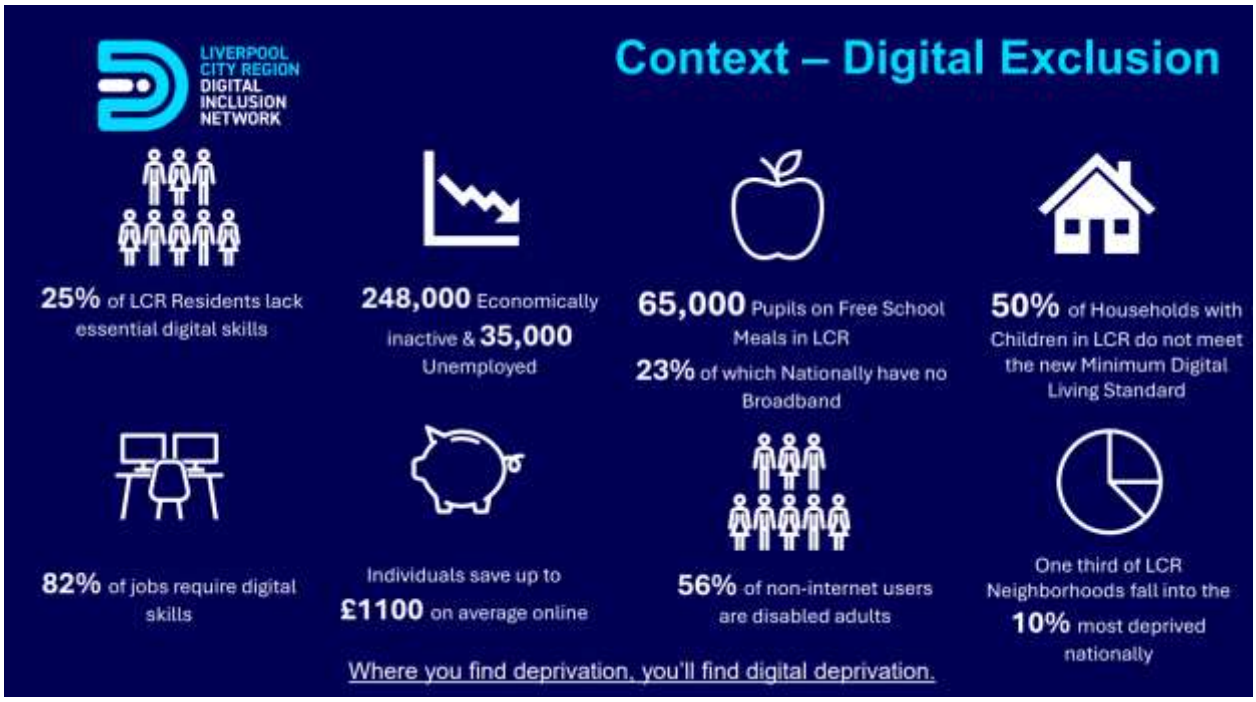
Through our digital inclusion commitments, we will ensure that no one is left behind or disadvantaged in the move to new digital and account-based ticketing products from paper-based tickets or from payment by cash.

5.1.28 Taking the guesswork and uncertainty out of paying for transport using cashless payments can offer big benefits and help overcome these barriers.
It can break down costs, if users are not penalised for making trips by different forms of travel or on different operators. It's also central to how we deliver a truly integrated, London-style transport system. The ambition is for a simple, fair, inclusive and seamless methods to pay to access transport for everyone while helping reduce car dependency and use of the private car – ensuring people pay the best fare for that journey or combination of journeys.

Mayor Steve Rotheram launching Metro 'Tap and Go' price capping on the Merseyrail network in August 2025 Source: LCRCA

5.1.29 The move to bus franchising in the early years of the LTP's delivery period provides huge opportunities to streamline, review and integrate bus ticketing with other modes of travel, especially the local rail network. In particular, the need to buy different tickets for use on different operators' services, often at disproportionate cost, will be obviated. This has the additional benefit of increasing integration between bus and rail and maximising choice.

5.1.30 Making the Liverpool City Region one of the UK's most digitally connected and inclusive regions in the UK is a key priority for the Combined Authority. As a city region, we are committed to ensuring that our residents have access to the skills and support needed to fully participate in an ever-evolving digital world and must address digital exclusion, just as we must address transport related social exclusion.



The importance of addressing digital exclusion in the LCR
Source: LCRCA / Digital Inclusion Network

5.1.31 It is essential that our plans for smart, integrated ticketing and new ways of paying or travel do not lead to digital exclusion and create unintended consequences. This means considering the needs of people who may not have access to the internet, the right equipment, appropriate digital skills, means to afford to engage online or may not have a bank account.
The LCRCA's digital inclusion work provides help on getting online, supports digital skills and in accessing essential equipment. This includes our "Helping You Online" guide, available as a printed booklet in most libraries and community venues.

5.1.32 When we take forward new digital ticketing products, and look at how they are sold and accessed by people we will:

a) deliver changes to ticketing products in ways that maintain a choice of formats and methods to ensure that the transport network and services allow freedom of travel for people who are digitally excluded and disadvantaged. Technology should enhance choice and ease of paying for access to the transport network, not stymie it.

b) Ensure that new products and services are integrated with the principles in the LCRCA's Digital Inclusion Network, so that support and mentoring is available for people who would otherwise be excluded or left behind

c) Reform and simplify the range of transport information, ticketing and payment systems, ensuring it is accessible and reflective of the demographic makeup of the LCR.

Policy G1-4

Reviewing our travel support offer

We will review our travel support packages to make sure that they are delivering benefits in ways that support the aims of this LTP.

This will include the consideration of trials of new support or incentivisation packages for younger people facing barriers to education or work, for people on the cusp of learning to drive, and becoming regular car users especially, for people struggling to access work and opportunity, or for people seeking asylum and who require urgent support. We will seek to do this as part of a review of our products and services, rather than on a case-by-case basis and consult with affected groups and communities.

Where travel support is provided by others, such as local education authorities or the health sector, we will work collaboratively to ensure that solutions are complementary, don't duplicate or compete and support the vision and goals set out in this LTP. The presumption will be on promoting and maximising sustainable travel choices that are at the top of the transport hierarchy set out in *Principle 5: Prioritise clean, healthy travel in all we do.*

5.1.33 We recognise that barriers to education, work and life chances can be unlocked by making travel cheaper, easier to access, and free of charge in some cases. In the Merseyside area, we operate one of the most generous concessionary travel systems for people with disability and over the age of 60 in the country, where we provide free travel our buses and trains. We also provide lower cost travel or young people studying for apprenticeships. MyTicket is a prime example of a simple, low cost and flexible bus ticket that takes the guesswork out of travelling by bus and in changing from one bus service to another. The Mayor's free travel pass for care experienced young people is also a groundbreaking example of how we're capturing the generosity and social value commitments of our bus and rail operators to help

overcome transport and cost barriers for young adults between 18-21 leaving the care system.

5.1.34 But as our economy changes, in terms of the types of jobs that people do, where these are based, how people travel, as technology changes and as our population ages, we will review how we best target our support. Our travel offer is not equitable across the six local authority areas either. Five of our local authorities are served by the Merseyside concessionary travel scheme and Halton is served by the equivalent Cheshire scheme, which is less generous. Younger people aged 16+ who are on the cusp of learning to drive or buying a car may feel that the existing travel ticketing system is too costly or complex and see car ownership as an easier solution. Simpler ticketing, or better and cheaper travel support packages for people in this age group may help to provide practical alternatives to buying or leasing a car, or else driving every trip and help reduce car dependency. It could also help tackle barriers to reaching education, training or new work opportunities

5.1.35 In 2019, those over 65 accounted for 19% of the city region population, but by 2045, they will account for 25%, and in places like Sefton, this will reach over 30% of the population. Over the same period, the LCR population aged 16 to 64 is projected to decline by around 72,000 (7.4%), compared to a 2.2% decline forecast nationally. This increase in the older population has big implications for transport networks, in terms of accessibility, ticketing, and network provision. It also has direct cost implications for the LCRCA.

5.1.36 Therefore, we will keep our travel offer under review. This is to provide best value for public funding and make sure that it offers greatest impact and benefits to support the vision, goals, principles and policies in this plan. This will include consideration of new support packages for people excluded from the jobs market, younger people facing barriers to education or work, people seeking asylum or people leaving the prison or care system.

5.1.37 This will include the need to think beyond traditional public transport support. As set out in *Principle 6: Guided* by our commitment to inclusivity, accessibility and social *value,* support packages to break down barriers to the use of independent and fully inclusive travel will be taken forward; these will include measures such as travel buddying, mentoring, travel training, cycle and wheeling training and confidence-building. These should replace the need for traditional, segregated door-to-door transport services that do not sit easily with the principles of inclusion and equality of access.

5.1.38 Technology is also changing rapidly, linked to new innovations that influence if, when and how people travel and how transport systems operate, that we must consider as part of any review.

GOAL 2: Achieve net-zero carbon and an improved environment

Reach net-zero carbon emissions by 2035, whilst protecting and improving our local environment

5.2 Delivering Goal 2

5.2.1 The LTP clearly sets out the challenges and risks presented by how we travel and move people and goods now. Supporting decarbonisation, so that by 2035 where the city region's transport network does not contribute any more carbon to the atmosphere that it can absorb, is the starting point. Transport remains our biggest source of carbon, generating some 29% of total carbon dioxide emissions in the city region. Most emissions come from road traffic. This must change quickly.

Policy G2-1

Removing carbon emissions from transport

Removing carbon emissions rapidly to achieve our aim to be a net zero emitting city region by 2035 means that the way we plan for travel and movement must change.

All transport proposals, plans, services and schemes must set out their likely carbon impacts in both their construction and in their usage. Their ability to reduce carbon against the 2035 net zero trajectory will form a core consideration in the decision-making process, including our scheme Gateway Approval processes. The right plans and proposals that make big reductions in carbon emissions will be viewed favourably by the Combined Authority.

Scheme promoters must look at a range of options from the outset to understand the relative carbon impact of different transport solutions, designs, construction types and procurement options, set against the city region's steep decarbonisation trajectory.

This approach will include consideration of whole life carbon analysis in line with Department for Transport guidance on "Quantifying carbon emissions for local transport planning" to inform transport strategies and schemes. Related principles set out in the PAS 2080 framework will be used in the assessment and appraisal of transport options and projects.

5.2.2 Importantly, tackling carbon emissions is not the sole focus of this LTP, as transport also generates other harmful pollutants to human health, such as nitrogen dioxide and microscopic particulates. This is addressed in more detail under *Goal 3 - Improve health, safety and quality of life*. Over the life of this LTP, more vehicle engines will shift from being powered by petrol and

diesel to being powered by electricity or by hydrogen, and which is expected to improve nitrogen dioxide problems. This is welcomed and encouraged. However, all road-based vehicles generate harmful microscopic particles from tyre wear and brake dust and other sources. Tragically, any vehicle is capable of inflicting injury or death. Low-emission electric or hybrid vehicles are not a panacea for improving the environment and tackling other adverse effects from transport, including issues of equality and fairness.

Modal shift

5.2.3 The headline is that measures to achieve very significant modal shift and a big reduction in vehicle trips must form a core part of this LTP. This is to deliver the goal of a clean, liveable, safe and healthy transport system that's not characterised by "cleaner congestion" but stressing that no congestion is clean or risk-free. Congestion is harmful to the economy and to people's safety and wellbeing.

To achieve net zero by 2035 locally from transport, the following estimates are re-iterated:

- Based on an estimate that only 63%-75% of the car fleet will be zero emission vehicles by 2035 this must change, through increased uptake and/or mode shift
- Levels of car trips will likely need to have reduced by between 11% and 21% relative to pre-COVID levels of demand
- This is equivalent to taking between 216,000 and 395,000 daily car trips off the road

If an average person takes 433 individual car trips a year (including non-car users), this will need to be reduced to between 346-372 trips

- Bus trips will likely need to increase by between 61% and 82%
- Rail trips will likely need to increase by between 69% and 72%
- Cycling and walking trips will need to increase by between 8% and 35%

5.2.4 The degree of modal shift that is required to achieve our decarbonisation goal is stark and challenging. Our four "do minimum" scenarios show that taking no action will increase the number of car-based and freight trips and will not support decarbonisation by 2035. Clean vehicle technology alone will not support the decarbonisation of transport across the city region. This means reducing the need to travel by car, van and lorry, and making travel by

alternatives more desirable, convenient, speedy and attractive than travelling by car.

5.2.5 This LTP is not “anti-car” but is instead “pro-transport choice” with the benefits of changing the balance in how we travel, and in re-prioritising travel far outweighing any disbenefits. There will be a need for, and a role for the car for the movement of people for certain trips, just as there is a role for HGVs and vans for the movement of freight, and whereby a well maintained, safe and resilient road network is a prerequisite. Some individuals, notably those with a disability, may rely more heavily on private vehicles for safe and comfortable travel. But this does not justify planning for the movement of motorised vehicles as the first choice and as the overriding priority.

5.2.6 The city region has an extensive highway network, developed over many years that serves an important purpose for everyone. But less traffic on the roads, with lower levels of congestion also directly benefits motorists, including essential freight deliveries and trips that cannot be made other than by car. This improves levels of connectivity and economic competitiveness at the same time. Put simply, we must give priority to people first, and then to clean forms of travel, and create a city region that is much less dominated by car traffic. The urgency of modal shift and making streets and places better for all will require a big focus on bus-based solutions, active travel and roadspace reallocation (e.g. the creation of bus lanes, walking, cycling and wheeling routes, bus lanes and priorities, school streets and low traffic streets).

5.2.7 We also know that transport consumes resources in construction and large-scale capital projects consume large amounts of carbon in their construction, from embodied steel, glass, concrete, stone and tarmac. Taking a whole life analysis of carbon means that large-scale, new build projects may prove less justifiable than in the past, especially of their modal shift potential is unclear or unproven. This will require us to make best use of existing assets, buildings and facilities, and in reusing and recycling existing materials before new facilities are proposed or built. Equally, lower-cost measures such as traffic management or revenue-based activities may provide better solutions than large capital schemes and will need to be tested as part of a range of options. The policies under *Goal 4 - Transport infrastructure that’s well maintained and resilient* set out the importance of sustainable materials to reduce our carbon impacts when we construct new infrastructure.

5.2.8 The alternative to the car is not there for everyone now to achieve the shift and the change that we need. As we set out in Goal 1, the lack of transport is also a barrier to accessing work, training or essential services. Filling these gaps and providing a fully integrated transport network (bus, rail, private hire vehicles, goods transport, active travel, new technology and also private transport) is needed to achieve this. This is equally important in how we move freight and goods.

Delivering joined-up transport measures

Policy G2-2

Delivering an integrated, sustainable mass transit network, tackling capacity problems and improving connectivity

Tackling known constraints and barriers on the active travel, bus, coach and rail networks to enable large numbers of people to be moved easily and efficiently will be essential to support the aims of this plan. Interventions will be focused and prioritised in two principal ways:

- By addressing weak links and connectivity gaps across the LCR through infrastructure enhancements, improved ticketing, information and better service levels; and
- By targeting actions to achieve modal shift in areas or on corridors where use of cars, vans or HGVs is highest and where poor connectivity, poor journey times, or actual or perceived dangers hinder bus, rail and active travel choices and the delivery of the goals and principles in the LTP.

Filling missing links in our active travel routes and providing safe, high quality “last mile” active links to areas of growth, schools, transport hubs and other big trip generators will be especially important in support of the above.

Actions that ensue must be delivered as part of an integrated, cohesive package of place-based options. These should be informed by *Principle 5: Prioritise clean, healthy travel in all we do* and in line with *Principle 3: Decisions must be based on need and evidence,* not as a preconceived scheme or solution.

