

# A Light Rail Strategy for the UK

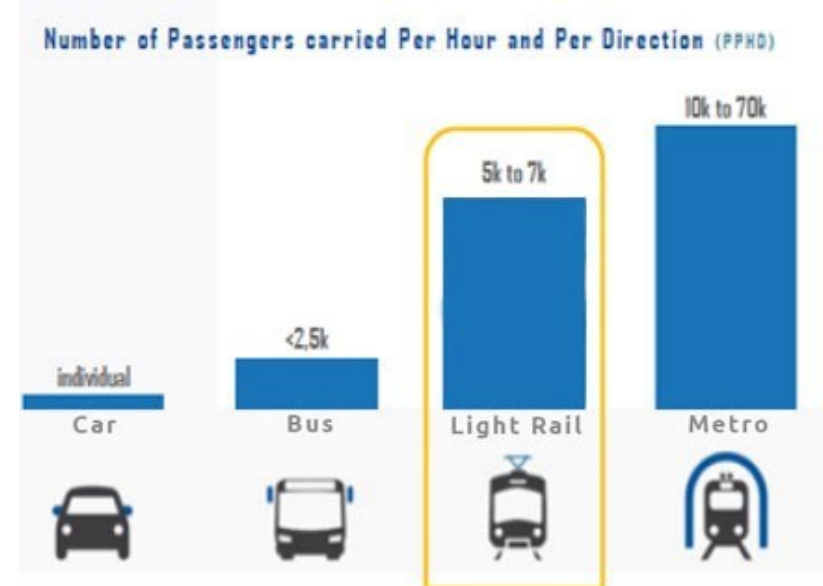
# The Big Picture

- Mobility needs are evolving. Changing travel habits with demand for services that increase convenience, speed and predictability, as well as evolving customer expectations.
- Light Rail (combined variants e.g. LRT, Tram Train, VLR etc.) has the potential to serve as the central artery of urban areas and create a connection between other modes of transport, orbital connectivity between suburbs and radial access from the outskirts to the inner city; however, its success depends very much on its integration into an overall urban development strategy.
- Fifty-three per cent of the population live in urban areas, and this number is expected to reach sixty-seven per cent by 2050. Today, sixty-four per cent of all travel occurs within urban environments, and the total amount of urban miles travelled is expected to increase significantly in future.
- A minimum ridership (>3,000 pass/hour/direction) is necessary to ensure cost-effectiveness and some degree of self funding sustainability. \*

# De-carbonisation

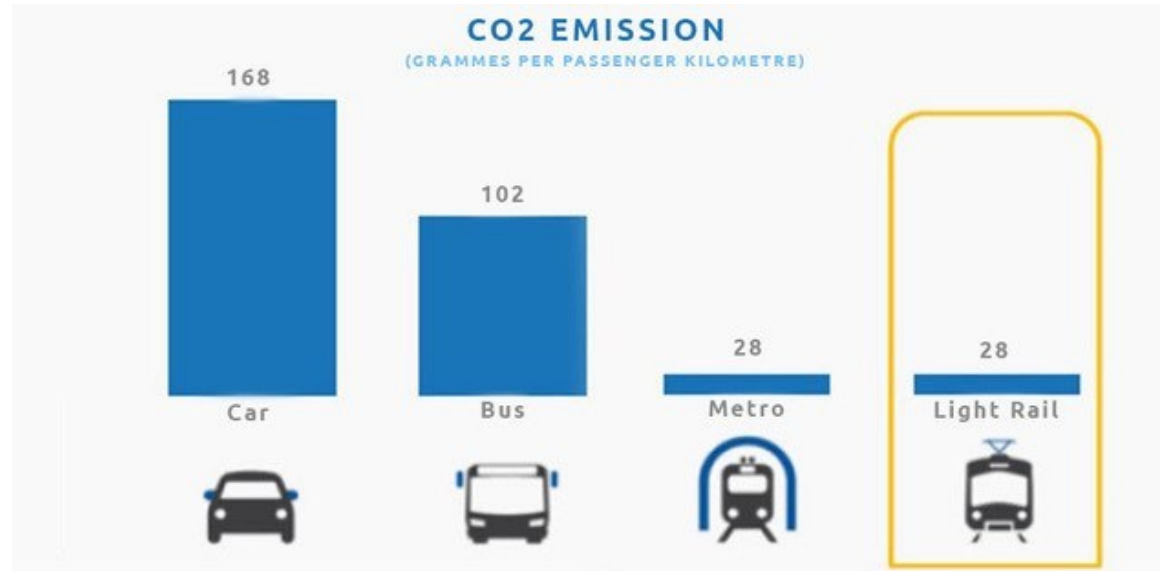
- Light Rail is Green, Cuts Congestion, Reduces Carbon Emissions and Particulates
- Low Impact on the Cityscape:
- Brings 'Regeneration' and 'Improved Cityscapes'
- Large Positive Impact on the Economy and Business

