

Need for intervention report

Local Transport Plan 5



Inclusive Growth

Transport Planning and Policy

Author: Local Transport Plan 5 Project Management Team, Luton Council

Officer: Deni Krevesic BSc (Hons), MSc, FCIHT, CTPP

Contact: deni.krevesic@luton.gov.uk and ltp@luton.gov.uk

Version: 1.0 for public consultation

Last updated: November 2025

Contents

Introduction	5
Overview	5
Challenge statements	6
Context.....	6
Challenge statement 1: Population age profile	7
Need for intervention.....	7
Local transport plan implications.....	8
Challenge statement 2: Social exclusion.....	8
Need for intervention.....	8
Local transport plan implications.....	9
Challenge statement 3: Physical activity	9
Need for intervention.....	9
Local transport plan implications.....	10
Challenge statement 4: Noise and air quality	10
Need for intervention.....	10
Local transport plan implications.....	11
Challenge statement 5: Road safety	11
Need for intervention.....	11
Local transport plan implications.....	12
Challenge statement 6: Access to healthcare	12
Need for intervention.....	12
Local transport plan implications.....	13
Challenge statement 7: Access to education.....	13
Need for intervention.....	13
Local transport plan implications.....	14
Challenge statement 8: Travel to work area	15
Need for intervention.....	15
Local transport plan implications.....	16
Challenge statement 9: Employment locations.....	16
Need for intervention.....	16
Local transport plan implications.....	17
Challenge statement 10: Planned developments	17
Need for intervention.....	17
Local transport plan implications.....	18
Challenge statement 11: Airport expansion.....	18
Need for intervention.....	18
Local transport plan implications.....	19
Challenge statement 12: Mode share.....	19
Need for intervention.....	19
Local transport plan implications.....	20
Challenge statement 13: Access to private vehicles	20
Need for intervention.....	20
Local transport plan implications.....	21
Challenge statement 14: Bus services and journeys.....	21
Need for intervention.....	22
Local transport plan implications.....	23

Challenge statement 15: Rate of decarbonisation.....	23
Need for intervention.....	23
Local transport plan implications.....	24
Challenge statement 16: Zero emission vehicle uptake and charging.....	24
Need for intervention.....	24
Local transport plan implications.....	25
Challenge statement 17: Network congestion	25
Need for intervention.....	25
Local transport plan implications.....	26
Theme alignment.....	27
Conclusions and next steps	28
Next Steps	29

List of tables

Table 1: Level 3+ qualifications (DfE) and accessibility to FE colleges (DfT).....	14
Table 2: Projections for LLA passenger uptake (London Luton Airport, July 2024)	18
Table 3: Local Transport Plan theme alignment.....	27

List of figures

Figure 1: Population Density of Luton (ONS, 2021).....	6
Figure 2: Population projections in Luton (ONS, 2020).....	7
Figure 3: Population projections in East of England (ONS, 2020).....	7
Figure 4: Areas at highest risk of Transport Related Social Exclusion (TfN, 2023).....	8
Figure 5: Health status in 2021 (ONS, 2023)	9
Figure 6: Adult activity levels in 2022/23 (Sport England, 2023).....	9
Figure 7: Areas at highest risk of Transport Related Social Exclusion (TfN, 2023).....	10
Figure 8: Collision hotspots across Luton (DfT, 2024)	11
Figure 9: Rates of reported road casualties per billion vehicle kilometres (DfT, 2023).....	12
Figure 10: Public transport and walk travel time to the closest hospital (DfT, 2021).....	13
Figure 11: Public transport and walk travel time to the closest further education (DfT, 2021)	14
Figure 12: Commuting to Luton (ONS, 2011).....	15
Figure 13: Commuting out of Luton (ONS, 2011).....	15
Figure 14: Employment density and key business parks (ONS, 2022)	16
Figure 15: Planned development site in Luton (Luton Council, 2017).....	17
Figure 16: Historic passenger and freight demand (London Luton Airport, 2024).....	18
Figure 17: Passenger mode share 2010-2019 (Luton Rising, CAA)	19
Figure 18: Travel to work mode shares in 2011 and 2021 (ONS, 2011 and 2021)*	19
Figure 19: Car availability among households in 2021 (ONS, 2021)*	20
Figure 20: Percent of households with no cars or vans in 2021 (ONS, 2021).....	20
Figure 21: Percent of households in Luton with no cars or vans in 2021 (ONS, 2023).....	21
Figure 22: Passenger journeys per head of population per annum (DfT, 2024).....	22
Figure 23: Bus Frequency in Luton (DfT, 2023).....	22
Figure 24: Trajectory of emissions for Luton (Carbon Assessment Playbook, 2024).....	23
Figure 25: Emissions by vehicle in Luton (Carbon Assessment Playbook, 2024).....	23
Figure 26: Proportion of Zero Emission Vehicles in Q2, 2024 (DfT, 2024)	24
Figure 27: Publicly available electric vehicle charging devices (DfT, 2024).....	25
Figure 28: Average vehicle delay across locally managed A-roads (DfT, 2024).....	25
Figure 29: Network Level of Service, Morning Peak Period (EEH, 2022)	26