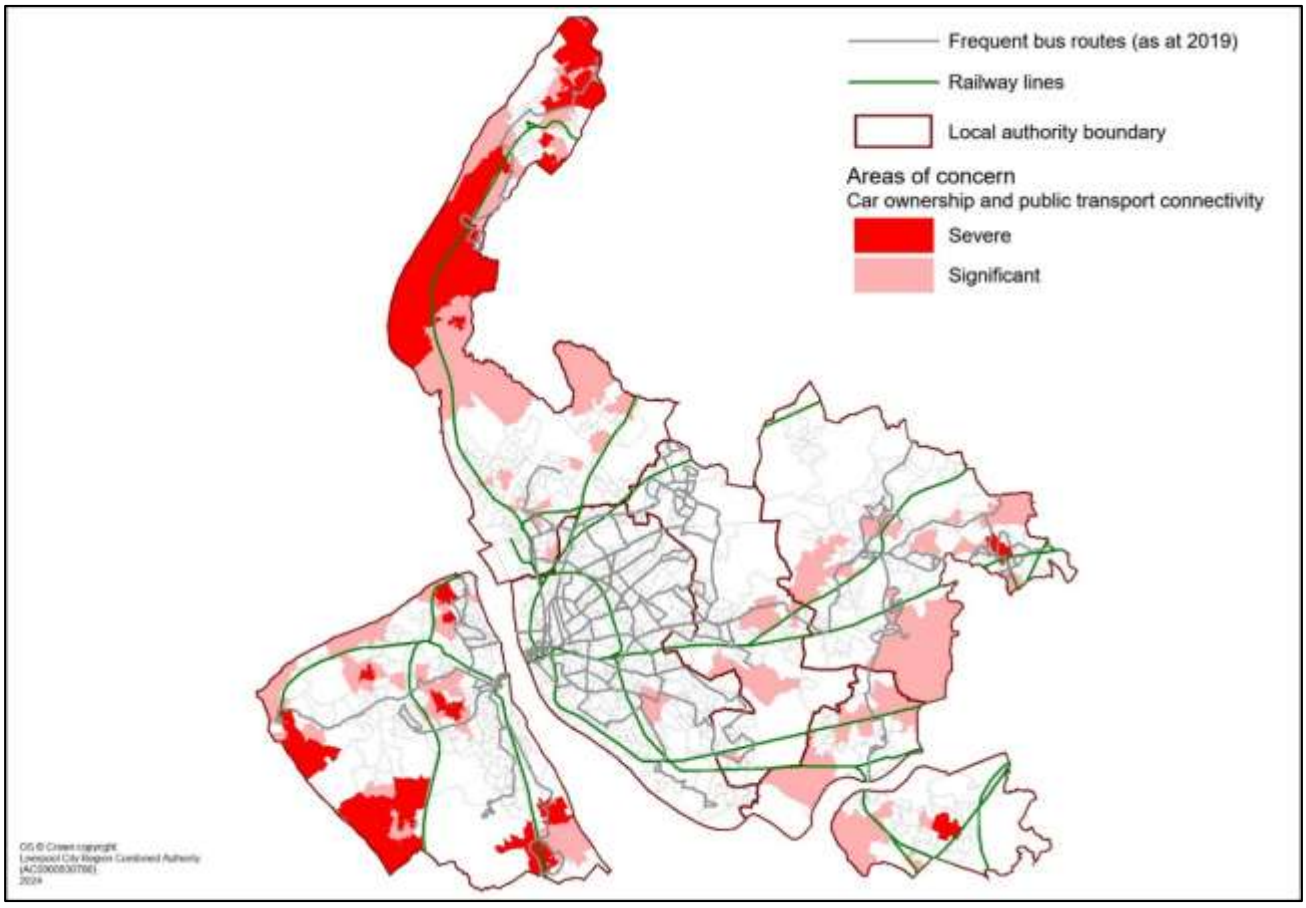
The delivery of a fully integrated system where different forms of transport and travel can feed one another, and be mixed and matched easily, is a priority. Our ability to plan and control local bus services, and integrate these with other networks through bus franchising from 2026 is key to achieving this aim, as is further devolution of rail services and networks.

This integrated approach will require capital and revenue-based measures to be considered and blended. Revenue measures will include enhanced ticketing options to widen choice and integration, measures to manage demand for private vehicles and marketing and incentivisation measures.

Incentives and behavioural change measures will be built into the approval process for schemes and interventions that are funded by the LCRCA, with a requirement to promote new transport measures to new users and encourage people to change how they travel or move goods. Travel plans for schools and workplaces will be used as part of this process, linked to the planning approval process where appropriate.

Looking at specific priorities, the LCR is pursuing the delivery of the Liverpool to Manchester rail scheme as part of Northern Powerhouse Rail. This is essential to deliver the connectivity, capacity needed to accommodate more passenger and freight on the rail network. Transformational solutions to capacity and crowding problems at Liverpool Central Station will be progressed in partnership with Government and relevant bodies and which will otherwise inhibit the infrastructure needed to support the growth of the local rail network and the regeneration of the city centre.

5.2.9 Goal 1 focuses on the importance of the right transport choices and infrastructure to provide good access for people and businesses. We need to do the same to support the goal of decarbonising transport; in areas with high car ownership, and where public transport is weaker than the car offer, where there may not be a good alternative to driving, the alternatives must be prioritised. The map below highlights where levels of high car ownership and poor public transport connectivity coexist:



Map showing where levels of high car ownership and poor public transport connectivity coexist. Source: LCRCA

5.2.10 There are known gaps and shortcoming in our transport networks. These include:

- Capacity constraints at Central Station in Liverpool City Centre that if unaddressed, will choke growth on the rail network and the ability to extend Merseyrail services beyond the current limits of the network. It is also holding back investment and economic potential in the wider area.
- Poor rail connectivity and quality of service on City Line routes to the east of Liverpool towards Huyton, St Helens, Wigan and Warrington
- Limited sustainable travel choices to areas of growth such as Wirral Waters, Liverpool Waters, Knowsley Industrial Park, Daresbury and east Runcorn.

- Cross-border capacity limits and bottlenecks, compounded by poor service levels on rail routes through Chester, Central Manchester, on the West Coast Main Line (especially following the cancellation of the northern leg of High Speed 2 in 2023), and towards Deeside in Flintshire on the Wrexham-Liverpool Line
- Areas of poor connectivity by bus and where journey times are poor relative to the private car or rail options, if these exist, including poor connectivity in the evenings, at night and in the dark in response to changes in demand. Equally, there are areas that are over-bussed, or else where buses compete with each other and with parallel rail networks, rather than operating as a joined-up network.
- An embryonic segregated walking, cycling and wheeling network, with missing links that need to be filled to create the vision in the Local Cycling and Walking Implementation Plan
- Danger on our roads both physically (e.g. poor surfacing or potholes) and from risks presented by wide roads, high speed traffic in dense urban areas, creating conflict for pedestrians, cyclists and wheelers and vulnerable road users especially
- Poor levels of direct rail connectivity relative to other core cities in the UK and that limit the potential of rail to replace car-based trips
- Adverse impacts of freight and distribution activities, especially on main arterial routes leading to the Port of Liverpool and to other major freight and logistics depots and hubs, related to the limited alternatives to end-to-end movement by HGVs or vans.
- Poor alternatives to, or poor perceptions of alternative to private car use or the use of a lorry or a van to move freight

5.2.11 Notwithstanding the importance we attach to delivering transport as part of a joined-up, integrated approach, the section that follow identifies the role and potential of each of our main forms of travel.

Delivering modal shift through active travel

5.2.12 The principles in our Local Cycling and Walking Infrastructure Plan (LCWIP), new standards in Local Transport Note 1/20 that supports the Government's Gear Change strategy, and standards and guidance from Active Travel England will guide how we deliver high quality, safe active travel. The principles in this LTP build on and reaffirm these standards and successive standards with similar aims and objectives. We support Gear Change's vision for cycling, walking and wheeling to be the natural first choice for many journeys, with half of all journeys in towns and cities being cycled, wheeled or walked by 2030.

Key Design Principles from Department for Transport's "Gear Change" strategy Source: DfT

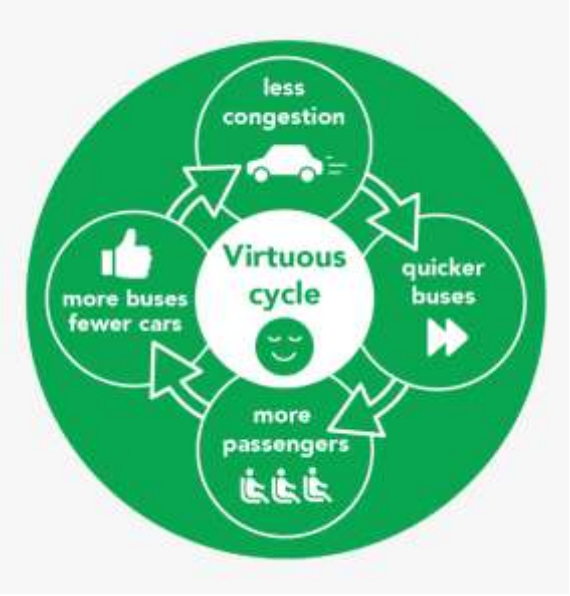
5.2.13 We will deliver plans for walking, cycling and wheeling in ways that are joined up with the wider transport network and with the key developments and destinations. This will also join together existing route sections, to create a cohesive network of routes. Every bus or train trip starts on foot or by being wheeled; if we make it easier to reach bus stops and rail stations, we immediately make bus and train travel easier, safer and more appealing as well as widening personal choice and addressing the modal shift imperative of the plan.

5.2.14 The principle of the movement hierarchy also places the needs and requirements of active travel as the first and most prominent considerations in any solution, service option or infrastructure proposal. We will use a Design Panel process to ensure that all relevant schemes and proposals maximise safe, well designed active travel measures.

5.2.15 The adoption of an LCWIP is a requirement of government, to support delivery and development on the ground. Updates to the LCWIP will be guided by the goals, principles and policies set out within the LTP.

The role of buses, coaches and bus priority

5.2.16 The role and potential of high-quality bus travel in supporting this plan is enormous. We will build on the commitments in our Bus Services Improvement Plan (BSIP) that stems from Government's Bus Back Better strategy, to support our plans for increasing bus usage. One of the most significant tools that the LTP will draw from in growing bus patronage and usage will be bus reform and how we manage and operate bus services and better integrate them with other forms of travel. In October 2023, following public consultation, the Combined Authority agreed to move to a bus franchising model and a Mayoral Order has enabled the final decision to go ahead. Franchising will come into effect from autumn 2026.



The benefits of bus priority. Source: LCRCA

5.2.17 Bus services – including routes, frequencies, fares and standards – will be brought under local control through franchising. This will maximise integration and efficiency and reduce overlap and inefficiency. The Combined Authority will coordinate the bus network based on what passengers need, make sure it is better connected with other modes of transport like rail and Mersey Ferries, and will reinvest any surplus made back into improving services. Local control of the bus network will also allow ticketing to made simpler and more affordable, with a new tap-and-go system ensuring passengers always pay the lowest fare for their journeys.

5.2.18 We are investing in new technologies to make buses across the city region even cleaner. Our new buses set the standard for our franchised bus network and we have, to date, secured funding for over 100 electric buses. But head-turning buses producing very few, or no emissions from their engines will only deliver the aims of our strategy if many more people use them in place of trips otherwise made by car. Latest estimates suggest that buses account for only 2.3% of all road transport energy use or 3.6% of all diesel road energy use. This is why shifting people from cars to buses is so vital, given the dominance of cars and vans in our total carbon emissions.

A zero emission bus outside Mann Island, Liverpool in Metro branding - Source: LCRCA

5.2.19 It is why we cannot afford to have buses stuck in traffic as this would mean that we are delivering only part of the solution - creating priority for buses, and removing conflict and delay is vital. This will benefit many more people than bus users alone, through better levels of access for everyone, better air quality less congestion and safer and more attractive roads and public spaces. The safe and easy movement of bus services will be a requirement of any scheme, or in any highway intervention that is planned and delivered, in line with the transport hierarchy. This is also incumbent on us reducing traffic levels on our roads and in supporting our target to grow bus trips by between 61% and 82% by 2035 if we are to meet the challenges of this LTP.

5.2.20 Making road space available to support bus priority and to give bus travel the competitive edge that it needs to make bus usage more attractive, more efficient and more convenient is essential. Measures to create bus priority and bus lanes through our devolved funding and through relevant development schemes will be important ways in which to achieve this aim.

5.2.21 The development of the BSIP remains a requirement of government and will support delivery and development on the ground. Updates to future BSIPs will be guided by the goals, principles and policies set out within the LTP.

5.2.22 The role of coach travel is also fully supported in this LTP and in line with the movement hierarchy that we set out. Coaches can deliver similar journey time and comfort-level benefits to the private car and complement the rail network for longer-distance trips. Chartered and scheduled coaches are also vitally important to support our visitor economy in Liverpool, where longer distance scheduled coaches share the Liverpool One bus station, and in serving destinations such as the airport, our seaports, and popular areas for tourists, such as Southport.

Extract from "Welcome Coach" Scheme
Source: Marketing Liverpool

5.2.23 Convenient parking for coaches and facilities for drivers will be developed in conjunction with local authorities, especially as part of town centre redevelopment and masterplanning priorities set out in *Policy G2-5: Creating high quality, low carbon transport networks in Liverpool City Centre and in our main town centres*.

Rapid Transit

5.2.24 Rapid Transit options, where vehicles operate on fixed routes with very high quality, tram-style infrastructure and extensive prioritisation or segregation will be pursued, to deliver the connectivity and modal shift objectives of this plan.

5.2.25 Route priorities will be the city centre, to Liverpool John Lennon Airport and the city's main football stadia and communities of Anfield and Bramley-Moore Dock. Options for serving Wirral Waters and the city's Knowledge Quarter by Rapid Transit will also be investigated in detail.

A trial rapid transit vehicle in Metro branding
Source: LCRCA

Rail services and infrastructure

5.2.26 Our newly launched Class 777 Merseyrail trains are game changers in boosting the quality and capacity of our already successful, locally managed rail network. The new trains allow many trips made by car, especially into the city and main towns to be switched to clean, swift train travel. There is also the potential for trains to support the carriage of small packages or freight in time, as an alternative to diesel powered vans or lorries.

A class 777 train arriving at Sandhills train station
Source: LCRCA

5.2.27 Our Independently Powered Electric Multiple Unit (IPEMU) technology is highly significant. It allows our electric trains to operate beyond the artificial confines of the electrified Merseyrail network using on-board batteries. With the development of new and existing stations, and the right capacity solutions at Liverpool Central station, this will allow the new trains to extend deeper across our city region and beyond. This will support the aims of this plan - especially the shift needed from car to rail travel for people and for goods. It will help to improve our residents', employees' and visitors' access to jobs, training and other life chances. This is an issue that featured very prominently and

A computer generated image (CGI) of the proposed Liverpool Baltic station. Source: LCRCA

positively in our first round of consultation on the LTP's Vision and Goals, especially from areas just outside the administrative limits of the LCRCA, but within its wider-travel-to-work area. Allied to this are proposals to be funded from the short-term delivery programme to develop a new station at the Liverpool Baltic (for the Baltic Triangle) in Liverpool and to expand the reach of the Merseyrail network into North East Wales and towards Warrington, potentially, using IPEMU technology.

5.2.28 But as we note above on gaps and constraints, the same quality of service does not exist on route to the east on City Line services. Rail use is typically higher in those catchments around Merseyrail Electrics stations, often forming over 10% of commutes. The same is not true of City Line stations, where service levels, reliability and overall quality is lower. This is an impediment to greater use of rail and widened travel options. Addressing this is a priority, but we recognise that many of the solutions will need to be pursued sub-nationally and nationally, including through the creation of Great British Railways and through greater devolution. The same is true of the electrification needed to support a rapid shift from diesel powered trains to electrical power on our trunk unelectrified passenger and freight lines.

5.2.29 The development of the new Liverpool-Manchester Railway as part of Northern Powerhouse Rail is a critical priority for the city region and to deliver the outcomes set out in this LTP. This will be a core part of the Northern Arc, an economic corridor stretching from the Mersey to the Pennines and beyond. Anticipated benefits Liverpool-Manchester Railway plan include:

The Liverpool – Manchester railway
Source: LCRCA / Liverpool Manchester Rail Board

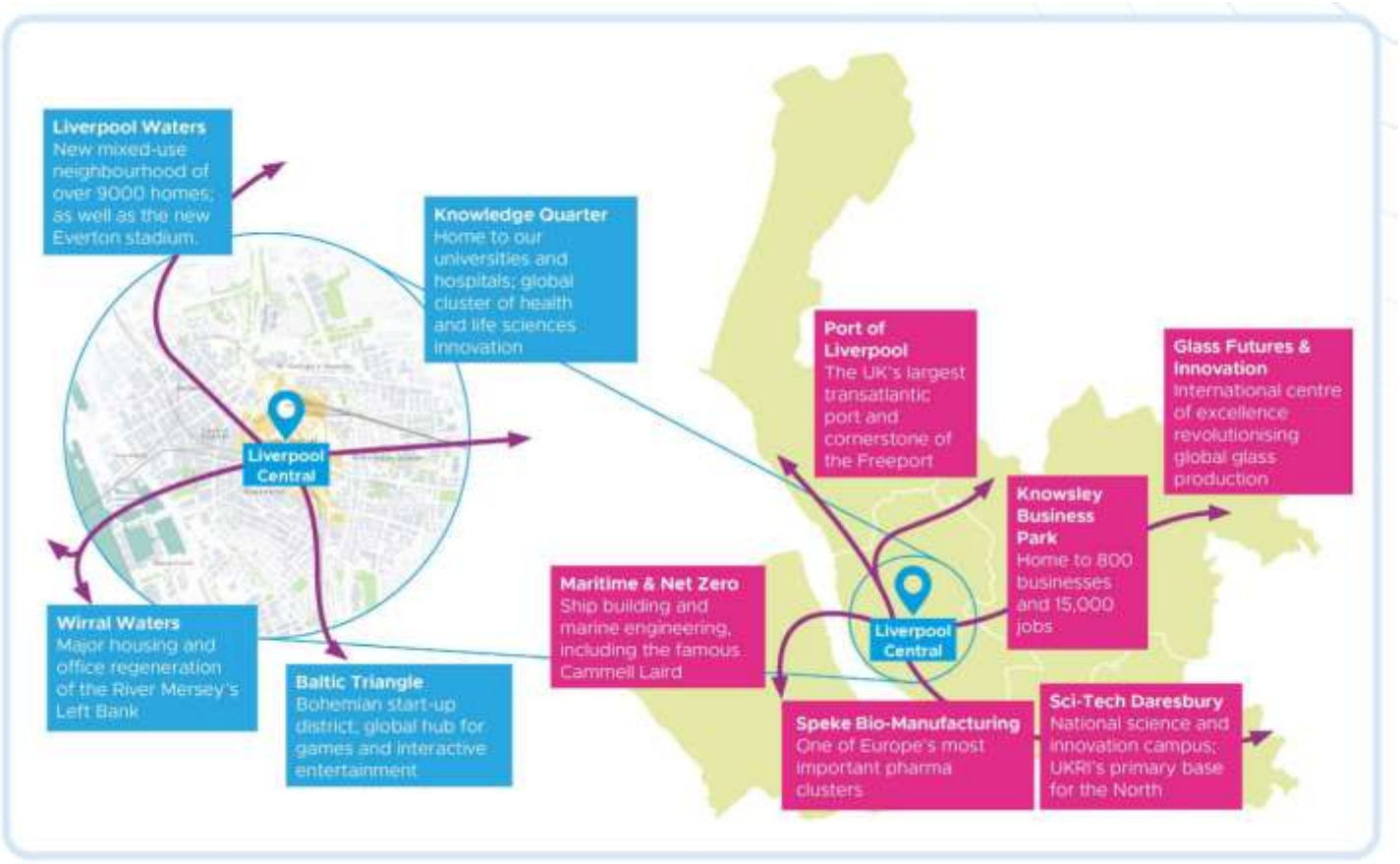
- £15bn economic uplift, supporting 22,000 jobs during construction, which could begin in early 2030s

- As a key component of the Northern Arc vision, it could generate £90bn in economic growth in the North West through a new, locally-led delivery model for faster, better infrastructure outcomes
- Growth zones are planned at five key stations to unlock new homes, jobs and wider regeneration

5.2.30 The right solution and route option is essential to create the right capacity (for passengers and freight), improve journey times and avoid disruption on the critical section of the Liverpool-Manchester rail route between Liverpool and Warrington especially. This must also include transformational station investment and expansion in Liverpool City Centre, together with a parkway station between Liverpool and Warrington.