200 people travelling on average would occupy 175 Cars, 2 Buses or 1 Tram



Less road space equals more room for pedestrians and cyclists

# Light Rail Cuts Co2 Emissions

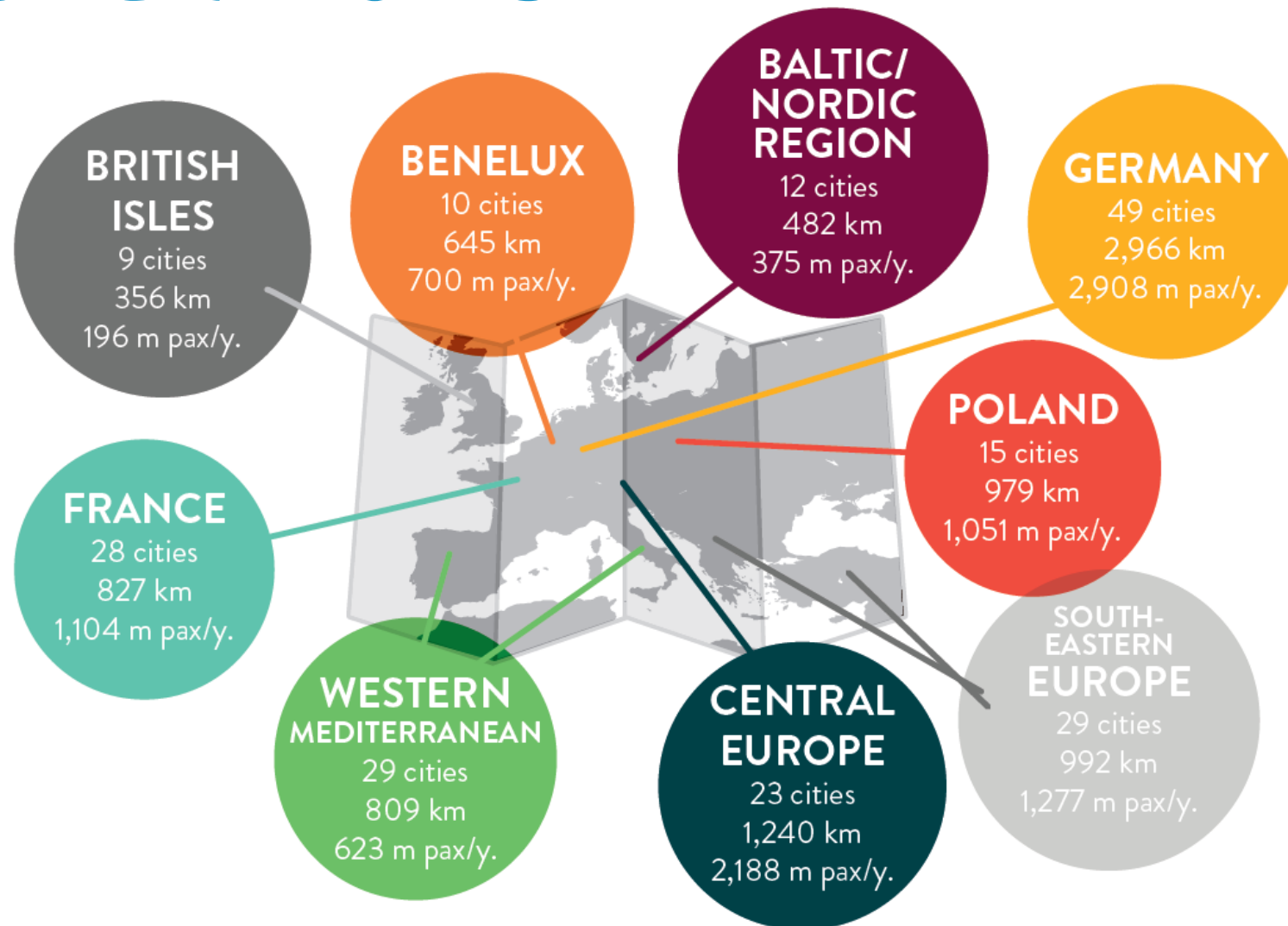


- Light Rail vehicles do not pollute along the route
- Can use renewable energy supplies
- Modern technology reduces the requirement for overhead power supplies and lessens their visual impact
- Energy efficient utilising regenerative braking for battery charging and feeding power supply

# Why Light Rail

- Light Rail assists with a clear and solid urban development strategy in which light rail construction is part of wider urban regeneration that supports housing, jobs and public and private investment around the area of the network.
- Light Rail provides support to our urban areas with an infrastructure offering a multi-modal integrated transport solution combining: Cycling/walking, Heavy Rail/Metro, Bus and Road.
- Predictable, rapid, frequent, safe and efficient Light Rail makes the '20-minute neighbourhood' possible.
- Light Rail complies with minimal local pollutant metrics – operates in ultra low emissions zones and supports the journey to Net Zero.