Introduction

Overview

This Need for Intervention report sets out Luton's current demographic, socio-economic and environmental context.

The 17 challenge statements have been developed from a data-led evidence review for Luton and framed together with stakeholders. These statements summarise the key issues across the borough and the case for change for the new Local Transport Plan (LTP5), the council's fifth plan since 2001.

This baseline understanding of Luton is an early stage in the development of the Local Transport Plan. This report establishes a baseline on how transport interacts with wider social, environmental, and economic factors, supporting delivery of the Luton 2040 Vision objectives.



© Copyright [Thomas Nugent](#) and licensed for [reuse](#) under this [Creative Commons Licence](#).

Challenge statements

Context

Luton is a borough and unitary authority area in Bedfordshire, strategically located about 30 miles northwest of London and 20 miles south of Bedford. It is located along key transport corridors which broadly run north to south through the authority – the Midland Main Line and the M1 and the A6 – and contains a major international airport, London Luton Airport. At the time of the analysis in 2024, the population of Luton was 239,090, having grown by 12% since the 2011 UK Census. It is also the most densely populated local authority area outside of London. Neighbouring Dunstable and Houghton Regis have a population of about 60,000, bringing the wider urban population towards 300,000 people.

Luton is historically well known for its hat making and automotive heritage with Vauxhall Motors; and more recently from the airport and the University of Bedfordshire. 2023 data from the Office for National Statistics estimate there are 112,000 jobs in Luton, with the largest proportions in:

- Administrative and support services: 32% (about 35,000 jobs), roughly three times the national share, driven by recruitment/employment services and building services (e.g., HR, cleaning, landscaping).
- Human health and social work: 10%, slightly below the national average.
- Wholesale and retail; motor trade: 10%, slightly below the national average.
- Transport and storage: 8%, around two-thirds above the national average, with air transport accounting for about half of this sector's jobs.