5.2.31 Liverpool Central Station remains an equally critical priority for the city region. The LTP supports the ongoing work across the LCR to make the case to government for significant investment as part of a bigger, area-wide economic masterplan. Very positively, in October 2025, Government announced that Liverpool Central Station would be expected to form one of the first four trials of a place-based approach to investment. This follows its commitments for Green Book reforms in the 2025 Spending Review. These aspects are important to enable us to make a compelling case for action.

5.2.32 As the third busiest station in the North of England and the busiest station outside of London by average platform usage. Liverpool Central needs capacity to encourage modal shift and be a key net zero enabler, providing a high-capacity public transport alternative to the private car. 50% utilisation of the new rolling stock capacity at this station would generate peak loadings in excess of even conservative 2043 growth forecasts, and new capacity is required at Liverpool Central. Improvements at Liverpool Central can also free up capacity at Liverpool Lime Street Station for longer distance services, including those being considered as part of NPR and Network North. This has the potential to bring services from Manchester into Liverpool Central at significantly lower cost than expanding Lime Street station.



Unlocking the benefits of benefits of an expanded and redeveloped Liverpool Central Station. Source: LCRCA

5.2.33 But too often in the past, the importance of rail from a freight modal shift and efficiency point of view has been overlooked. Several major Freeport sites in the LCR are rail connected, namely the Port of Liverpool, Garston Freightliner Terminal, 3MG at Ditton and the emerging Parkside strategic rail freight interchange (part of the Intermodal Logistics Park North) near Newton-le-Willows in St Helens. This is very positive, but the challenge is that train paths are constrained by bottlenecks outside the city region in many cases. *Policy G2-6 - Sustainable and efficient freight and logistics* expands on this aspect and the solutions that are needed.

Supporting shared mobility, including taxis and private hire vehicles

5.2.34 Owning a car or van brings great freedom, benefit and opportunity. But is costly, involving many sunk costs such as financing, insurance, servicing, repairs and vehicle excise duty. This can make the "per mile" cost of a car journey appear low relative to an equivalent bus, taxi or train journey once these upfront costs have been paid and forgotten about.

5.2.35 But research by the Sustainable Transport Alliance suggests that the average private car is parked 96% of the time, wasting resource and space, particularly

so with average size being 32% larger than in the 1960s, taking up 35%-41% of urban spaces and often dominating our streets and communities.

5.2.36 The role of shared mobility and new technology is important here, to provide very practical alternatives to owning and running a private vehicle, or multiple vehicles.

Policy G2-3

The role of shared mobility and micromobility

The Combined Authority strongly supports travel solutions that provide the same convenience as owning or running a car, or multiple cars, using flexible and shared forms of transport.

Shared mobility includes car sharing and lift sharing initiatives at major employment sites, retail parks, hospital and health centres or other significant trip generators.

We will proactively work with our local authorities and private sector partners to roll-out the implementation of car clubs and to encourage uptake. Zero emission electric vehicles will be incentivised, in line with our approach to new technologies in *Policy G5-3 - A Smart City Region – Investing in new technologies and utilising Artificial Intelligence.*

Micromobility options will be tested and promoted across the LCR, as new technologies emerge, including legal e-scooters, e-bikes and drones, and where they help deliver the underlying goals and principles of the LTP.

Measures that make existing, general on-street and off-street parking spaces available for the convenient parking, docking or charging of shared mobility or micromobility options, such as car club vehicles, e-scooters, e-bikes and cargo bikes will be encouraged.

Taxis and private hire vehicles will remain an important part of the shared mobility mix, integrating closely with public mass transit network. We will work with our constituent local licensing authorities to raise taxi and private hire vehicle standards and operating practices to the very highest levels, and make the offer safer, and more consistent for users.

The use of area masterplans, workplace travel plans and travel plans negotiated through the planning process as appropriate will be encouraged to help deliver micromobility and shared mobility benefits.

5.2.37 This is where “mobility as a service” principles, including micromobility and shared mobility can provide a practical alternative for a trip that could have been made in full or part by a car. Car clubs provide huge potential to give people access to hire a private vehicle by the mile when they need one, but without the upfront cost and ongoing running costs. Recent research suggests that people using a car club make far fewer car trips than if they

owned a vehicle. Car club schemes encourage use of active travel and public transport too, as the default option is not to jump into a car or van for every trip. For example:

- 32% of car club members use a bicycle at least weekly
- 76% walk for travel at least weekly,
- 48% use a bus at least weekly

5.2.38 Reducing the amount of land needed for car parking and reducing the dominance of car parking on streets especially is an associated benefit, supporting *Principle 4: Transport must support placemaking.* It can also allow much higher new housing densities to support national and local housing growth targets. Joining a car sharing scheme can provide improved levels of access and remove transport barriers for people for whom making a trip by public transport or active travel is not possible. More specific operational guidance is available from CoMo UK – a national umbrella organisation for shared transport.

5.2.39 Finally, and in line with *Principle 6: Guided by our commitment to inclusivity, accessibility and social value* we must ensure that new forms of mobility and shared mobility are assessed fully from the very start. This is so that any adverse impacts can be avoided or mitigated against. This recognises that shared mobility services may not be easily usable by all if they are simply rolled out according to a standard template that does not meet the needs of the LCR's diverse communities. We will work with partners to ensure the delivery of inclusive, accessible and trusted transport options.

Making the right use of our roads and public spaces

Policy G2-4

Reallocating road space and making best use of finite capacity

We will invest in, and make the very best use of, our extensive and valuable highway network to meet the aims of the LTP. In doing this we will review how road space is used and reprioritise road space to make sustainable modes of travel – walking, cycling, wheeling, clean public transport and new forms of mobility such as e-bikes and e-scooters the first choices in their attractiveness, convenience and affordability. This is to support the shift that is needed from travel by private cars and vans to incentivise the most sustainable alternatives in line with *Principle 5: Prioritise clean, healthy travel in all we do.*

Highway maintenance schemes must consider and incorporate plans to support safe walking, wheeling and public transport use in equal measure.

We accept that this change in emphasis will mean that journey times by car or by private vehicle may become slower, less direct or less convenient than they may have been previously. The principle of such consequences will not be viewed negatively in the decision-making process, providing that these are outweighed by benefits for people who are walking, cycling, wheeling and using public transport and which go on to benefit all road users.

The Combined Authority will commission, fund and support measures that provide new access to development and re-prioritise highway space in ways that give priority to our most vulnerable road users, and to sustainable mass transit and that support *Principle 5: Prioritise clean, healthy travel in all we do.*

There will be a presumption against proposals or schemes that create additional highway capacity for general, private traffic. Schemes that simply induce more trips by private transport will typically not be supported by the Combined Authority.

We will use Design Panels and reviews through our scheme Gateway Approval processes to assess the suitability of proposals against the tests set out in this LTP, alongside consultation with Local Authorities, communities and expert groups.

5.2.40 In recent decades, too many plans and funding decisions have made travel by car easier and more attractive, at the expense of other forms of travel. This has included significant road building locally and nationally. In parallel, we have seen a reduction in bus and rail networks and conditions that make walking, cycling and wheeling less attractive and safe. Designing streets, new homes, shops and workplaces has also been focused on the needs of cars and private forms of travel as the priority. This has led to danger, collisions

and injuries, pollution and people feeling excluded and left behind. The “road diet” concept, where we reduce the width, impact, danger and dominance of many of our roads will be needed to achieve the vision and the aims of this Goal especially.

5.2.41 Helping to move more people and goods by clean forms of travel and provide better travel choices to all provides greater benefit overall. In turn, levels of congestion will fall which benefit road users making trips that can only be made by car, van or by heavy goods vehicle, through more efficient, reliable and predictable journeys. It is important to reiterate that this benefits ***all*** road users.

Image of a segregated cycle path and widened pavements on the Strand, Liverpool City Centre Source: LCRCA

5.2.42 Highway maintenance schemes must consider and incorporate plans to support safe walking, wheeling and public transport use in equal measure to support wider outcomes than road condition. Highway maintenance schemes should not be taken forward on a “like for like” basis or detached from wider area-based schemes and programmes of activity.

5.2.43 The use of Design Panels, to allow schemes and plans to be robustly tested against a range of criteria, frameworks and designs standards by a range of subject experts is strongly encouraged. This will be linked to the Gateway Approval processes adopted by the Combined Authority in its management of the devolved transport funding programme and through the Strategic Investment Fund Investment Strategy. This will provide a transparent process assessing transport and investment proposals against the policies in this LTP and ensure that schemes are developed as part of a coherent package.

Targeting transport enhancements in our main urban areas

Policy G2-5

Creating high quality, low carbon transport networks in Liverpool City Centre and in our main town centres

We will prioritise reviews of, and the reprioritisation of movement in our most significant urban and town centres as significant generators of travel demand in the city region and as important transport hubs in their own right.

With Liverpool City Council, we will jointly deliver a new Urban Mobility and Public Spaces Strategy for Liverpool City Centre. This will radically repurpose how the city centre operates and is prioritised for movement by walking, cycling and wheeling and as a hub for many clean public transport and logistics services.

We will work with local authority partners to create more liveable, more sustainable and better-connected town, district and local centres across the LCR as some of our main generators of trips and movement.

The development of area-wide strategies and masterplans will be encouraged, to plan movement and development in an integrated way and in ways that support the LTP's vision, goals and principles.

Outputs from new movement strategies and masterplans will inform the LTP's rolling delivery plan and associated funding priorities.

5.2.44 As the hub of the city region's bus and rail networks, and as a vital destination and attraction in its own right, it is essential that we get sustainable movement right in the city centre. It is also important that sustainable movement and connectivity is promoted and realised across the city region's network of other urban and town centres, as identified in our Spatial Development Strategy, Local Growth Plan and in our partner authorities' local development plans. For example, in Huyton, Bootle, Birkenhead, Runcorn and St Helens.

5.2.45 In addition, through this LTP, and the rolling Delivery Plan set out as an Appendix, there will be a strong focus on the city centre and on main arterial travel corridors into and from the city centre. These are areas that can achieve big modal switch to bus, rail, walking and cycling. Congestion levels are also high, and poor air quality from nitrous oxides is a city-wide problem. Taking action in these corridors will also result in benefits that will be felt further afield across the city region. Liverpool City Council developed a City Transport Plan in 2023 that sets out a bold ambition for a liveable, and reprioritised city centre. The city's plan is wholly aligned with, and complements this LTP.

Freight

5.2.46 Freight is not a stand-alone activity in this plan; the movement of goods, services and products is a common thread that flows through all of the guiding Vision, Goals and Principles. Freight and the movement of goods is part of the lifeblood of the city region. This is reflected most recently in our Freeport status. Important port and multi-modal logistics assets are spread across the LCR. They including: deep sea ports, cruise liner terminals, roll-on-roll-off seaports, multimodal rail freight facilities, the Manchester Ship Canal and our airport and all bring many important economic benefits and opportunities.

Cluster of port and freight sites that contribute to the LCR's Freeport assets
Source: LCRCA

5.2.47 However, these activities also bring disbenefits include pollution, noise and disturbance, high carbon emissions and poor quality of life to people living or visiting areas in proximity. These demand action in response.

Policy G2-6

Delivering sustainable and efficient freight and logistics

We will deliver and support measures that reduce the adverse impact of freight and distribution activities, improve their safety and efficiency and maximise their positive social and economic role. This will include measures that:

a) Support movement by rail, sea or inland waterway, where these prioritise sustainable fuels and have lower carbon and air quality impacts than air, or road-based movement, in line with *Principle 5: Prioritise clean, healthy travel in all we do*
b) Ensure, through evidence, engagement and lobbying that the Government's plans for developing Liverpool – Manchester Rail, as part of Northern Powerhouse Rail and the Northern Arc, as well as the need to tackle constraints on the West Coast Main Line post-High Speed 2, deliver the best possible outcomes for the LCR by creating essential capacity to accommodate more rail freight and a shift from road to rail.
c) Support the uptake of clean, zero emission fuels for freight vehicles and vans, aircraft, boats, ships and ferries, such as battery electric and green hydrogen and ensuring that fuelling or charging facilities are co-developed in the right locations with fuel suppliers and operators
d) Support the development of renewable and other low carbon energy uses (e.g. ship-to-shore power) at ports and logistics facilities across the LCR.
e) Support measures in urban areas especially that enable freight to be consolidated onto a smaller number of vehicles or else moved by ultra-clean forms of travel, such as e-bikes or cargo bikes where it can be moved more efficiently. This will include new and innovative ways to manage conflicts or dangers on the roads in ways that support *Principle 5: Prioritise clean, healthy travel in all we do.*

The above will be supported by clear evidence on where vehicle flows in particular can be minimised and transferred to other forms of transport in line with *Principle 3: Transport decisions must be based on clear need and evidence*.

In line with *Principle 6: Guided by our commitment to inclusivity, accessibility and social value,* we will ensure that essential facilities for all freight and distribution operators, such as safe vehicle parking, rest, changing and toilet facilities are considered from the outset.

5.2.48 The Port of Liverpool in Seaforth is a key international gateway for trade into the northwest, north Wales and north of England with 8% of UK trade passing through its terminals. As well as being home to Liverpool 2, the deep-water container terminal built following a £300m investment by Peel Ports, it is also the UKs busiest Atlantic-facing port and a vital trade route for the USA, Canada and the Republic of Ireland, handing 45% of trade from North

America. It is also a major shipping hub for the Irish Sea Region with frequent ferry services and coastal container shipping services to Ireland, Northern Ireland and Scotland linking these regions with the deep-sea services out of the Port of Liverpool to North America, the Mediterranean and the Far East. Other key ports include Garston, Twelve Quays in Birkenhead and Port Weston in Runcorn. Securing better use of the LCR's port assets as alternatives to ports in the south or east of the country can also reduce the need to haul goods by road or rail to their end markets in the north and midlands. This will provide decongestion and decarbonisation benefits for the country as a whole. In support of this, we will strive to improve sustainable transport connections to our ports.

5.2.49 The city region also has important multi-modal freight interchanges and distribution sites. These allow goods can be transferred from road to rail, allowing modal shift from road to rail and a reduction in lorry miles. These sites include: 3MG in Widnes, the Tuebrook Sidings, the Garston Freightliner terminal adjacent to the Port of Garston, the Potter Rail Freight facility in Kirkby, and significantly, the Parkside strategic rail freight interchange in St Helens that is being developed as a Nationally Significant Infrastructure Project.

5.2.50 Trade-offs between economic growth and transport disbenefits do not fit with the goals of this LTP, which is about support for economic growth that support decarbonisation and a better quality of life. This means that a big focus on delivery will be on decarbonising our freight and logistics activities to maximise their benefits. This will be in two main ways:

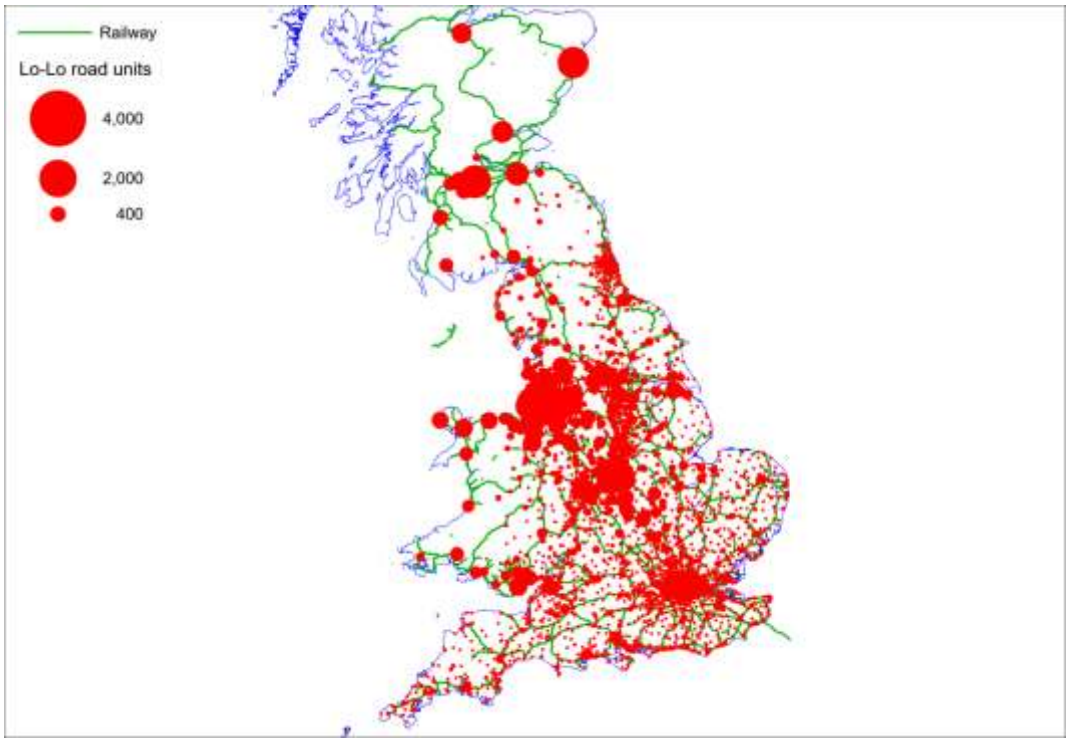
- Shifting the balance of goods and how they move. This will be by promoting the use of rail for the movement of freight, the use of clean craft on inland waterways, or short sea shipping, and encouraging freight and logistics facilities and new developments to wherever possible, incorporate rail access. We will work with Government to support the delivery its 75% rail freight growth target as a particular priority in the LCR.
- Adopting clean, sustainable fuels. This will be linked to related strategies supporting the phasing out of diesel, marine diesel, aircraft kerosene and petrol as fuel sources.