- It offers an attractive urban landscape that keeps the UK on a level footing when competing to attract investment of our global partners. There are currently nine urban areas in the UK where Light Rail supports transport needs.

# Light Rail Works



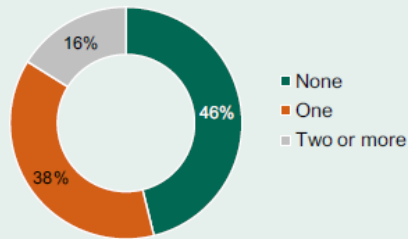
# Light Rail is Popular

## Passengers

Households without access to a car account for a larger share of trips by light rail.

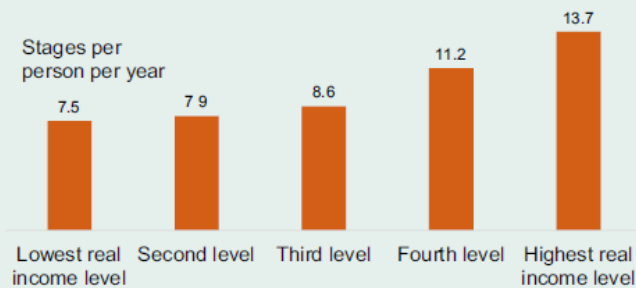
Higher income households tend to make more trips by light rail.

Journey stages by household car access



Journey stages by household income


Stages per person per year





See page 7 for the definition of a stage


Source: National Travel Survey

## Passenger satisfaction

 **87-97%** of passengers are satisfied with their overall journey

 **59-91%** of fare paying passengers are satisfied with the value for money for their journey

 **85-93%** of passengers are satisfied with the punctuality of the tram

 **68-89%** of passengers are satisfied with the availability of seating or space to stand

Blackpool Tramway (2018), Midland Metro (2018), Manchester Metrolink (2019), Sheffield Supertram (2019)

Source: Transport Focus

## Concessionary journeys



**33.8 million**

passenger journeys

12.8% of all light rail passenger journeys were concessionary.