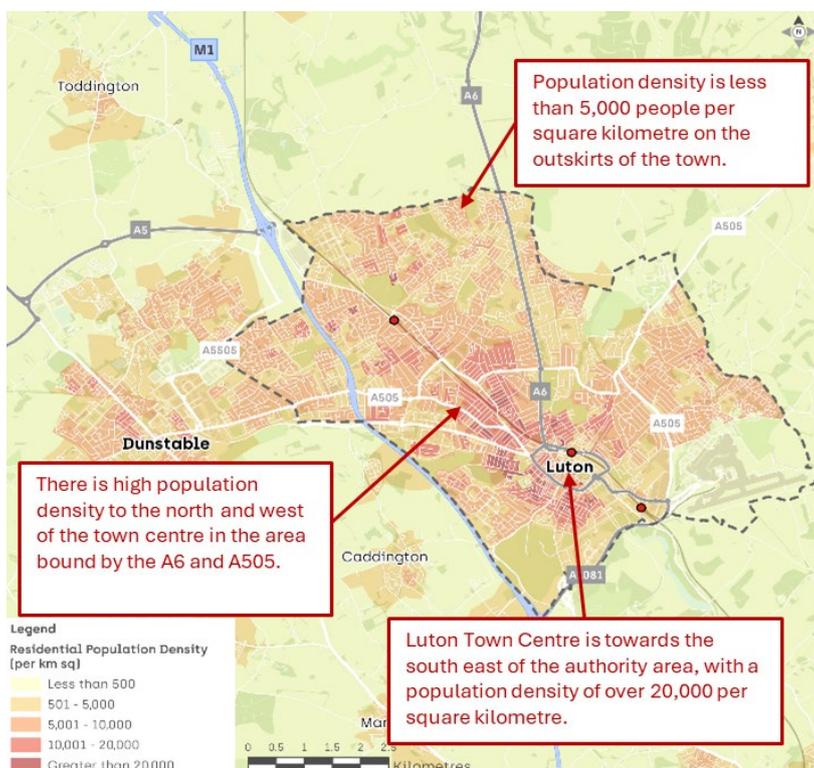


Figure 1: Population Density of Luton (ONS, 2021)

Luton's large population and closely built urban area offer good opportunity for the provision of sustainable mobility solutions such as bus services and shared mobility options (e.g. bike share) and infrastructure for walking, wheeling, cycling and scooting. The Local Transport Plan will identify opportunities and benefits from these features and address the potential barriers to ensure future growth.

Challenge statement 1: Population age profile

Luton has an ageing population and at the same time a large younger population in comparison to benchmark local authority areas, emphasising the need for an accessible and inclusive sustainable transport network, particularly local buses.

Need for intervention

The share of residents aged 65–84 is projected to rise from 11% in 2024 (around 24,000 people) to 15% by 2041. The number of people aged 85+ is also expected to grow, in line with national trends. These age groups have a higher propensity to use and need for public transport. Additionally, key services typically used by the older demographic groups, such as healthcare, will experience increased demand. Figure 2 shows population projections to 2041.



Figure 2: [Population projections in Luton](#) (ONS, 2020)

Luton has a larger younger population relative to the East of England average as shown on Figure 3. Key considerations include access to education, affordable housing, and employment opportunities. Sustainable travel access to education can reduce reliance on car travel. The Luton Housing Strategy (2022) highlights housing affordability issues for young people, especially first-time buyers. If they have to live further afield, commuting distances and car dependency will likely increase.