5.2.51 The Port of Liverpool in Seaforth is also connected to the national rail network via the Bootle Branch line to Edge Hill but is constrained by a shortage of train paths to end destinations. This again highlights the importance of key interventions such as the Liverpool-Manchester railway, to provide much needed rail capacity across the wider region.

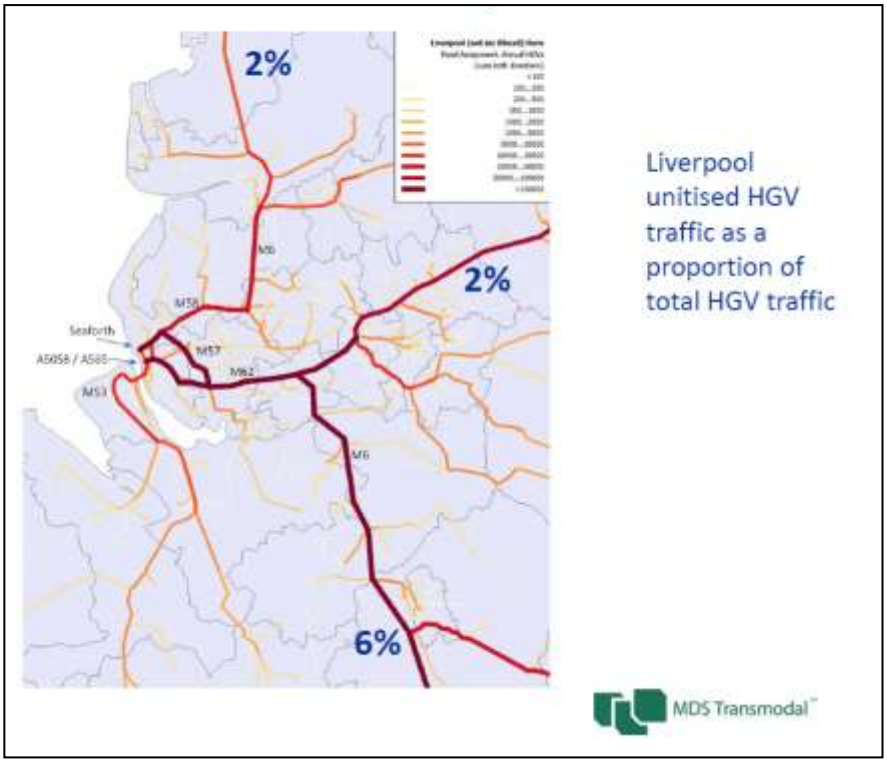
5.2.52 We must plan to improve facilities for freight operators, notably high-quality lorry parking, toilet and rest facilities and ensure that parking in sensitive residential or other inappropriate locations is avoided.

5.2.53 Freight is also often one of our least understood sectors in terms of movement, especially road-based transport and where freight is destined for when it leaves ports or rail depots. To support *Guiding Principle 3: Transport*

decisions must be based on clear need and evidence, we have begun to build a significant body of evidence about freight movement in the city region. This shows where road-based freight is moving to and from, with a focus on traffic coming to and from our main seaports. We will use this data to help target measures that can switch freight from road to rail or water, or from diesel to alternatives such as hydrogen or battery electric trucks. Measures like consolidation centres can have a valuable role to play in reducing the impact of road-based freight movement, especially in sensitive urban centres. We support Transport for the North's guide to best practice in this area of growing importance. Again, better data will guide how and where we focus our activities, but it must in all cases be where significant mode shift, decarbonisation and cleaner air can be achieved.



Origin / destination of road-based freight leaving / landing at Port of Liverpool. Source: Mott MacDonald and MDS Transmodal



Proportion of total unitised HGV traffic from Port of Liverpool on main motorways in the North West and Midlands - Source: Mott MacDonald and MDS Transmodal

5.2.54 In particular, the Port of Liverpool in Seaforth – the most significant port facility in the city region's Freeport cluster and regionally - is a major generator of heavy traffic and congestion on the A5036 trunk road corridor that links the port with the region's motorway network. The road generates significant volumes of local traffic as it serves local communities, retail parks, schools and employment. It is also crossed and used by many local bus services. The road corridor is also in close proximity to residential properties, resulting in noise, disturbance, dangers and poor air quality.

5.2.55 In the autumn Budget of 2024, the contentious proposal to construct a bypass to the existing A5036 road corridor to the Port of Liverpool through the Rimrose Country Park was cancelled by the Government, due to poor value for money, unfunded and unaffordable. This, however, has resulted in the loss of funding to address transport problems for communities in the area especially. It also inhibits our ability to support safe and efficient freight and logistics activities to and from the port, to maximise its economic role.

5.2.56 We and our partners will work to explore a full range of multi-modal options to improve traffic, safety and quality of life conditions in the A5036 corridor area and in affected communities. This will be in ways that do not entail the construction of new highway capacity. Any preferred solutions that arise must align with this LTP to inform future rolling delivery plans over the short, medium and long terms.

5.2.57 As noted, the cancellation of the road scheme has resulted in the loss of funding for any alternative solutions to the problems that remain, in part due to the way that funds are historically allocated by mode of transport or by lead agency nationally, rather than on an area-based needs approach. This is an issue that we will progress with government in support of the aims of this LTP, to complement the devolved Integrated Settlement that will support the delivery of local transport.

The true costs of transport

5.2.58 We know that many factors influence how people travel, and how much carbon and other pollutants are emitted in response. Pricing is essential to incentivise bus and rail use especially instead of using a car, or where active travel is not an option. Pricing tools include: the cost of fuel, the cost of tunnel tolls, car parking charges and its availability, insurance costs, and changes to vehicle and fuel taxation. The use of new ticketing products, account-based price capping and easy payment methods are all essential here too, linked to our priorities around supporting inclusive growth under *Goal 1.*

Policy G2-7

Implementing "polluter pays" approaches

The Combined Authority supports the role of pricing measures that help manage demand for the use of cars, vans, and freight vehicles in ways that support the vision, goals and principles in this plan. Making the cleanest and most sustainable transport choices more affordable will be pursued through new ticketing and pricing measures, in line with *Policy G1-3 Making it easy and affordable to travel.*

We also support the exploration of financial tools and incentives by government and by industry to help boost the use and uptake of zero emission cars, vans, buses, coaches and lorries, ships and aircraft in place of fossil-fuelled engines.

Tunnel tolls and discounting on the Mersey Tunnels will be kept under review. This is to ensure that users pay a fair and the true cost of their travel and in a way that makes clean, sustainable transport options affordable and competitive. The likely impacts of different pricing options on carbon emissions will guide reviews of tolling and operations in line with *Policy G2-1: Removing carbon emissions from transport*

We will work with our private sector partners and local authorities to make the cost of parking more consistent and reflective of the true costs of vehicle use. We will work to seek to reduce overall parking provision, especially long-term parking to encourage the modal shift and associated benefits needed.

The Combined Authority supports the principle of a move to a national system of road pricing to replace existing duty on petrol and diesel and Vehicle Excise Duty as part of the transition from fossil fuel powered vehicles to electric vehicles. This will also ensure that the cost of a journey reflects its relative contribution to congestion, carbon and pollution impacts.

5.2.59 The Combined Authority supports the principle of pricing measures to help manage usage and demand for cars, vans and freight vehicles in ways that support much greater use of clean alternatives. One of the most effective measures to affect the way people travel is congestion charging and a car parking levy, as evidenced in Greater London and Nottingham, respectively. Despite the scale of modal shift that we know is needed, we do not consider that a localised road user charging scheme or a workplace parking levy scheme is an appropriate short-term priority. This is because such measures can distort local investment decisions in ways that do not address our socio-economic challenges as a city region. Future reviews of the LTP will keep these options under review. This will be aided by commitments by Liverpool City Council to consider the implications of implementing a Workplace Parking Levy or a more general Parking Levy in the medium term in its 2025 Parking Strategy. Our focus now is on managing demand for travel by managing our highways and roadspace in different ways, and boosting the availability and quality of the alternatives to car travel.

5.2.60 Many pricing tools lie outside the remit of the Combined Authority, meaning that we will work with others to make the case for change. This aligns with *Principle 7: Work with others to promote and deliver the vision, goals, principles and policies of the LTP.*

5.2.61 The Combined Authority believes that moving to a national system of road pricing, as opposed to an area-by-area approach is fairest and most effective way in which to ensure that transport pays its way and generates the income that is needed. It is also the fairest way in which to reflect transport's true cost on the environment, economy and on people. The transition to electric vehicles in particular means that revenues from fuel duty and vehicle excise duty will diminish, and which need to be replaced by alternative taxes, again, at a national level.

5.2.62 We also believe in making the case to industry and to central government for incentives to help consumers and commerce switch from fossil-fuelled engines to electric or other forms of zero emission engines. This could be via a retrofitting scheme or through scrappage scheme aided by suitable grants or taxation tools. As a principle, retrofitting schemes are considered preferable to scrappage schemes in their ability to reduce waste, extending the life of an otherwise roadworthy vehicle, recognising the significant embedded carbon from source materials and construction. This supports *Policy G2-1: Removing carbon emissions from transport*.

GOAL 3: Improve health, safety and quality of life

Improve the health and quality of life for our people and communities.
Make sure transport is safe, clean and good for the environment around us.

5.3 Delivering Goal 3

5.3.1 Death and serious injury on our roads are the most direct and tragic demonstration of our transport system's damaging effects on health. In 2021 there were 2,773 reported casualties on the City Region's roads, including 465 people killed or seriously injured ("KSIs"). Of the latter, 58.5% were pedestrians or cyclists.

5.3.2 Our 2024 annual road safety update noted with concern that KSI levels across the LCR had started to increase, recognising that 2020 was a statistical anomaly due to COVID-19 restrictions. In 2023, the 568 KSIs were incurred, the highest figure since 2017:

Numbers of deaths and serious injuries (KSIs) on the LCR's roads each year
Source: Road Safety Strategy Annual Report 2024

5.3.3 Across Transport for the North's area of influence, then between 2017 and 2021, 2,041 people were killed and 28,519 were seriously injured in road traffic collisions. Of those killed or seriously injured:

- 38.9% were drivers or passengers in cars
- 23.7% were pedestrians,
- 18.2% motorcycle riders or passengers and
- 14.5% were cyclists.

5.3.4 Again, this is a significant and wholly unacceptable burden of mortality and morbidity, with a disproportionate impact on those travelling actively. The most common cause of death among those walking, wheeling and cycling is collisions with cars.

"Vision Zero"

5.3.5 One avoidable death or injury on the road is one too many. **Our very clear target is for there to be no deaths and serious injuries on our roads by 2040.**

Policy G3-1

Reinforcing "Vision Zero" and Safe Systems approaches – no deaths or serious injuries on the city region's roads by 2040

We reinforce and commit to the clear vision of achieving a big reduction in the number and severity of road traffic collisions, working to a target of no avoidable collisions by 2040.

The Safe Systems principles in the Merseyside Road Safety Partnership's 2021 Road Safety Strategy and successor strategies with similar aims will guide our actions in the delivery of safe streets and the elimination of death and serious injuries on our roads.

We will support work by the Cheshire Road Safety Partnership in the development of a similar Vision Zero commitment for Halton Borough, policed by Cheshire Constabulary.

The LCRCA will support the work of the Merseyside and Cheshire Road Safety Partnerships by sharing data and intelligence to understand the causes and factors leading to collisions and "near misses" on the roads, and to develop strategies and interventions in response. This will include the use of Artificial Intelligence (AI) from the growing network of roadside sensors, in-vehicle GPS systems and related technologies.

We will work with the Merseyside and Cheshire Road Safety Partnerships to tackle unsafe or illegal behaviours on the roads and support the resourcing of essential enforcement and intelligence-led activities.

We will support safe behaviours through educational measures including targeted educational campaigns and road safety training that supports the Safe Systems principle. This will include the delivery and expansion of Bikeability-standard training.

Issues of public safety, personal responsibility and user training must be considered fully as part of the piloting and roll-out of new forms of shared mobility linked to *Policy G2-3 - The role of shared mobility and micromobility.*

5.3.6 Collisions on the road happen for many reasons. Historically, the focus has been on educating road users, designing out dangerous road layouts and taking action against people who speed or drive dangerously. This has reduced numbers of deaths and serious injuries. **What this approach has not done is to accept that people make mistakes, hence the need to reduce risk and danger at source.** This is to ensure that people are not put at risk, fundamentally, from being in conflict with heavy or speeding traffic. The speed at which vehicles travel on our roads affect the risk and safety of those who share the network. The human body has a limited physical ability to

tolerate collision forces – any impact greater than 20 mph increases the risk of dying significantly If a pedestrian is hit by a vehicle travelling at 20 mph, they are about five times less likely to be killed than by a vehicle travelling at 30mph.

5.3.7 To combat this, the development of new infrastructure and changes to existing infrastructure must ensure that road danger is reduced. A Safe Systems approach is needed, where we ensure the streets and roads are attractive for all road users can encourage a shift in transportation modes and empower communities to navigate areas safely and confidently whilst reducing danger and casualty rates. Low Traffic Neighbourhoods are a good example, which remove through traffic and reduce volumes and the speed of motor traffic. This approach fits with other important policy objectives, especially policies on decarbonising transport and making our transport system fairer for all.

The components of a safe systems model. Source: LCRCA Road Safety Strategy

5.3.8 This LTP therefore reinforces and re-states the messages set out in the Combined Authority's Road Safety Strategy and the Vision Zero principle.

Our outcomes for road safety in the LCRCA Road Safety Strategy Source: LCRCA and Merseyside Police

5.3.9 We also need to ensure that our residents and workforce continue to have the confidence to walk and wheel in safety; in addition to our focus on creating safe roads, we also need to build confidence and skills for children to cycle, walk and wheel safely. This will include training needed to support the safe use of new forms of mobility, such as e-scooters, including enforcement where rules are broken. We will develop ways of expanding our plans and programmes for Bikeability-standard cycle training and other bespoke training, to include other cohorts, and support packages that seek to:

- Break down barriers to walking and cycling for people who have physical or sensory disabilities and other protected characteristics;
- Address transport related social exclusion by improving personal, independent access to employment, education and other key services; and
- Support decarbonisation goals through complementary training and incentive measures for residents or for cycle freight couriers where these complement new or improved infrastructure for walking, cycling and wheeling.

Safe places for people

5.3.10 The Vision Zero approach is closely related to how we plan, design and use our city region – how it looks and feels as a place. This is the basis of the LTP's *Principle 4: Transport must support placemaking.*

Policy G3-2

Delivering clean, healthy travel and placemaking in all we do

Transport schemes and traffic management schemes of any scale must be designed around the needs of the movement hierarchy. Highways and other spaces used by the public must be made safe and attractive for people who are walking, wheeling or cycling as the first consideration. Achieving a reduction in the speed, volume, noise and dominance of traffic must a stated objective of transport-related schemes or traffic management measures, including highway maintenance schemes.

Proposals that involve changes to the movement of people or traffic must be considered as a cohesive and complementary package of measures focused on the wider locality or environment. Improving the streetscape through good design, improved public realm and high-quality street furniture and planting will be encouraged, but only as part of a cohesive package aimed at reducing the speed, volume and dominance of traffic.

Measures such as school streets, Low Traffic Neighbourhoods and "Mini Holland" schemes will be strongly encouraged. So too will measures that remove the dominance and dangers of street-level car parking, whether on- or off-road.

Low speed zones, including 20mph zones will be supported, especially where accompanied by complementary packages such as road markings, traffic calming features, road narrowing or speed humps.

The LCRCA will urgently progress means to address the problems, dangers and unsightliness of pavement parking. We will press for, and use powers that Government is proposing to make available to local areas in the early years of this LTP's delivery timeframes.

5.3.11 Places have been designed around the needs of vehicles rather than people in the recent decades, in response to the growth in car travel and on seeking to separate people from traffic. This has created large areas that are dominated by wide highways, high speed junctions, or space for car parking. As noted previously, evidence by the Sustainable Transport Alliance suggests that the average size of a car being 32% larger than in the 1960s, taking up 35%-41% of urban spaces.