## Passenger journeys



**263.4 million**

passenger journeys



**14.9**

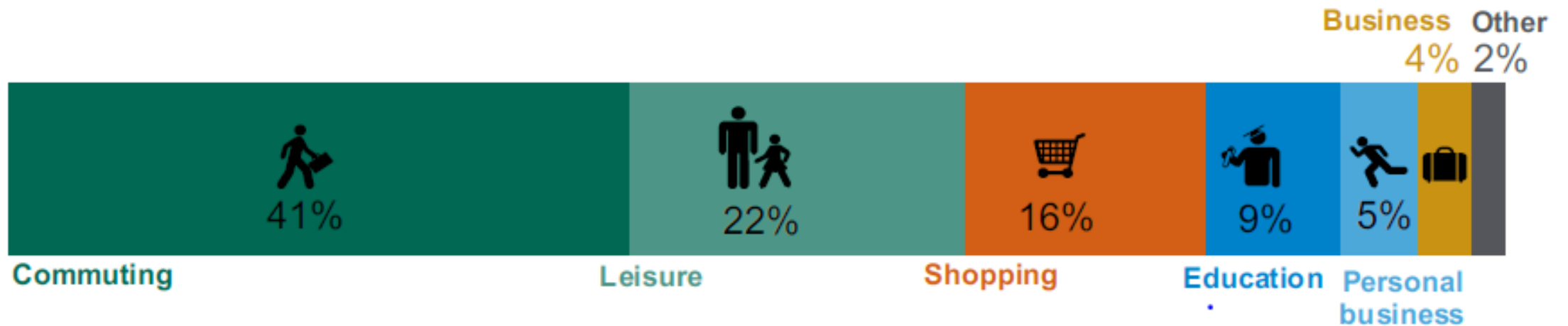
passenger journeys per head

Passenger journeys decreased by 4.2% in 2019/20.

# Light Rail is Essential for Commuters and the Economy

Commuting, leisure and shopping are the most common purposes for journeys using Light Rail systems.

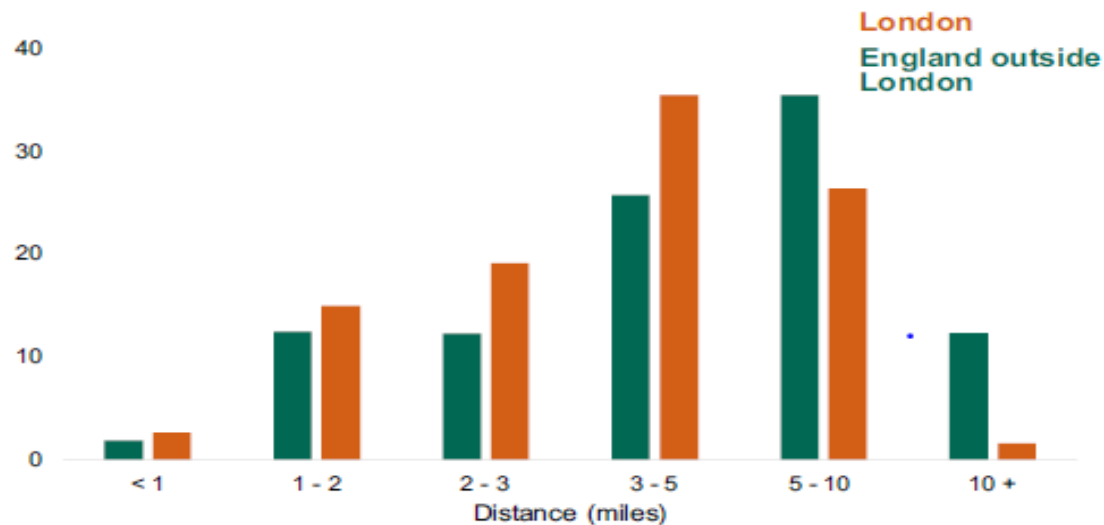
In England, 17.2 miles are travelled per person per year for commuting purposes, 9.7 miles for leisure and 7.2 miles for shopping. Light Rail systems are used more for commuting in London than systems in England outside London (55% of stages of their journey compared with 28%)





# Light Rail is Popular for Short, but Quick Journeys

To meet the aim of a '15-minute city' or '20-minute neighborhood', Light Rail provides quick journey times, covering local areas. The distance travelled in a Light Rail or Tram journeys is longer in England outside London, with 47% of journeys over 5 miles, compared to just 28% in London.



- Sheffield Supertram connects to regional shopping centres such as Crystal Peaks and Hillsborough
- NET connects to Beeston and Clifton centres, as well as Nottingham City Centre.
- Manchester Metrolink connects to the Trafford shopping centre
- West Midlands Metro connects to Grand Central station and shopping centre.

# Light Rail is Accessible to All

## Accessibility:

- Well marked and presented Tram stops
- Reliable and predictable Tram arrival times
- Step free boarding/alighting
- Spacious interior
- Good seating/wheelchair space
- Smooth & jerk free acceleration/braking
- Clear and fixed routes
- Well positioned destination stops

# Light Rail Regenerates

Levelling up:

Permanence of fixed alignment, more frequent services, Light Rail has the ability to shift perceptions of Public Transport. It can give developers greater confidence to invest in areas around light rail where the infrastructure is placed.