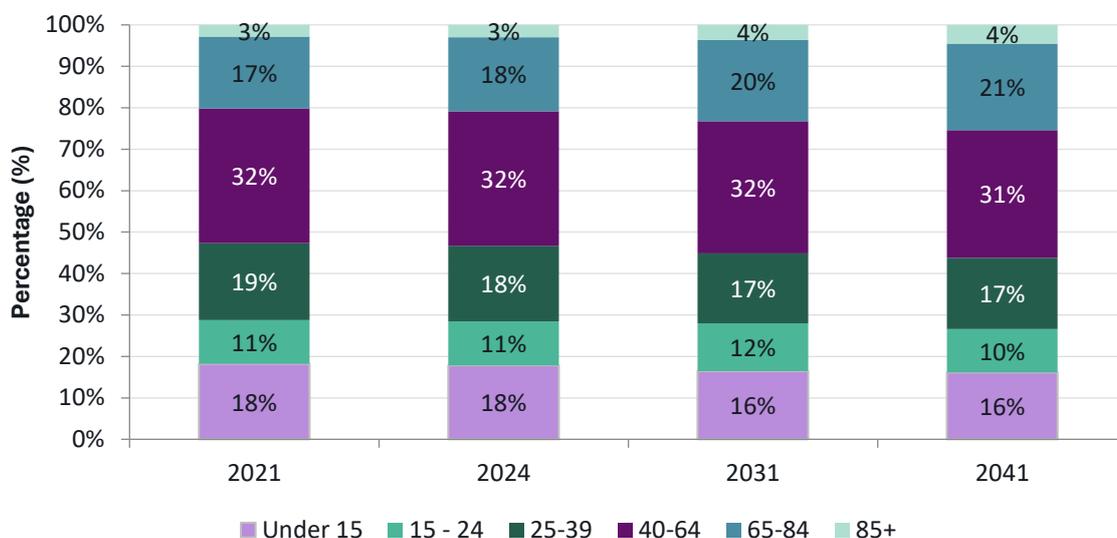


Figure 3: [Population projections in East of England](#) (ONS, 2020)

Local transport plan implications

The Local Transport Plan should:

- Prioritise the most vulnerable users first (pedestrian and cyclists), that will drive the need for accessible, affordable sustainable travel. For older groups, local buses are key, with a focus on access to healthcare, as well as leisure activities to help prevent isolation and loneliness.
- Consider a range of scenarios for population change, influenced by economic growth and migration.

Challenge statement 2: Social exclusion

Several neighbourhoods across Luton suffer from high levels of transport related social exclusion through a combination of higher levels of deprivation and poor public transport accessibility to key services.

Need for intervention

While relative deprivation levels are falling in Luton in comparison to the national average, the neighbourhoods of Farley, South and Northwell fall within the top 10 percent most deprived. Several parts of Luton are also at higher risk of Transport-Related Social Exclusion (TRSE), a Transport for the North metric that combines income deprivation with accessibility and mobility indicators. Areas most at risk include parts of Northwell (north of the town) as shown in Figure 4.