5.3.12 This has created a vicious circle of making the alternatives – walking, cycling, wheeling, or catching the bus – less attractive. Creating safe places that prioritise walking, wheeling and the use of public transport, with reduced reliance on private motorised journeys, can reduce road casualties whilst simultaneously improving air quality, reducing carbon emissions and improving public health as people become more active in their day-to-day activities. Person-centred placemaking can have a significant impact on

social cohesion and interaction, in turn support mental health and community wellbeing. As a city region with a strong tourism base and thriving visitor economy, measures that make the city region more accessible and attractive creates a virtuous circle.

Placemaking examples in the LCRCA Local Journeys Strategy, 2018 (left and middle), LCR Road Safety Strategy (right). Source: LCRCA

5.3.13 The transport hierarchy principle will guide our plans and any scheme that affect movement, to support this safe placemaking approach. Our clear expectation is that movement by people and by public transport users must be considered and planned as the first priority. We must consider the safety and needs and priorities of road users most at risk in the event of a collision and who are at the top of the hierarchy. It does not remove the need for everyone to behave responsibly, in line with the requirements of the new Highway Code.

Video featuring Simon O'Brien, LCR Active Travel Commissioner on the impact of a trial School Street in Huyton. Source: LCRCA / YouTube

CASE STUDY: THE BENEFITS OF 20 MPH ZONES IN WIRRAL

Wirral's evaluation of its first phase of 20mph area zones delivered the following benefits after the first year:

- An overall reduction of 2.9mph in average speed across all schemes
- A 12% reduction in road traffic collisions.
- A 23% reduction in KSI (killed or seriously injured) road traffic collisions
- An 8% reduction in SI (slightly injured) road traffic collisions.
- 64% more vehicles travelling below 20mph
- Estimated savings to the community from road traffic collisions of £1.2m
- Few complaints from residents since the 20mph speed limits were introduced and several residents requesting extensions to the 20mph speed limits in their area.

Wirral's positive experiences mirror those of Welsh Government's 20mph default mph zones, with an 11.8% decrease in total casualties reported in the first 12 months, and average journey times increasing in most cases by no more than two minutes.

Keeping all vulnerable road users safe

5.3.14 It is not explicit in our hierarchy, but our approach reflects new highway code guidance in considering the needs and safety of horse riders. Levels of horse riding are relatively low in our largely urbanised city region, but is still an important form of travel, especially in more rural fringes. The dangers faced by horse riders are of concern and action must be taken. The Combined Authority supports the British Horse Society's policy that that highway authorities and other providers should accommodate horse riders as well as cyclists and pedestrians on all off-road routes where it is practicable. The city region also showcases good practice of successful shared user paths, where horse riders, wheelers and pedestrians can use a facility safety and comfortably.

Example of shared use walking, wheeling and equestrian route, Dibb Lane, Crosby. Source: LCRCA

5.3.15 Importantly, the wider objectives set out in this plan of promoting modal shift and reducing the impact and dominance of traffic will be especially positive for horse riders and other vulnerable road users.

Healthy and active lives

5.3.16 From a health angle, too few people are active in their daily lives, which leads to problems later in life. Gear Change notes, starkly, that physical inactivity is responsible for 1 in 6 UK deaths. There are also stark health inequalities between the richest and the poorest neighbourhoods in the city region and poor health is a major reason why many people are not in work. People living in our more disadvantaged communities, on major arterial roads and with lower levels of car ownership are also, perversely, most affected by poor air quality and noise that they're least likely to have contributed to. Both problems stem from the domination of traffic and a lack of, or perceived lack of safe alternatives.

5.3.17 We don't want to make walking and cycling a chore or a formal activity that people expect to do in a gym. It is about how everyone moves every day, to live their lives in a way to stay healthy for longer. More activity is not a panacea for tackling health inequality, but it has been identified as a key tool in health improvement by colleagues in our health and wellbeing sectors. This is also central to the principle of making transport and transport investment fully accessible and usable by people of all ages, backgrounds and abilities and improving public health.

The hidden costs of inactivity in the UK and in Cheshire and Merseyside
Source: All Together Active

5.3.18 We will work with the health sector to deliver our plans for healthy transport on a "prevention is better than cure" basis. As noted in section 2, this directly supports the Government's 10 Year Health Plan sets out how the government will reinvent the NHS through the radical shift from sickness to prevention.

5.3.19 The related priority is to ensure that changes to health services consider access and travel issues from the outset. If health facilities, clinics and hospitals are located in areas that are highly accessible by foot, cycle, wheeling and bus and train services, staff, patients and visitors do not need to drive, take a lift or else require costly non-emergency transport services. Neither will they be disadvantaged, making this a fairer, cheaper and healthier

approach. Again, in line with the 10 Year Health Plan, moving hospital services closer to people's homes and away from major hospital sites means that health-related trips should become easier on foot, by bike or on wheels – a virtuous circle.

5.3.20 It will be vital to join-up activities that support independent travel training, cycle training, buddying and confidence building. Social prescribing of walking and wheeling by the health sector can be good alternatives to medication or surgery to tackle obesity, stress or high blood pressure. Not only is it cheaper, but can be more rewarding as a life skill, and better supports the outcomes in this LTP. Joint working with the NHS and health sector is a priority area where we will champion *Principle 7: Work with others to promote and deliver the vision, goals, principles and policies of the LTP.*

The right to clean air

Policy G3-3

Improving air quality from transport

As well as achieving quantifiable carbon reductions from our transport network, reducing all other harmful emissions from transport, including Volatile Organic Compounds (VOCs), Nitrogen Dioxide (Nox) and Particulate Matter (PMs) remain a high priority in delivering this plan.

Eliminating harmful pollution at source and in ways that improve air quality and allow the revocation of the city region's Air Quality Management Areas (AQMAs) is a fundamental aim.

The LCRCA will use its powers, influences and responsibilities, especially through commissioning, franchising or funding processes for transport schemes and transport services, to radically improve air quality. This will include, in priority order:

- **Supporting the collection of granular, real time air quality data** to understand the extent of poor air quality and the impact of different measures on air quality. This will include rolling-out smart air quality sensors linked to artificial intelligence and traffic management systems
- **Support consistent traffic management across the city region** to give priority to the cleanest and most efficient forms of transport in areas where poor air quality hotspots or AQMAs exist. This will be through measures to prioritise modes at the top of the movement hierarchy, to reduce traffic and congestion levels, and tackle stop-start traffic conditions for buses and heavy goods vehicles that emit high levels of pollution.
- **Phasing out the use of fossil fuelled vehicles, fleets and craft over the lifetime of the LTP** in favour of transport powered by clean hydrogen, electricity or other sustainable sources, especially where this helps tackle defined air quality problems. This will be achieved in a variety of ways, including: direct intervention by the LCRCA, in partnership with bus, rail, port, airport and road freight operators, by supporting the installation of clean charging or fuelling facilities, or by supporting the case for national legislative or regulatory change.
- **Supporting new innovations**, in line with *Goal 5: Plan and respond to uncertainty and change and be innovative* to mitigate against these impacts.

5.3.21 Goal 2 has focused on the need to remove carbon from transport. We also set out the air quality challenges that we have in our city region and the direct harm caused by poor air quality from transport, especially from Nitrogen Dioxide from vehicles' engines. The move to electric vehicles and zero emission vehicles will mean that Nitrogen Dioxide emissions will fall, and

which will be good for health. But it is not a panacea, and we must be careful not to tackle one problem at the risk of creating another.

5.3.22 Electric vehicles can produce less noise, which can be a positive from a disturbance angle, but negative for people with visual or other sensory impairments. Electric or zero emission vehicles also produce particulate matter (dust and sooty deposits) from their brakes, tyres and road wear and which can be equally or more harmful to health than nitrogen dioxide from fossil fuels. Similarly, zero emission vehicles require scarce land for roads and for parking, and can still tragically, kill and seriously injure people. Modal shift to reduce overall reliance upon, and use of private and commercial vehicles especially remains critical.

5.3.23 If we simply switch all of our private and goods vehicles to electric or zero emission vehicles and away from petrol or diesel, we will still not deliver all of the goals in this plan. A total shift towards electric is currently not practical for many people from both a cost and convenience perspective too. This is why shifting people to walking, wheeling, bus and rail use wherever possible is critical. Equally, this is why it's important for our public transport (including rail freight infrastructure) to be "best in class" in terms of quality and provision and by being clean, accessible and zero emission.

5.3.24 The LCRCA is not legally responsible for tackling issues related to air quality, but we can and must take action in response, not least as transport is the primary cause of poor air quality across the LCR and is an area in which the LCRCA can influence. An LCR Air Quality Action Plan has been adopted to support these commitments. National Highways has been given new responsibilities for air quality on the strategic road network as a result of recent legislative changes. Only through collective action can our efforts locally be maximised.

5.3.25 Liverpool City Council is mandated by Government to examine a Clean Air Zone (CAZ) option in response to its air quality problems, but has now moved away from a charging CAZ option, which would have seen drivers of non-compliant vehicles pay to drive in certain parts of the city. Sefton Council is also examining the potential of a CAZ to address the problems of HGV traffic in the vicinity of the Port of Liverpool. This study work remains in development and will be used to inform future actions and LTP investment plans. However, the delivery of the goals, principles and policies in this LTP are intended to have a very positive effect for our communities.

5.3.26 Despite this, the quality of air quality data across the city region is poor as it can be patchy and coarse, which can require assumptions to be taken. It also hinders evidence-based problem solving and decision making - for example, being able to change traffic flows in real time in response to an episode of poor air quality. Staff capacity at local authority level is also stretched, meaning that there is a role for the LCRCA to support local authorities and the public alike through the collection of better data and the consideration of air quality implications, especially in transport terms through this LTP.

The right to travel in safety and without fear

Policy G3-4

Making all journeys safe, inclusive, attractive and reassuring for the user

Building on *Principle 4: Transport must support placemaking* and *Principle 6: Guided by our commitment to inclusivity, accessibility and social value* we will ensure that transport developments and changes to our transport networks improve the personal safety, and perceptions of safety for all.

This will be achieved by designing-out the risk of crime and anti-social behaviour, by creating inviting spaces for movement and for people waiting, or interchanging between, and using all forms of transport. Creating transport schemes, transport corridors, streets, points of access and spaces that are well-lit, well designed and inviting form essential design components in support of this. This requires interventions and solutions to be considered in a place-based way, thinking of people's end-to-end journeys from doorstep to destination.

The involvement of people who are most affected by crime or fear of crime, including women and girls, young people, people with cognitive and hidden disabilities such as autism, anxiety or dementia, together with other protected characteristics, will be secured in the development and design of proposals and projects. Design Panels will be used by the Combined Authority to consider and mitigate against any potential impacts of schemes and investments, and for any unintended consequences to be addressed.

We commit to the importance of greater human interaction, more visible staff presence and active surveillance in creating feelings of safety and confidence.

We will ensure the user experience of public transport is positive, so that people feel safe and comfortable. This will include good the provision of well-maintained public toilets along the network, where practical, or else access to safe and secure public facilities. This will be supported by designated safe spaces to wait or seek refuge across the transport network.

We will actively support multi agency partnerships and campaigns, such as TravelSafe Partnership and work with transport operators and the relevant authorities such as the Police and Crime Commissioners and British Transport Police to prevent, educate, and tackle anti-social behaviour and targeted crime on our transport networks and offer reassurance to all. This will include simplifying the reporting of concerns or incidents on the transport network and improving our collective intelligence in order to take action in response.

5.3.27 Our consultation – especially consultation with children and our Equality Panels – has consistently highlighted how important personal safety is, and in

turn, how this is integral to health and quality of life. Younger people are, rightly, concerned about knife crime and gangs and anti-social behaviour on public transport. We are very concerned about the growing cases of violence against women and girls (VAWG) and are working with a range of partners, including TravelSafe Partnership, the Merseyside Sports Partnership (MSP) and the Urban Transport Group to tackle this. Fear or anxiety around travelling and making trips can lead to, or exacerbate sensory, or mental health issues.

5.3.28 We know that if we do not address these issues, we will not make public transport, walking and wheeling the safe, attractive everyday forms of transport they need to be, especially as our children grow to be the drivers, bus and rail users and walkers and wheelers of the future. Incidents of crime and harassment on the street and on public transport, including the fear or crime and harassment also act as barriers to the very significant shift needed from private car trips to deliver the aims of the LTP. We must ensure that no one feels excluded from using and accessing the transport system, and where facilities such as toilets, rest areas and designated safe spaces are so important.

5.3.29 We must design-out the risk of crime and anti-social behaviour, by creating inviting spaces for movement and for people waiting, or interchanging between, and using all forms of transport.

5.3.30 Learning from the experiences of COVID-19, physical cleanliness, the enforcement of laws and byelaws, and perceptions of cleanliness form a critical component of a safe and attractive transport network. This is essential to reassure and attract back new and lapsed users of the public transport network and support the growth in bus and rail travel required to deliver the aims of the LTP. Enhanced cleaning regimes that have been so important in supporting the recovery of the transport network will continue and we will work to communicate reassurances that public transport is physically clean and safe.

5.3.31 Digital technology - increasingly needed to access transport information or transport services - can have negative impacts on mental health or quality of life, if people always feel tethered to their mobile phone. In-person interactions are not only important for many to get the right information and product, but also from a safety, wellbeing and reassurance point of view. This is why a human touch is important, linked to staffed railway stations and in ensuring a physical presence, and where people may otherwise feel vulnerable or unsure about using sustainable travel choices. But we will also explore how technology itself can support and simplify safety measures and the reporting of concerns or incidents to improve our intelligence on anti-social behaviour and crime and so that we can take swift action in response.

GOAL 4: Transport infrastructure that's well maintained and resilient

Make sure our transport network and assets are well maintained, long lasting, and resilient to the effects of climate change.

5.4 Delivering Goal 4

5.4.1 We have a large and established transport network that has been developed over many years. It includes: motorways, roads, footpaths, cycle routes and cycle lanes, rights of way, car parks, two road tunnels beneath and two road and one rail crossing over the River Mersey, our sea and ferry ports, the Mersey Ferries, some 5,000 bus shelters or bus stops, an extensive electrified rail network including a river tunnel and a five underground railway stations, plus mainline rail services that connect the city region with other towns and cities and which carry important freight as well as passengers.

5.4.2 Our transport network is a large, very valuable, complex and in most parts, elderly. The public highway network in particular is one of largest and most obvious assets owned and maintained by our local authorities, or by National Highways, in the case of the Strategic Road Network. If roads are closed or made impassable as a result of poor maintenance, flooding, landslips or other emergencies, the dangers and disbenefits are felt immediately – journey times are extended, people are inconvenienced, and essential "just in time" goods and services can't be moved to where they're needed.

5.4.3 Our transport assets are at growing risk due to the way that our climate is changing. More heat, rain, wind and flooding put more pressure on our transport system. Extreme weather can bring the road and rail networks to a halt as a result of flooding, landslides, ice, cracking and buckling, and contribute to injury or even death. Financially, public liability claims, such as claims for damage to vehicles from potholes are also more likely. More road traffic – forecast under our "do minimum" scenarios described in section 2 – increase the risk of greater wear and tear and pressure on our roads and streets, as well as other undesirable impacts and consequences.

5.4.4 A badly maintained highway network presents dangers if potholes are created, if paving and kerbs are damaged, if highway drainage is blocked, or if road markings and signs are damaged or missing. This is especially problematic for pedestrians, cyclists, people wheeling and people who may have sensory or mobility problems. Similarly, dangers are presented if cycle paths, railway platforms and footpaths that are not swept, maintained or kept free of weeds and debris. Poorly maintained roads are not conducive to growing the use of buses and may serve as a disincentive if new bus fleets, including Rapid Transit services, operate on worn or potholed roads that impact on passenger comfort or the reliability of vehicles. Investing in highways infrastructure supports improved reliability for public transport, as well as improving the quality of the active travel offer. It also better ensures that the transport

network is safe and resilient in response to the significant risks of climate change.

A transport network that's fit for purpose

5.4.5 A well maintained and resilient transport system is a fundamental starting point to delivering an effective sustainable transport system that supports the visions, goals and principles set out in this plan. We recognise that stepping up, and regularly updating our data on the condition of our transport assets is vitally important – ultimately, in "real time". Good quality information gives us early warnings and the ability to target resources where they are needed in good time and before long term damage or serious risks are presented. This accords with *Principle 3: Transport decisions must be based on clear need and evidence.*

Policy G4-1

Well maintained transport infrastructure with regimes informed by good data

We will strive to keep the condition of the city region's road network, including footways, rights of way, bridleways and cycle routes well maintained and regularly reviewed to a consistent standard, and in ways that follow national guidance and best practice.

Our ambition is to collect and use data in real time is our ambition, to make the case for, and prioritise the significant levels of investment needed to improve their condition and lifespan.

This will be supported by adopting invest-to-save initiatives and by focusing spend where need is greatest.

The primary highway maintenance focus in the immediate term is the Key Route Network of local roads, structures and footways, as the city region's most strategically important roads for all modes of transport and for freight.

The city region's rail network and associated signalling and power infrastructure is complex and vulnerable, especially in light of its ageing nature and changing weather patterns that increase risks of high winds, flooding and icing. We will work closely with industry partners to develop timely and robust inspections regimes and evidence to develop mitigation and action plans in response.

The tolled Mersey Tunnels and Mersey Gateway Crossings provide vital connections between our communities and the wider travel to work area for people and for goods. They will be proactively maintained in line with robust asset management plans, supported by toll income.