- Manchester Metrolink has helped to regenerate the Salford Quays and Eccles areas and created new journey opportunities by creating cross city links
- London Trams transformed brown field sites and helped to attract inward investment to Croydon and brought good transport links to relatively socially deprived areas.
- Midland Metro has contributed to the regeneration of land in the Wednesbury area of the West Midlands
- Queens Medical Centre (QMC) in Nottingham (the largest hospital in the region) has its own tram stop (including walkways directly into the hospital). 30% of the Nottingham conurbation live within 800 metres of a tram stop allowing them to easily access the hospital

# Light Rail Regenerates

- The Tyne and Wear Metro allows you to live in the suburbs of Newcastle and travel to work in the suburbs of Sunderland across the two city centres in as little as 40 minutes. It serves the region's airport, the two major football clubs, as well as the business parks and residential areas that are strung along its lines, which are dotted with stations just 1.3 miles apart.
- 43% of employment sites in Sheffield are within walking distance of a Supertram stop.
- 30% of NET users switched from the car for part or all of their journey. This has contributed to growth in public transport use in Nottingham by nearly 25% between 2004 and 2019 which in turn has led to Nottingham being one of the few cities outside London to see a reduction in car usage.
- The Docklands Light Railway (DLR) extension to London City Airport brought massive environmental benefits with roughly 120,000 fewer taxi rides and 288,000 fewer car journeys, reducing carbon dioxide emissions by over 156 tonnes.

# Light Rail Will:

- Contribute to 'Building back better greener and faster'.
- Investment in urban areas to continue to drive their economies - not all focused on London and South East, e.g. Northern Powerhouses such as Midland Connect concept.
- Provide the conduit for Central Government initiative but local government delivery and accountability.
- Focus on UK employment and R&D –Vehicle construction, Infrastructure Construction Support Services, Signalling, Power and Control systems, Service industries (Operations, Cleaning etc.), support high street outlets as well as retail centres.

# Light Rail Will:

- Be a catalyst for regional improvements in economic and social mobility.
- Significantly improvements in regional air quality and landscapes.
- Light Rail will be an important contributor to the 'Restore your Railways' programme.
- Light Rail will support central government investment projects, e.g. HS2 connectivity.
- World leading schools and hospitals need world leading Local Transport networks; Light Rail provides a UK template and expertise that can be exported across the world.

# Industry Strategy

- Re-structure and re-energise the Industry to deliver this:
  - Use “Williams” new National Rail Agency to include Light Rail and create central support function for Planning, Standards and Help/Assistance
  - Minister to lead and endorse strategy for Light Rail
  - Provide support and fast-track solutions for Mayors of devolved regions and Local Transport Authorities (LTA’s)
  - Agree a “10 year funding scheme” to provide certainty and consistent pipeline for UK suppliers
  - Create an Innovation Centre and test track to become world leaders ready to export UK skills and technology
- Create a Light Rail template scheme with a standardised Design Guide
- Bus, Rail and public transport collaboration to ensure modal support rather than competition, and drive integration.

# Industry Aims

- Long term 'Control Period' funding commitment from Government via DfT and Treasury:
  - to deliver the Light Rail Strategy
  - deliver all ongoing industry technology advances to compete in Global Market
  - continue the development and improvement of Light Rail in the UK
  - Fund Safety and Standards Body for delivery of safety initiatives

Control Period Funding to align Light Rail with similar industries (e.g. National Rail Network). This mitigates the problem of funding volatility and political uncertainty in a system which might otherwise run only from year to year; an issue well recognised in government as an impediment to economic and efficient procurement in an infrastructure industry where lead and committal times are especially long.

- Provide the industry the opportunity to commit to longer term investment, collaboration, Innovation and growth of a UK based industry
- Provide the backbone of Integrated Public Transport in Cities and Towns of the British Isles



# Industry Requirements

- Initial Covid Support package £204million has been welcomed but has only managed to keep services running – to get back to a level of ‘self sufficiency’ will require tailored funding support tapered over the next **XX** years.
- Continued commitment and engagement from members and stakeholders to assist in delivering industry consolidation.
- Further enhance engagement in wider transport strategies to maximize integration of the ‘Union’ infrastructure transport improvements.
- Continue to contribute and capture innovation within the ‘International Stage’