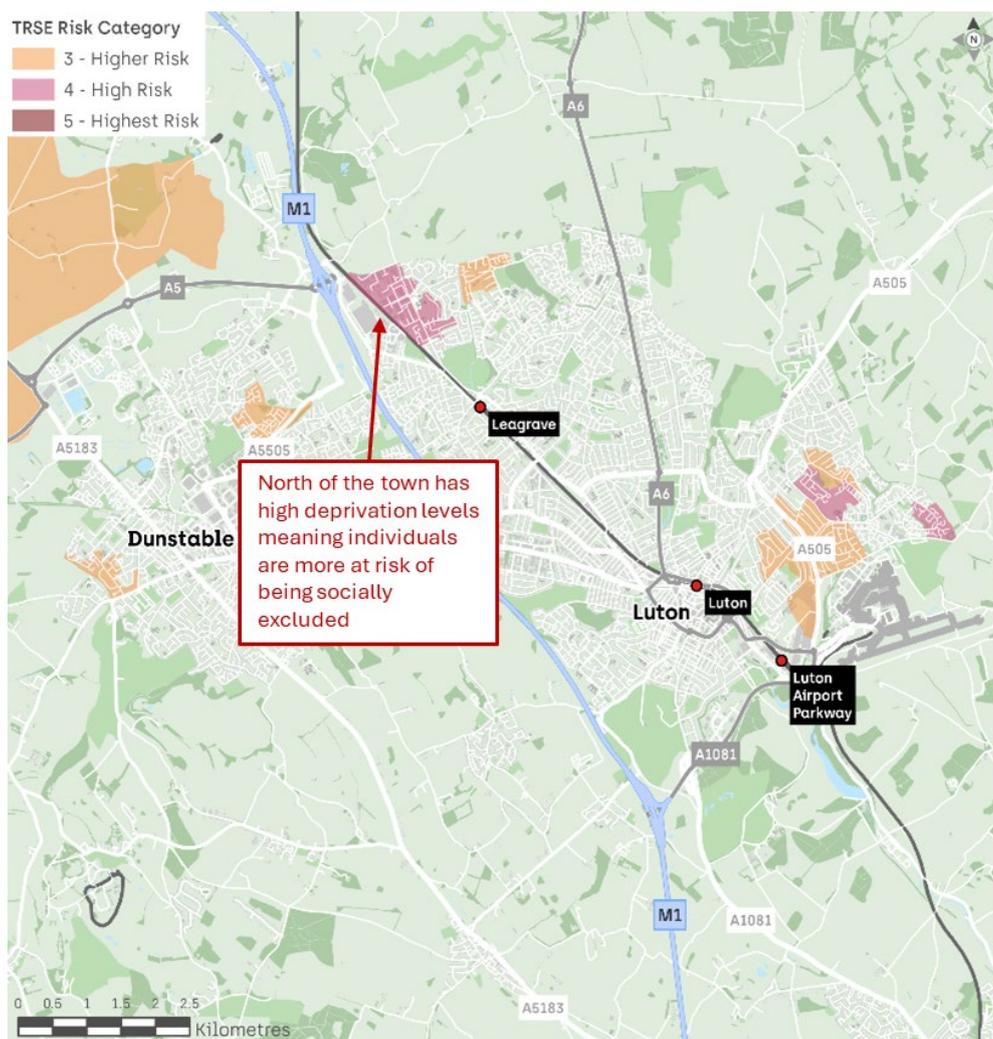


Figure 4: [Areas at highest risk of Transport Related Social Exclusion](#) (TfN, 2023)

Local transport plan implications

People in the most deprived areas have the poorest connectivity and risk being left behind. The plan should:

- Prioritise infrastructure and service investment in deprived areas.
- Improve public transport links to key economic hubs.
- Reduce social exclusion by ensuring access to essential services and opportunities.

Challenge statement 3: Physical activity

Health status and activity levels in Luton are lower compared to other benchmark local authority areas, identifying a need for greater take up of sustainable travel, particularly walking, wheeling and cycling.

Need for intervention

Since 2011, the share of residents reporting “very good” health in Luton has risen from 40% to 43% (2021). However, compared with similar authorities, Luton has a lower proportion reporting “very good” health and higher proportions reporting “fair” or “very bad” health as shown in Figure 5.

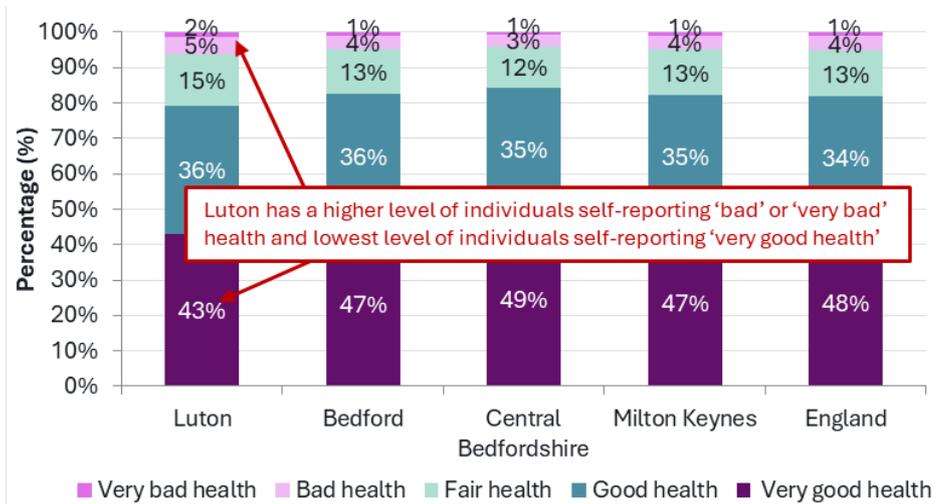


Figure 5: Health status in 2021 (ONS, 2023)

Higher levels of poor health correlate with high levels of adult inactivity in Luton. Levels in Luton are lower than comparator areas with about a third of residents engaged in less than 30 minutes of activity per week as shown in Figure 6.