The Mersey Ferries are being upgraded and replaced to provide greatly improved levels of reliability, comfort and convenience. The vessels, and their related ferry terminals and berthing facilities, will be inspected, monitored and maintained in line with industry guidance and best practice.

5.4.6 The Combined Authority has defined a Key Route Network (KRN) of local roads. The KRN accounts for around 10% of the total local road network, but form the most important links to workplaces, residential areas, our motorway network and further afield. But these are not simply roads that are important for motorised traffic – they are also routes that are important bus routes, walking, cycling and wheeling routes, tourism routes or routes to education and leisure facilities.

The LCR's Defined Key Route Network
Source: LCRCA

5.4.7 In addition to the KRN, is the LCR's much wider network of A, B and C class and unclassified roads across the city region that make up the majority of the roads network. Footpaths, rights of way, bridleways and other paths also criss-cross the city region. For the travelling public, the different classes, designations and ownership of these networks is irrelevant. The critical outcome will be in ensuring that the network as a whole works in a cohesive and integrated way. This will be achieved by moving to consistent standards, safety and maintenance regimes, wherever possible.

5.4.8 As the most significant network, however the focus in the LTP in on the KRN. In defining our KRN, we acknowledged the significant benefit that a more co-ordinated approach to managing this network of roads could deliver. This includes:

- a more consistent approach to delivery and highway standards;
- economies of scale, for example procuring and delivering on a city region-wide basis;
- potential staffing benefits through the ability to pool services and efforts;
- greater efficiencies from the amalgamation of delivery arrangements and contracts; and
- A move to streamlining and standardising highway control rooms to provide better value for money and timely interventions where problems occur.

5.4.9 As a first stage in ensuring that this network especially is fit for purpose, a Highway Infrastructure Asset Management Plan (HIAMP) was developed in 2018. This provided an understanding of the physical condition of the main carriageways on a consistent footing for the first time. Over the life of this LTP, this HIAMP data must also be enhanced to provide a detailed and consistent understanding of all highway assets, such as bridges, drainage, safety restraints, lights, traffic signals, street furniture and pavements. This is essential in being able to make the case for the right funding and prioritisation to support preventative maintenance and reconstruction.

5.4.10 In our first HIAMP surveys in 2017, the headline conclusion is that the condition of the highway network is degrading, and that current funding is not at a level to properly address the maintenance backlog of the highway network. The analysis shows that to maintain current levels of service (i.e. maintain a steady state) that:

- approximately £12 million is required per annum for Structural Maintenance;
- approximately £2.5 million is required for Preventative Maintenance; and
- the maintenance need "backlog" was approximately £56.8 million

5.4.11 This maintenance backlog affects the city region as a whole, but the majority of KRN roads requiring urgent structural maintenance are within Liverpool. Similarly, the maintenance backlog in Liverpool is especially acute, meaning that interventions on these roads demand the highest priority. Our related

priority in the early years of the LTP's delivery period will be to refresh these surveys, to build a detailed picture of the condition of the assets and take the best possible action in response.

5.4.12 The city region's KRN also features two complex road tunnels managed by the Combined Authority which also form part of the Key Route Network. The oldest tunnel is 90 years old and the newest is over 55 years old – testament to their build quality, but also a reminder of their increasing age and vulnerability. Outside of the Combined Authority's direct management are two important bridge crossings upstream – the Silver Jubilee Bridge and the Mersey Gateway between Runcorn and Widnes. These crossings act as critical links for people, goods and visitors and must be kept well maintained, usable and, where necessary, upgraded to withstand new pressures and challenges, including severe weather events such as flash flooding and storms.

Resilient infrastructure that can withstand climate change

Policy G4-2

Delivering transport that can withstand the effects of climate change

We will develop and implement design standards for new and existing infrastructure that lessen the effects of extreme weather events on network performance to protect assets and improve people's safety, perceptions and experiences. Standards for new and existing infrastructure to be retrofitted will seek to incorporate green infrastructure to help mitigate impacts of climate change on the transport network.

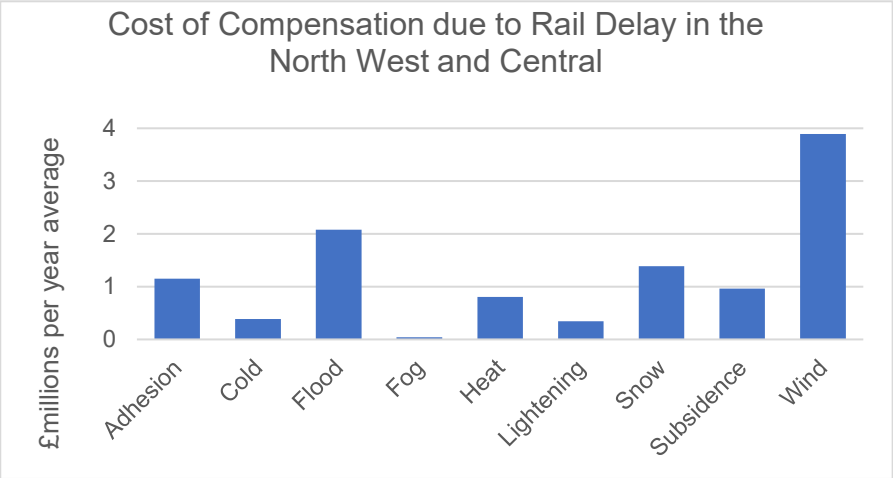
We will ensure that all new infrastructure and retrofitted projects are designed to manage and reduce surface water run-off and risks of flooding or discharges of pollutants to watercourses. This will be considered in partnership with Lead Local Flood Authorities, Highway Authorities and utility companies. We will consider solutions that align transport infrastructure schemes, including highway maintenance schemes, with efforts to capture and slow the flow of surface water into the waste water system and reduce spills from combined sewer overflows. We will design measures in a collaborative way and prioritise natural flood management solutions and sustainable drainage systems.

We will monitor weather events in real time and take proactive measures to reduce disruption, for example diverting vehicles and people from flood prone or high wind routes. Working collaboratively with partners is also vital, and across different modes of transport, in the event that extreme weather or localised damage renders the transport network unusable or unsafe.

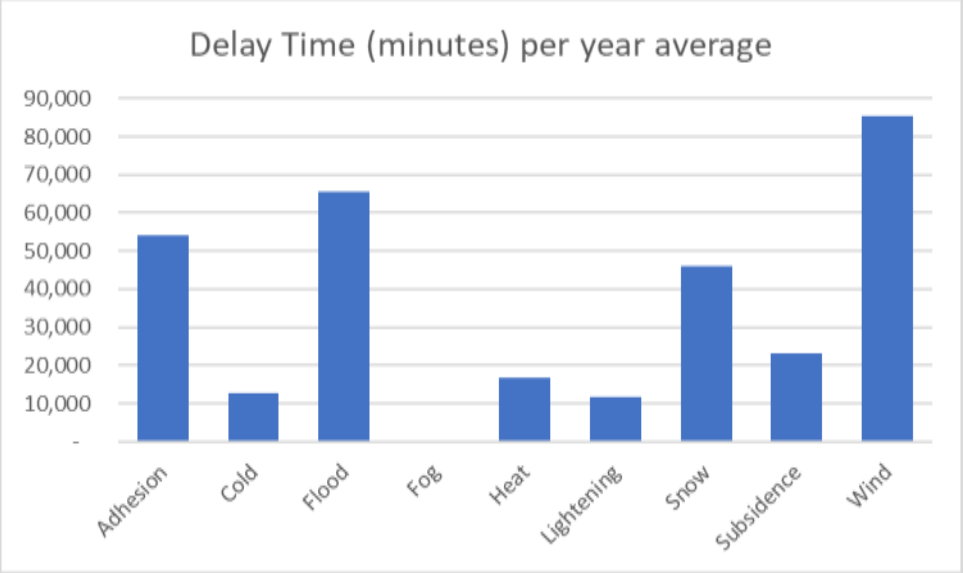
New tree planting, and maintenance schedules for trees adjacent to the transport network will be informed by climate projections in order to prevent disruption, improve the reliability and comfort of adjoining networks, and minimise risk of physical harm.

We will work closely with the rail industry to improve the rail network's resilience against icing, extreme heat, flooding and wind. This includes increasing the amount of natural capital and biodiversity to support the safe and efficient operation of the network.

5.4.13 The vulnerability of transport infrastructure in the LCR has been made evident; multiple storms and heatwaves in 2023 caused significant damage and disruptions to the transport network. The LCR experienced the highest temperature on record of 36°C in July 2022 during a heatwave which caused widespread disruption on the rail network. It is predicted that maximum summer temperatures in Liverpool will increase up to 2.1°C by 2030 and winter precipitation will increase up to 11%. Extreme weather events are going to become more prevalent, intense and unpredictable; not only does our infrastructure need to be able to withstand these impacts, but to encourage modal shift, we need to minimise the impacts of climate change so that we make all journeys safe, comfortable and attractive.



Source: Network Rail delay compensation costs due to weather events in their North West Central area – average taken from period 2006/07 to 2018/19



Source: Network Rail delay minutes due to weather events in their North West Central area – average taken from period 2006/07 to 2018/19

5.4.14 New infrastructure assets should be planned, designed, built, and operated in anticipation of the effects of climate change that they are predicted to face in their lifetime. Existing infrastructure should be retrofitted with appropriate measures whilst ensuring climate resilience is a continual process throughout the life of the asset. Heat, wind, storm surges and precipitation are the major threats that the Liverpool City Region faces. It is also important to remember how important the transport network can be to the protection of people during extreme weather – bus and rail stations can provide refuge, shelter, warmth and protection, whilst transport services can provide the means to flee a localised incident or emergency to a place of safety.

5.4.15 Looking at precipitation, this LTP supports the aims of the LCR's draft Vision for Sustainable Water Management, developed in summer 2025. Transport has a direct bearing on water quality and on flooding; hard surfaces from roads, car parks, driveways are rarely porous and contribute to water runoff and flooding and potentially harmful discharges into our rivers and the sea. Managing rainwater where it falls in the face of increasingly frequent, intense and unpredictable rainfall events is essential to avoid surface water flooding and river flooding.

5.4.16 The sewerage infrastructure that has served the LCR for many years, much of which is buried beneath our streets and footways, is a particular concern. In several densely urbanised areas across the LCR, 84% of the sewers are 'combined sewers', meaning that both wastewater and rainwater are taken together to the treatment facility, rather than separated, where only clean rainwater drains to a waterbody. The proportion of combined sewers in the wider North West of England is 54%, with the UK industry average of 33%. During heavy rainfall events, combined sewers can reach capacity quickly, causing localised flooding around drainage points. At capacity, combined sewer systems are designed to overflow into the sea and rivers to prevent backing up and flooding of homes and businesses.

Completion of an urban raingarden Upper Pitt Street, Liverpool Source: Dr Juliet Staples, URBAN GreenUP, Liverpool City Council

5.4.17 As a result of climate change, rainfall is predicted to increase, A warmer atmosphere can hold more moisture, with winter precipitation rates are predicted to increase by between 4% and 16% by the 2050s and increases in the intensity of heavy summer rainfall events, as well as their unpredictability. Changes to precipitation patterns are already causing a range of significant and costly impacts as well as the

occurrence and intensity of extreme storms. This means that we are going to see greater volumes of water; as well as the harm caused by flooding and pollution is the danger and inconvenience caused to road users by floodwater. Worryingly, a 2022 Environment Agency study concluded that people from more deprived areas disproportionately face more flood risk than those living in less deprived areas – areas often characterised by an abundance of hard surfaces which do not allow for absorption of rainwater into the soil.

5.4.18 The main action needed in response is to reduce surface water run-off by capturing water before it enters the drainage system. This avoids risks of flooding or discharges of pollutants to watercourses from roads, car parks and other hard surfaces. Water can be held back through the use of Sustainable Drainage systems (SuDs), and measures such as swales, balancing ponds, permeable surfacing and appropriate tree planting to capture and slow the flow of surface water into our fragile drainage systems. The right trees in the right locations can also provide much needed shade and shelter for people using our transport networks, as well as offering protection to the infrastructure itself from wind or heat.

5.4.19 The LTP's wider vision of reducing the impact of roads and traffic, focusing on placemaking and its presumption against providing more road and car parking capacity further supports this wider aim. SuDs techniques will be incorporated into projects and maintenance regimes, coinvesting with utility companies wherever appropriate to reflect the co-benefits. Good examples include Halton Borough Council's Runcorn Station Quarter Piazza transformation and Liverpool City Council's Urban GreenUp programme that uses sustainable drainage to manage surface water runoff.

5.4.20 Extreme and fast-changing weather conditions are being seen more often and with growing severity. Significant disruption to the Merseyrail network on 9th January 2025 arose followed snow falling on frozen electrical conductor rails. This resulted in stranded Class 777 trains and passengers, despite winter resilience plans being agreed in advance. The Mayor commissioned an independent review to learn lessons from the incident. The report warned that without changes to how we plan for poor weather and greater resilience, the same collapse of the network could happen again. It also warned how changes in our climate and the continued evolution of Merseyrail's operations means that

Source: Merseyrail's Winter Weather Resilience Review 2024/25 undertaken by Vernon Everitt – Source LCRCA)

new risks are likely to be faced, and that resilience plans must constantly adapt. This is an important reminder about the need to continually plan for, and adapt to changing weather patterns so that our networks are fit-for-purpose.

5.4.21 Heat can cause deformities in road surfaces such as ruts due to expansion and contraction of surface materials. National Highways have made a shift to using Thin Surface Course Systems (TSCS) from the more traditional hot rolled asphalt. TSCS is considered to be more resilient to adverse weather and climate change, including to heat. Railway lines and overhead power lines will also expand and sag, respectively, in hot weather.

5.4.22 Buses in London have tinted windows to reduce heat from sunlight and ventilation to improve comfort. They also have white roofs, plus ceiling insulation to reflect heat. Double decker buses which make up around three quarters of the London bus fleet have air cooling in the upper deck. The entire Transport for London train fleet also has tinted windows installed to improve user experience.

5.4.23 Active travel corridors and waiting areas like bus stops and train stations can also be at risk from extreme weather linked to climate change. Singapore in 2018 completed the installation of 200km of covered walkways, under the Land Transport Authority's Walk2Ride programme. This protects pedestrians below from extreme heat as well as rainfall. These walkways serve different transport hubs as well as to public services and make use of walkways by pedestrians more appealing when faced by adverse weather conditions.

5.4.24 Bus stops can be optimised in multiple ways to improve air quality, reduce temperature, increase biodiversity, and attenuate water. For example, in Seville, innovative "climate shelters" are in development, which are sustainable bus stops capable of reducing temperatures by up to 20°C. Shelters have a water cistern that stores fresh water. During the day, solar panels help pump fresh air through small holes. Each structure has a temperature and pedestrian detection sensor to optimise performance. Similarly, Iceland utilises 'storm shelter' bus stops that have animal-safe wind turbines on the top which power lighting, heating and mobile charging in the bus stop.

5.4.25 These are all real-life examples of how the LCR's transport network can be made more resilient, fit for purpose and comfortable for users over time. These principles and measures will be embedded into the delivery of schemes and interventions.

Resilient infrastructure with a lower environmental impact

Policy G4-3

Ensuring that we develop and maintain infrastructure in a sustainable way

We will pilot, implement and commission new ways of reducing carbon from transport infrastructure, including from concrete, ballast, steel, glass and bitumen. We will support a shift to new, low carbon technologies and alternative materials and construction methods in all that we commission, procure and deliver.

This will include the testing and roll-out of sustainable net zero energy generation, such as heat pumps, photovoltaics and wind power.

The retrofitting of street lighting and traffic signals with LED and power-saving technologies to consume less power will be rolled-out.

We will integrate circular economy principles into the transport network; there will be a strong focus on reusing existing buildings, materials, equipment and infrastructure, where possible, to make best use of existing resources and reduce waste and minimise carbon emissions.

We will actively support new construction methods and technologies that absorb carbon and support wider biodiversity and nature recovery plans and in ways that make areas feel safer and more attractive for people. Measures may include green roofs and wildflower planting. Construction methods of this nature minimise noise and air pollution as well as reducing greenhouse gas emissions.
When implementing changes across the transport network, the Local Nature Recovery Strategy (LNRS) will inform opportunities for nature recovery interventions in locations where they are most needed to provide the biggest benefit to both nature and people.