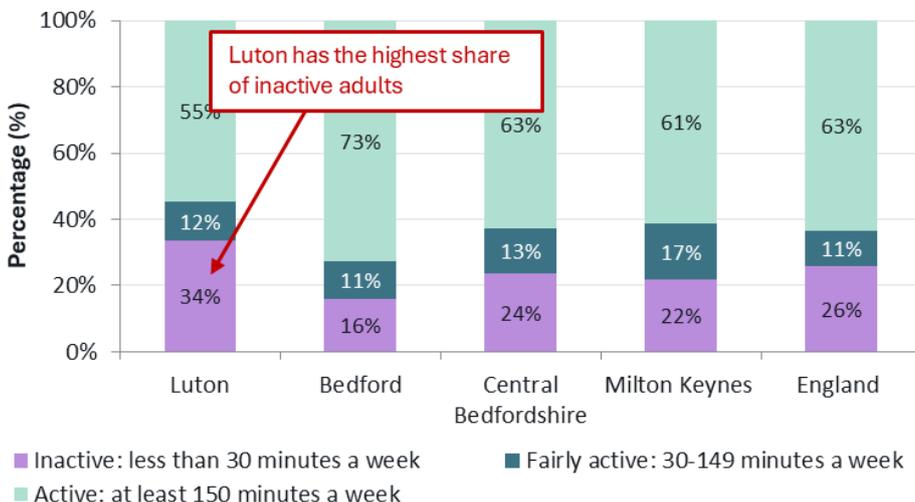


Figure 6: Adult activity levels in 2022/23 (Sport England, 2023)

Obesity levels are likewise high but varied across Luton. Rates of childhood obesity are 15% in Stopsely and up to 30% in the High Town (A Marton Town 2023). Active travel for physical activity or other journey purposes can help to address poor health outcomes and ultimately reduce pressure on medical services.

Local transport plan implications

The Local Transport Plan should:

- Promote higher levels of physical activity by creating environments where people choose active modes. A Healthy Streets framework (or similar) can guide active travel infrastructure and the PROW network.
- Improve access to green spaces and leisure destinations.
- Align the plan with the Marmot Town approach to reducing health inequalities.

Challenge statement 4: Noise and air quality

Key road corridors such as the M1 contribute to high noise and air pollution, including Air Quality Management Areas, negatively impacting residents and workers close to the corridors.

Need for intervention

Air and noise pollution from surface travel are highest along the M1 corridor and major A-roads in Luton. These pollutants harm health, especially for vulnerable groups such as children, pregnant people, those with underlying conditions, and the elderly. In particular, high levels of air and noise pollution are linked to increased rates of long-term health conditions, while noise can especially contribute to mental health issues and poorer educational outcomes in young people. Reducing levels of noise and air pollution can create more attractive places to live and work.

Over the past three years, there has been a sustained period of compliance with annual mean NO₂ air quality objectives. As such Air Quality Monitoring Areas (AQMAs) may be revoked, however monitoring will continue alongside development and delivery of an Air Quality Strategy as shown in Figure 7.