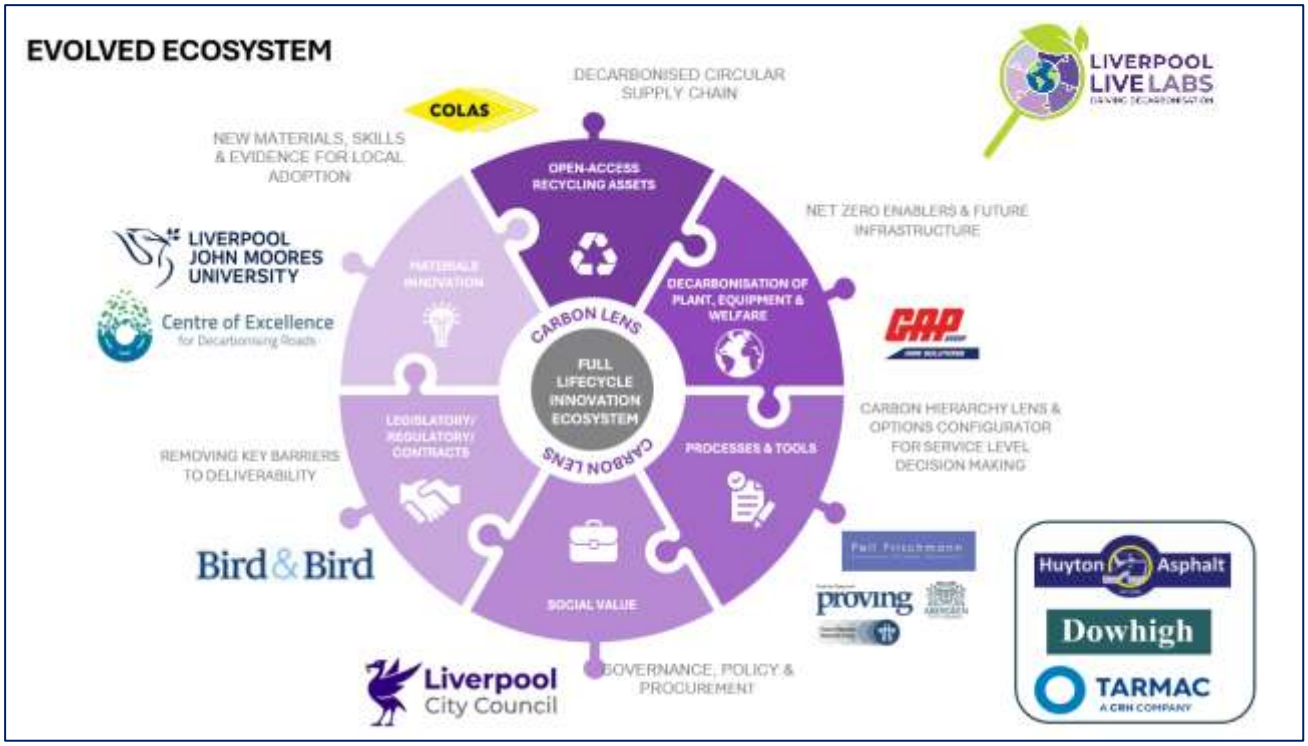
We will map and align resilience opportunities, opportunities to increase Biodiversity Net Gain in appropriate circumstances and make improvements to the transport network, especially to improve active travel conditions.

Linking to LCRCA's Long Term Skills Plan, we will pursue the training and upskilling of our workforces to enhance the sustainability of projects, schemes and transport operations.

5.4.26 As we set out in Goal 2, and under *Policy G2-1: Removing carbon emissions from transport*, transport infrastructure consumes large amounts of carbon. In looking at a whole life approach to carbon in our schemes and activities, we must look to reduce the environment impacts of construction materials and maintenance, in ways that also support the aims of this goal in delivering a robust, adaptable transport system. This may require a focus on making best use of existing assets, buildings and facilities, and in reusing and recycling

existing materials before bringing in new materials, or creating a new facility or building.

5.4.27 There is already some best practice taking place within the Liverpool City Region. Liverpool City Council have been utilising the DfT funded scheme ADEPT Live Labs 2, focussing on decarbonisation of local roads. Through trialling the use of lower-carbon alternatives compared to traditional methods of maintenance and construction, LCC have demonstrated carbon savings across a range of schemes. It is not without its challenges, with hurdles around skills, data and funding to overcome, but it exhibits what is possible with the right level of commitment.



Liverpool City Council Adept Live Labs 2, Evolved Ecosystem
Source: Liverpool City Council

5.4.28 Increasing levels of biodiversity as part of enhancement and repair of the transport network where possible is also important. More planting can absorb carbon and other pollutants, as well as aiding in tackling extreme weather via natural, permeable materials to prevent flooding. Increasing Biodiversity Net Gain (BNG) is also a mandatory part of the land use planning process for developments, as showcased at the recently opened Headbolt Lane station in Kirkby. Developers must now deliver a minimum BNG of 10%. This means a development will result in more or better-quality natural habitat than there was before development. The approach to BNG will be guided by the Spatial Development Strategy, Local Nature Recovery Strategy and in our partner authorities' local development plans. The use of the right planting and biodiversity to create high quality places and visual interest also supports other guiding principles in the plan, notably *Principle 4: Transport must support placemaking.*

GOAL 5: Plan and respond to uncertainty and change and be innovative

Become a forward-thinking region. Use innovation and new technologies, plan for uncertainty and change, and improve future travel in the region

5.5 Delivering Goal 5

5.5.1 The Liverpool City Region has huge strengths, ambitions and plans for the future. The devolution of powers and funds to a local level is critical, to allow decisions to be taken at the same level where impact will be felt and in response to local needs and evidence.

5.5.2 Innovation has always, and will always be core to LCR's strengths since the birth of the industrial revolution – new dock systems, pioneering inter-city rail, medicines, vaccines, innovative new materials and digital innovation as examples. Innovation and change will enable the Liverpool City Region to remain prosperous, vibrant and competitive long into the future against the backdrop of a constantly evolving context. Through this LTP, we reiterate our ambition to become a nationally exemplary, forward-thinking city region in how we plan and deliver transport. We will use innovation and new technologies to help deliver our goals and be receptive to change, disruptive technologies and uncertainty in equal measure.

5.5.3 We recognise that technology and innovation can help revolutionise travel and transport and how people access it. The provision of comprehensive digital connectivity for everyone will be vital to achieving the vision of our LTP. Just as water and electricity are vital utilities for our prosperity and wellbeing, so too is digital connectivity; it allows people to work and shop from home, and enables the seamless provision of Real Time Information and Smart Ticketing services. Powered forms of mobility such as e-bikes and e-scooters can provide real alternatives to cars and vans, but are reliant on digital connectivity to allow people to book trips and track the location of vehicle fleets. Digital connectivity is also a crucial building block for future transport services, including connected and autonomous vehicles, and in managing freight and logistics services.

5.5.4 The completion of the LCR Connect digital fibre spine in 2024, supported by "Dig Once" principles represents a pioneering and vitally important development, that will allow ultrafast broadband connectivity across the city region for services or functions that are yet to be invented. We must also ensure that our future pipeline of transport schemes supports the roll out of 5G connectivity (and advances on 5G), to aid transformation in our digital connectivity.

The LCR Connect digital fibre spine
Source: LCRCA Draft Spatial Development Strategy

Uncertainty and change

5.5.5 Despite these transformative innovations, the COVID-19 pandemic was a grave reminder that the future is uncertain and change can happen quickly, or in ways that blindside us. Lockdown had an immediate and overnight impact on travel, and traffic levels plummeted as schools, workplaces and shops closed. Over five years on, we still don't know what the long-term impact will be, as homeworking for those who can, and online home shopping continued long after travel restrictions were eased.

5.5.6 In addition to the impact of the pandemic, our future is especially uncertain at present; of international conflicts, Brexit, rising inflation, the imposition of trade tariffs, the cost of energy, the cost-of-living crisis and industrial action in the transport sector frame the drafting of this plan. The fluctuating costs of petrol,

diesel and electrical power for electric vehicles also have the potential to change how and why people travel and how goods are moved.

5.5.7 The October 2023 cancellation of the northern section of High Speed 2 (HS2) between Birmingham and Manchester is a powerful example of an overnight change to a longstanding proposal, and one that turned many years of forward planning on its head.

5.5.8 People's attitudes also change over time – often quickly and with radical implications. The switch from tobacco from vaping is a notable example, as are attitudes to drink driving today compared to those in the 1960s. Changing attitudes and values have a bearing on why, and where people travel, how they choose to travel, and how they want to pay for it. Recent research suggests that fewer young people hold driving licences compared to previous generations, and are driving less. If this trend continues, linked to growing costs of running a car, young people's demands will change. This may mean that the demand for high quality public transport and shared mobility, for example, grow much faster than we might otherwise have expected.

5.5.9 Finally, we must not rely on a technology for its own sake or jump to conclusions where the technology is in its infancy. This is why tests and trials will be supported. This comes in addition to the need to prevent digital exclusion and in ensuring fairness for al, in line with *Principle 6: Guided by our commitment to inclusivity, accessibility and social value.*

5.5.10 Building on *Principle 3: Transport decisions must be based on clear need and evidence,* proposals must also be tested against future uncertainty as part of the risk management process. The four future travel scenarios that have informed the development of this plan (set out in *3. The need for action*) are especially important considerations. Schemes or interventions that stack up against uncertainty and a range of futures will typically have the additional assurance of demonstrating that they are robust and future-proof.

Policy G5-1

Testing proposals against uncertainty and change and applying scenario-planning principles

Plans, proposals and interventions taken forward in support of this plan must be tested against future uncertainties.

In particular, the four future travel scenarios identified in section 3 – *Transport Scenarios for the Future of the City Region* - must be considered in proposals and business cases for relevant schemes and interventions. This is to provide assurance that schemes and priorities remain relevant and robust set against a range of futures and uncertainties.

There will be a presumption in favour of supporting plans, proposals and interventions that perform well against a range of uncertainties, rather than schemes that have been developed against a single set of forecasts or a narrow range of assumptions.

5.5.11 Schemes and projects that are identified and developed need to be tested against different possibilities and futures. For example, this could include a scenario of falling costs of motoring at one end of the spectrum, but with a national road user charging scheme that charges the affordability and attractiveness of car commuting at the other end. Or it could include a comparison of travel demand in a low growth, poorly performing economy, and in a high growth inclusive economy. Our delivery plan that follows needs to be responsive to these changes.

5.5.12 A significant uncertainty that we face concerns funding into the longer term. Positively, the early years of delivery are underpinned by significant levels of funding from the £710 million City Region Sustainable Transport Settlement (CRSTS) and now, £1.6 billion Transport for City Regions award until 2032. But at the same time, this funding may not keep up with rising inflation, so is worth less year-on-year. Moving to a devolved, Integrated Settlement is extremely welcome, as it provides this medium term certainty and flexibility. But it may also mean that we are ineligible to bid into, or receive other funds that are made available from government.

5.5.13 Funding pressures are likely to be acute in the short to medium term especially in revenue terms for local authorities. Revenue funding is used to maintain roads and open spaces, commission services, and employ staff to develop schemes. The public sector in under extreme financial pressures and staffing levels have been squeezed over recent years. Levels of revenue funding, needed to support the delivery of bus, rail and ferry services, concessionary travel and the development and delivery of schemes and projects are under extreme pressure. We need to make the case for essential funding from a range of other partners to realise the many benefits to society that the LTP sets out, especially for the large measures that cannot be funded from devolved funding alone.

5.5.14 Equally, uncertainty and funding pressures emphasise the need to be led by clear evidence, to consider a range of options including “making best use” of existing assets before building new schemes that may have very significant running costs. As advocated under Goal 2, delivering multiple benefits through a well-designed scheme is also more efficient in delivering the aims of this plan – examples include “packaging up” road space reallocation, public transport and road safety improvements as part of the delivery of highway capital maintenance schemes, rather than as like-for-like highway maintenance schemes.

5.5.15 Likewise, the generation of new funding sources or returns on investment will feature, to maximise value and to leverage travel support and assistance to people needing it most. This can include measures like land value uplift to capture wide benefits that transport schemes can bring, developer contributions to support accessibility improvements to new developments, and sponsorship and other ways to generate income. In addition, working across different sectors, there is huge scope to improve how existing funds works and complement one another, including through public sector reform. The latter

will include reviewing what and how we deliver transport activities and projects, to maximise our efficiency and impact.

5.5.16 In summary, we must keep an open mind and be receptive to change. We cannot lock ourselves into a specific view of what the future might look like or else our plans will become outdated and irrelevant, especially if they are based on a preoccupation with past trends or established conventions.

Testing and trialling new measures

5.5.17 When the future is uncertain, or when we are progressing new, innovative and untested ideas, the use of trials and experiments can prove useful. A trial can ensure that we don't commit large amounts of funding to things that may not be proven or effective. It can also help us to test ideas in a "real world" setting, especially if the use of forecasts or transport modelling tools would not be appropriate. Equally, a trial can be useful if our communities are not sure whether a proposed solution to a problem will work, especially if a solution is seen as radical or challenges the use we make of road space, linked to *Principle 5: Prioritise clean, healthy travel in all we do.*

Policy G5-2

Piloting options, trials and new technologies in a climate of uncertainty and change

We recognise that we do not always have all the facts or all the right answers at our disposal when developing solutions to the transport problems and challenges set out in this LTP. This is especially important where public support is untested or where the evidence is inconclusive.

We support the use of transport and travel trials, pilots and technological innovations that support the vision, goals and principles in this plan, to test impacts in a "real life" setting and that could include:

- Collecting data on movement, or on the condition of transport networks and assets in new ways, including "digital twins" and artificial intelligence, to better inform the development of solutions and interventions.
- Behavioural pilots to understand the effect of incentives or other measures on how people choose to travel. This could include pilots of ticketing and pricing options, including dynamic pricing, to manage or spread the demand for travel
- New technologies that can move people or goods in more efficient ways, including technologies that can control transport systems in real time in response to external factors (e.g. adverse weather or other emergencies)
- Measures to trial and evaluate the impact of schemes that reprioritise road space to deliver the visions, goals and policies of this plan. Starting small-scale can provide learning experiences and mitigate risk. This can include low cost, temporary trials of car-free environments, road closures, low speed zones, active travel, bus priority and micromobility or autonomous vehicle measures.

5.5.18 It can mean that piloting a new form of transport or technology is the right thing to do, as we are doing now with the ongoing e-scooter trial in Liverpool, and where public consensus is far from clear. Our pioneering battery powered Class 777 trains are national game-changers in looking at new, and lower cost ways in which to decarbonise the rail network and increase the reach of the network without using conventional "third rail" electrification.

5.5.19 Pop-up cycle lanes were promoted as quick, temporary solutions to help people move in a socially distanced way about during the height of COVID-19 restrictions in 2020. Not all were successful or popular. But they provided an immediate solution to a problem, to the point that a number of these have been made, or are being made permanent. Robust monitoring and evaluating of the success or otherwise of these initiatives is essential.

A smart, innovative city region

5.5.20 We recognise that new innovations and technology have the potential to change the way we live our lives and how we travel and move. This is in much the same way that high speed broadband and smart phones have revolutionised the way many of us work, shop, book tickets and communicate. Our aim will be to capitalise on technology and innovation that allow all of our goals to be met, in line with *Principle 2: We will apply the five goals equally*.

5.2.21 We support the ambition to be a "Smart City Region" – using Artificial Intelligence (AI) for good to transform our transport system through innovative and creative digital solutions that allow movement to be planned and operated in real time. This can be in response to changing circumstances or to respond to an emergency and include the management of traffic, using road, rail, air and water, in new and more efficient ways utilising live data and real time information.

Policy G5-3

A Smart City Region – Investing in new technologies and using Artificial Intelligence for good

The delivery of this plan will be supported by the ambition to be smart and innovative in the use of real time data collection, intelligence (including Artificial Intelligence) and traffic and transport control systems. The commitment to a rolling LTP delivery programme allows new technologies and design principles and emerging solutions to be assessed and embedded into plans and proposals. But the starting point with new technologies is that they must clearly set out to support the vision, goals, principles and policies in this plan.

A Smart City Region is reliant on having the right digital infrastructure in place. Much of our digital connectivity is located or buried within our transport assets, especially our roads and pavements. Scheme promotors must consider opportunities to improve digital connectivity coverage as part of the delivery of relevant schemes through the use of "Dig Once" principles, through active or passive digital infrastructure upgrades, to minimise future disruption and reduce overall costs.

We will facilitate the transition from petrol and diesel engines to electric and other sustainable fuels in a technology-agnostic way. New fuels may include, but are not limited to electrical and battery power, green hydrogen, ammonia, methanol and sustainable aviation fuels.

As a more advanced technology, the electrification of cars and vans will be facilitated through the Local Vehicle Infrastructure Fund (LEVI) programme as a short-to-medium-term delivery deliverable. This will include a mix of on-street low powered chargers and high capacity "hub" chargers with a focus on areas lacking off-street parking and home charging facilities.

In rolling-out electric vehicle charging, we will prioritise shared mobility principles, with a focus on the provision of access to clean electrified transport rather than on ownership of an electric vehicle, in line with *Policy G2-3 - The role of shared mobility and micromobility.* We will integrate vehicle charging proposals with our placemaking plans and with the wider transport network, including bus, rail, ferry, e-scooter, walking and cycling networks.

The electrification of mass transit and associated infrastructure (e.g. the electrification of rail lines and electric or alternatively powered buses, vans, HGVs, ferries, logistics and shipping) will be pursued locally with industry and other key partners. The focus will be on delivering such measures as part of a cohesive, integrated package of measures aimed at tackling modal shift especially. This will be in line with *Policy G2-2 - Delivering an integrated, sustainable mass transit network, tackling capacity problems and improving connectivity.*

5.5.22 There is great potential for better data and technology to transform the safe and sustainable movement of goods and freight. This will directly support *Principle 3: Transport decisions must be based on clear need and evidence.* Road safety aspects are especially important; we express concern in our 2021 Road Safety report about the lack of significant road safety innovations, akin to the introduction of road safety cameras in the early 1990s. To achieve the aim of zero avoidable killed or seriously injured casualties by 2040, we recognise that innovation will play a key role in ensuring very significant reductions in risk, collisions and injuries.

5.5.23 Better data gathered from real-time traffic monitoring can be used to inform traffic signal and traffic flow adjustments, including emergency response requirements. This could give priority to road users to help ease bus or freight flows, for example, in relevant areas, and provide people with real time travel advice or warnings. Similarly, low-cost technological measures that warn against, or tackle a problem at source (e.g. early warnings of hidden dangers on the road or rail network) can trigger suitable avoiding action, or remedial action. Ensuring our systems and data are protected is also a fundamental aspect of our approach. Cybercrime could have catastrophic impacts on urban transport systems if we don't consider, manage and mitigate against these risks. We will work with partners to ensure the appropriate cyber security processes and measures are in place to protect systems and data centres.