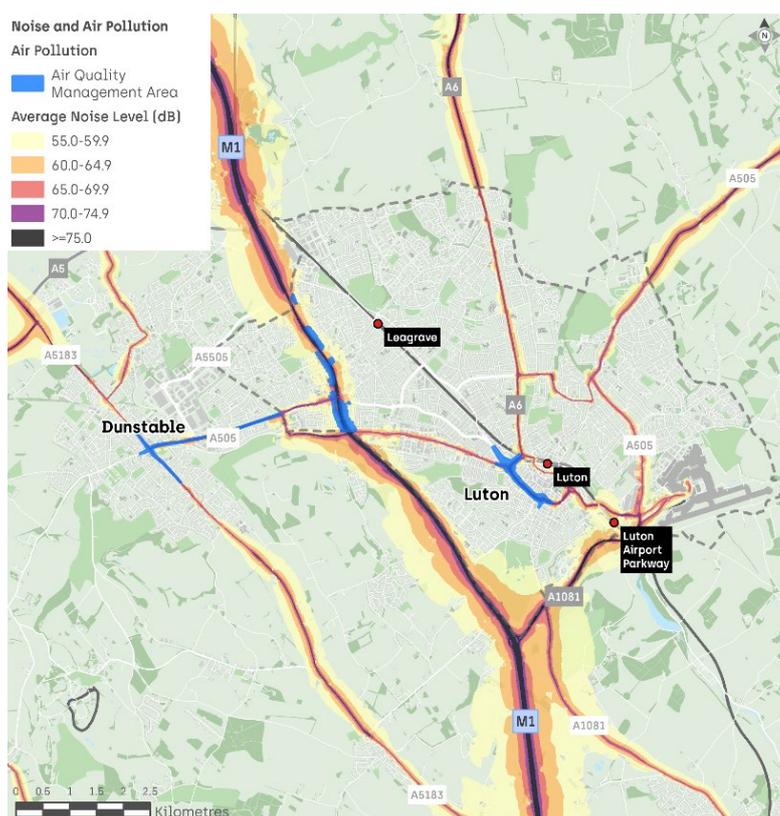


Figure 7: [Areas at highest risk of Transport Related Social Exclusion](#) (TfN, 2023)

Local transport plan implications

The Local Transport Plan should:

- Align with current and future Air Quality Action Plans.
- Accelerate uptake of electric vehicles, prioritising buses and HGVs, and shift trips to sustainable modes to improve air and noise quality.
- Identify measures to reduce noise, such as green barriers and buffers, to mitigate through-traffic impacts and inform Luton's asset management approach.

Challenge statement 5: Road safety

Health status and activity levels in Luton are lower compared to other benchmark local authority areas, identifying a need for greater take up of sustainable travel, particularly walking, wheeling and cycling.

Need for intervention

The A6, A505 and A1081 pass through Luton and carry high traffic volumes along which there are several collision hotspots. There are also hotspots within the town centre, along its inner ring road as shown in Figure 8.