5.5.24 Technology is changing how transport itself operates, especially the shift from petrol and diesel engines to electric power in the imperative to decarbonise. Despite the shift in technology, and huge growth in recent years, and electric vehicles (EVs) currently represent a small proportion of total vehicle stocks. But by 2035, the sale of new petrol and diesel cars and vans will be banned, with buses, and heavy vehicles following suit later. The uptake of EVs is influenced by many factors, especially affordability, confidence in the technology, and the availability of charging facilities. This LTP must support this ambition by ensuring that the infrastructure to charge and refuel vehicles is in place, working closely with industry on a "pump priming" basis. The LCR's £10 million LEVI fund will be the focus on activity in the early years of the LTP's delivery horizons to provide EV chargers for people without access to off-site parking or a driveway.

5.5.25 A robust electrical grid must be in place to underpin this approach. We will continue to work with key partners and stakeholders, including District Energy Network operators to ensure grid capacity is in place to support the transition, as well as championing to use of renewable energy sources. Notable examples including the plans for Mersey Tidal, to decarbonise the electricity grid and also provide a physical connection between Liverpool and Birkenhead, for the first time since the ice age.

5.5.26 In line with the wider aims of this LTP, a one-for-one switch from fossil fuel vehicles to EVs or alternatively fuelled vehicles is not desirable. As we set out throughout this plan, if we don't plan proactively to change how we travel and move goods, we will risk "clean congestion" with a continuation of problems of

emissions, serious accidents, isolation, exclusion and roads dominated by traffic.

5.5.27 Indeed, as we have set out under Goal 3, new technology and innovation to encourage alternatives to cars, vans and the movement of freight are emerging, often termed “mobility as a service” (MaaS) – a concept that brings together many modes of travel, under one app or platform to allow users to plan, book and buy tickets for various mobility modes. MaaS measures can provide the same benefit as having ownership of a private car or van, but without the cost burdens associated with this. We must reflect the role of technology and new mobility in filling gaps in the transport network and providing viable alternatives to private car use. To reaffirm policies in support of the preceding goals, measures like car clubs, e-scooters, e-bikes, cargo bikes, ride sharing apps and payment systems can increase affordability and equality of access will be supported through this LTP.

5.5.28 The focus must be on capitalising on new flexible forms of travel and new technologies to replace trips currently made by private car, van or HGV as well as filling first and last mile gaps to reach bus or rail services. The response to new transport technologies and opportunities will be guided by their fit against the goals, principles and policies of the LTP.

5.5.29 Equally, technologies such as drones and autonomous vehicles or pods are in their infancy, but could provide efficient, low carbon means to move small goods to from a consolidation centre on the edge of a built-up area or town centre for their “last mile” instead of end-to-end movement using a diesel van or a diesel HGV. Conventional vehicles are becoming increasingly smart – ranging from the ability to “see” the road ahead and warn drivers of hazards, to self-driving and autonomous vehicles and pods.

5.3.30 And finally, as technology evolves, our people’s skills and technical requirements will change accordingly. Numbers of vehicles with internal combustion engines will fall significant during the life of this LTP and the demand for the mechanical skills that we have relied on will change. Electrical and alternative forms of power to those derived from oil will become more prevalent, with very different skillsets and maintenance requirements. The same is true of the new technologies outlined above. The LCRCA is working closely with employers and training organisations to ensure that our workforce, and workforce of the future, are equipped with future-focused skills.

6. Monitoring and evaluation

6.1 The LCRCA recognises the importance of monitoring and evaluation (M&E) as tools to understand the success of plans and strategies. The Combined Authority's Monitoring and Evaluation Framework describes our approach to M&E. It outlines the commitment to collecting evidence of progress and performance against local strategies to demonstrate how devolved funding is being invested and estimate the overall benefits this generates for residents, businesses and local communities. This evidence also provides information about what works and why, to support future planning, decision making and investments.

6.2 Although monitoring and evaluation draw on and inform one another, they are two different processes:

- **Monitoring** involves regularly collecting data on planned activities to understand if they are happening as anticipated
- **Evaluation** aims to understanding the effectiveness of a plan, strategy or project in terms of the design, implementation and outcomes achieved.

6.3 Monitoring and evaluation are generally used together - monitoring data provides early evidence that can help to refine or change an approach to ensure things are being delivered as expected. Evaluation builds on monitoring data to provide a fuller assessment of the benefits, outcomes and impacts of a plan or project. Transport Analysis Guidance (TAG) also reiterates the importance of proportionately evaluating transport interventions.

6.4 We have developed a local approach to measuring the success and impact of the LTP in line with the CA's Monitoring and Evaluation Framework and Assurance Framework. It provides a clear mechanism for assessing how effectively the vision and goals are being delivered whilst providing accountability and focus for continuous learning and improvement.

6.5 There is also a direct link between this plan's targets and performance measures and the **Outcomes Framework** that the LCRCA is expected to agree with central Government in early 2026. The Outcomes Framework will set out the measures and the impacts that the Combined Authority aims to achieve from its Integrated Settlement from the start of the 2026/27 financial year, of which transport will be largest funding component in future.

6.6 The remainder of this section outlines the approach, and describes:

- outcomes that will be used to demonstrate progress against the LTP vision and goals
- data that will be used to measure these outcomes, how it will be collected and who will collect it

- how the CA will report and communicate performance and progress against our vision and goals, including timelines and governance arrangements.

Key outcome measures

6.7 Given the importance of delivering quantifiable carbon reductions as a core theme, understanding the LTP's impact on carbon emissions will be vital, but in line with *Principle 2: We will apply the five goals equally*, decarbonisation is an equal priority to the other four goals. We have therefore identified a set of outcome measures that align to all LTP goals, including metrics which relate to:

- Existing Government funded programmes, especially the current City Region Sustainable Transport Fund (CRSTS) and future Transport for the City Regions (TCR) fund- which have monitoring and evaluation plans in place to track indicators at both scheme and LCR level and to inform the national evaluation
- Delivery and performance data from ongoing transport activities and services
- Other plans and strategies that directly align with the LTP, or directly influence and affect transport, such as the Five Year Climate Action Plan and Spatial Development Strategy (SDS).

6.8 The table on the next page sets out the goals and the overarching vision of the Plan against key outcomes drawn from key chapters of this document. These are consistent with the outcome indicators and contextual performance measures that are set out in our related Outcomes Framework for our Integrated Settlement.

Outcome indicators for Local Transport Plan 2025 – 2040

Vision: Clean, safe and accessible transport for moving people and goods

To plan and deliver a future-facing, clean, safe and accessible transport system built to last. It will focus on moving people, goods and freight around the region in a way that delivers our local ambitions. Particular focus will be on a net zero carbon emitting city region by 2035.

Outcome no.	Outcome measure	Goal 1: Support good, clean job growth and opportunity for all	Goal 2: Achieving net-zero carbon and an improved environment	Goal 3: Improve the health, safety, and quality of life for our people and communities. Making sure transport is safe, clean and good for the environment around us.	Goal 4: Make sure our transport network and assets are well maintained, long lasting, and resilient to the effects of climate change	Goal 5: Become a forward-thinking region. Use innovation and new technologies, plan for uncertainty and change and improve future travel in the region.
1	Increased satisfaction with public transport offer (experience, affordability, convenience, reliability, punctuality, journey time, accessibility, resilience, safety/security)	✓	✓	✓	✓	
1.1	- By key groups (age, gender, disability, ethnic background, residents living in areas of deprivation)	✓		✓		
2	Increased satisfaction with active travel offer (experience, convenience, accessibility, safety, condition)	✓	✓	✓		
2.1	- By key groups (age, gender, disability,	✓		✓		

Outcome no.	Outcome measure	Goal 1: Support good, clean job growth and opportunity for all	Goal 2: Achieving net-zero carbon and an improved environment	Goal 3: Improve the health, safety, and quality of life for our people and communities. Making sure transport is safe, clean and good for the environment around us.	Goal 4: Make sure our transport network and assets are well maintained, long lasting, and resilient to the effects of climate change	Goal 5: Become a forward-thinking region. Use innovation and new technologies, plan for uncertainty and change and improve future travel in the region.
	ethnic background, residents living in areas of deprivation)					
3	Improved access to services and opportunities	✓				
3.1	- By key groups (age, gender, disability, ethnic background, residents living in areas of deprivation)	✓				
4	Reduction in transport-related social exclusion (TRSE)	✓				
5	Reduction in transport carbon emissions		✓			
6	Improved air quality		✓	✓		
7	Modal shift - increase in cycling, walking, and public transport use (bus and rail patronage)		✓			
8	Modal shift - reduction in private car use		✓			
9	Increase in low/zero emission freight journeys		✓			
10	Improved public transport performance measures (rail, bus and ferries) - punctuality/reliability		✓		✓	
11	Reduction in LCR road casualties			✓		

Outcome no.	Outcome measure	Goal 1: Support good, clean job growth and opportunity for all	Goal 2: Achieving net-zero carbon and an improved environment	Goal 3: Improve the health, safety, and quality of life for our people and communities. Making sure transport is safe, clean and good for the environment around us.	Goal 4: Make sure our transport network and assets are well maintained, long lasting, and resilient to the effects of climate change	Goal 5: Become a forward-thinking region. Use innovation and new technologies, plan for uncertainty and change and improve future travel in the region.
12	Improved road condition			✓	✓	
13	Improved perception of local neighbourhoods - car dominance, clean air, community spirit			✓		
14	Improved perception of local town centres (car dominance, clean air, feel comfortable walking/wheeling and cycling)			✓		
14.1	- By key groups (residents and visitors)			✓		
15	Increased satisfaction with condition of highway, including assets (footways, cycleways and structures)				✓	
15.1	- by key groups (residents and businesses)				✓	
16	Increased satisfaction with Mersey Tunnels (overall satisfaction, safety, condition of road surface)				✓	
17	Increase in access and uptake of alternative sustainable transport options (e.g. City Bike and					✓

Outcome no.	Outcome measure	Goal 1: Support good, clean job growth and opportunity for all	Goal 2: Achieving net-zero carbon and an improved environment	Goal 3: Improve the health, safety, and quality of life for our people and communities. Making sure transport is safe, clean and good for the environment around us.	Goal 4: Make sure our transport network and assets are well maintained, long lasting, and resilient to the effects of climate change	Goal 5: Become a forward-thinking region. Use innovation and new technologies, plan for uncertainty and change and improve future travel in the region.
	car share schemes, E-Scooter schemes)					
18	Improved use of data/evidence to inform transport management and planning					✓
19	Improved infrastructure in key locations to support roll out and uptake of zero emission transport					✓

Data collection

6.9 Data will be collected from existing sources, where possible. These include:

- National surveys:
  - Your Bus Survey and Rail User Survey, carried out annually by Transport Focus to understand passenger experience of rail and bus journeys
  - Walking and Cycling Index (WACI), a study of active travel conducted every two years by Sustrans in 23 cities and urban areas across the UK and Ireland
- Local surveys:
  - LCR Household Travel Survey, which provides rich data on the travel behaviour of local residents. This was last undertaken in 2017 but is due to be updated and refreshed in 2024
  - LCR Mode Share Survey, which captures mode share of transport into key LCR centres (annually for Liverpool City Centre, biennially for other major towns)
  - Mersey Tunnels Customer Satisfaction Survey, conducted ever 2-3 years with tunnel users
- Local data:
  - Walking and cycling flows and air quality data from a network of sensors and monitors across the LCR
  - Public transport patronage data for rail, bus and ferries
  - TravelSafe Partnership and Police data on transport related crime and safety
- Performance data collected by the CA on the delivery of ongoing transport services and schemes ('business as usual' data)
- National and subregional statistics published by the Department of Transport (DfT) and Transport for the North (TfN) on themes like transport carbon emissions, road condition and traffic accident data.

6.10 In addition to the above, it is envisaged that we will look to strengthen our evidence base through, for example:

- Commissioning research to improve insight on perceptions of public transport, active travel, access to services and opportunities for transport-related placemaking - particularly amongst key groups, including surveys with:
  - Residents - to understand non-user perceptions of public transport, safety, access to services and opportunities, local neighbourhoods and town centres
  - Public transport users - to measure perceptions of affordability, convenience, reliability, punctuality, journey time, accessibility, resilience and feelings of safety and personal security when travelling
  - Visitors - to assess and measure perceptions of town centre accessibility and public transport

  - Businesses - to understand changes in satisfaction with highways assets

- Exploring ways to improve:
  - rail and bus patronage data, particularly at a more local level
  - modelling of transport user costs, including ticketing
  - data collection and monitoring of traffic flows along the key road network

- Undertaking further analysis and collection of:
  - freight data, including data around light goods vehicle use for logistics and last mile delivery
  - road user safety data, particularly in terms of deepening understanding of actual and perceived issues relating to cycling safety.

Resource, reporting and dissemination

6.11 An annual highlights document will report progress on the “Outcome indicators for Local Transport Plan 2024 – 2040”, linked to reporting that we need to undertake as part of our Integrated Settlement. This will draw on monitoring data from schemes that we deliver, and ongoing local activities alongside national and local research and analysis. This will provide an opportunity to share evidence of what has been achieved to date and demonstrate progress against each LTP goal, alongside more qualitative narrative on key successes and future areas of focus to reflect new or emerging priorities.

6.12 To supplement the annual reviews, we will carry out periodic ‘deep dive’ analysis to assess how the plan is being implemented, including the application of the eight LTP principles, to understand:

- what is working well, or less well, for who and why
- what can be improved, and how any lessons learned can be implemented
- if delivery of the LTP is progressing as intended
- how the context in which the plan is being delivered is influencing it’s delivery.

6.13 Findings, including lessons learned, will be used to improve and refine the LTP and shape future service and policy planning and delivery

6.14 These reports will align with key phase of the LTP delivery plan or where it may be necessary to formally review it, for example in the event that national or local policy changes need to be reflected.

Appendix Summary of Vision, Principles, Goals and Policies

The vision: Clean, safe and accessible transport for moving people and goods

To plan and deliver a future-facing, clean, safe and accessible transport system built to last. It will focus on moving people, goods and freight around the region in a way that delivers our local ambitions. Particular focus will be on a net zero carbon emitting city region by 2035.

Principle 1:	A vision led approach
Principle 2:	All LTP Goals are of equal importance
Principle 3:	Transport decisions based on clear need and evidence
Principle 4:	Transport must support placemaking
Principle 5:	Prioritise safe, clean, healthy travel in all we do
Principle 6:	Guided by our commitment to inclusivity, accessibility and social value
Principle 7:	Work with others to promote and deliver the LTP
Principle 8:	A rolling programme of innovative transport investment

GOAL	POLICY	
GOAL 1 *Support good, clean job growth and opportunity for all.* Make sure transport supports local growth. This means equal opportunities for all to access affordable transport systems that connect people to jobs and services – all while keeping the environment in mind.	Policy G1-1	Consider sustainable transport and movement in all we do as a Combined Authority
	Policy G1-2	Prioritising measures and services that improve people's access to opportunity
	Policy G1-3	Making it easy and affordable to travel sustainably
	Policy G1-4	Reviewing our travel support offer
GOAL 2 *Achieve net-zero carbon and an improved environment* Reach net-zero carbon emissions by 2035, whilst protecting and improving our local environment	Policy G2-1	Removing carbon emissions from transport
	Policy G2-2	Delivering an integrated, sustainable mass transit network, tackling capacity problems and improving connectivity
	Policy G2-3	The role of shared mobility and micromobility
	Policy G2-4	Reallocating road space and making best use of finite capacity
	Policy G2-5	Creating high quality, low carbon transport networks in Liverpool City Centre and in our main town centres
	Policy G2-6	Delivering sustainable and efficient freight and logistics
	Policy G2-7	Implementing "polluter pays" approaches

GOAL	POLICY	
GOAL 3 *Improve health, safety and quality of life* Improve the health and quality of life for our people and communities. Make sure transport is safe, clean and good for the environment around us. Make sure transport is safe, clean and good for the environment around us.	Policy G3-1	Reinforcing "Vision Zero" – no deaths or serious injuries on the city region's roads by 2040
	Policy G3-2	Delivering clean, healthy travel and placemaking in all we do
	Policy G3-3	Improving air quality from transport
	Policy G3-4	Making all journeys safe, inclusive, attractive and reassuring for the user
GOAL 4 *Transport infrastructure that's well maintained and resilient* Make sure our transport network and assets are well maintained, long lasting, and resilient to the effects of climate change.	Policy G4-1	Well maintained transport infrastructure with regimes informed by good data
	Policy G4-2	Delivering transport that can withstand the effects of climate change
	Policy G4-3	Ensuring that we develop and maintain infrastructure in a sustainable way
GOAL 5 *Plan and respond to uncertainty and change and be innovative* Become a forward-thinking region. Use innovation and new technologies, plan for uncertainty and change, and improve future travel in the region	Policy G5-1	Testing proposals against uncertainty and change and applying scenario-planning principles
	Policy G5-2	Piloting options, trials and new technologies in a climate of uncertainty and change
	Policy G5-3	A Smart City Region – Investing in new technologies and using Artificial Intelligence for good

Liverpool City Region Combined Authority
Draft Local Transport Plan

Doing Things Differently: 2025 – 2040
"People, Places, Movement

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