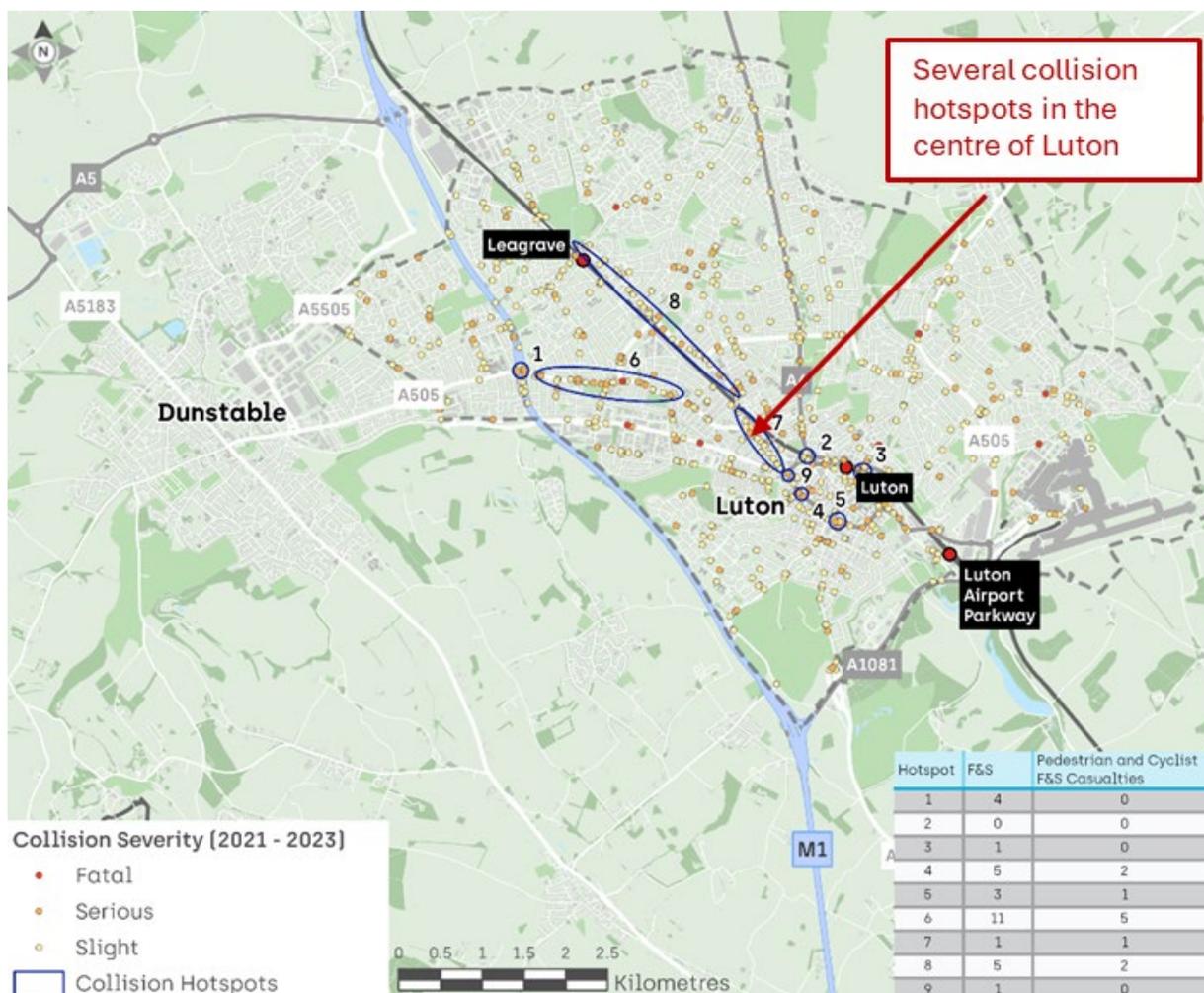


Figure 8: [Collision hotspots across Luton](#) (DfT, 2024)

Since residents rely on these routes for local connectivity, conflicts between different road users are likely to challenge the viability of active travel modes in these areas. Figure 9 shows that Luton continues to have the highest rate of casualties (i.e. fatalities or people seriously injured) compared with benchmark local authority areas – about twice as high as Central Bedfordshire and Milton Keynes.

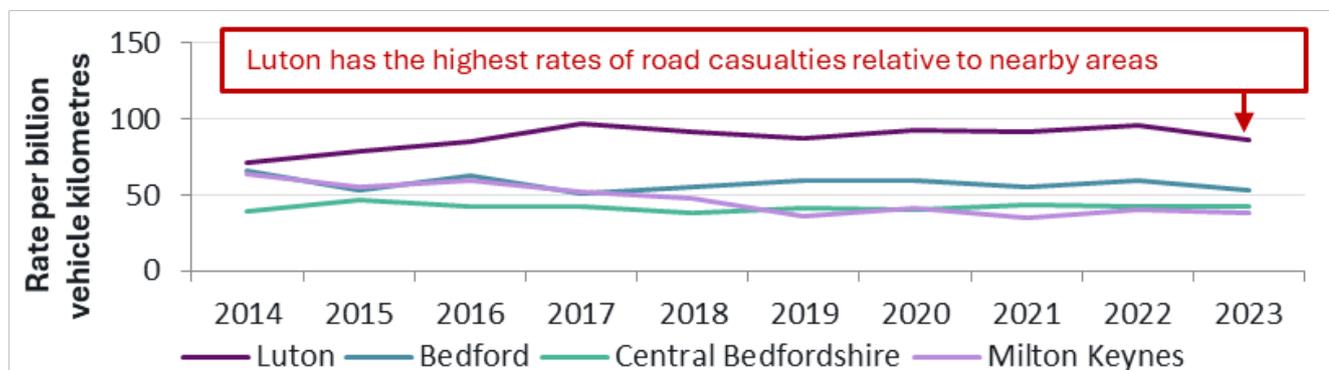


Figure 9: Rates of reported road casualties per billion vehicle kilometres (DfT, 2023)

Local transport plan implications

The Local Transport Plan should:

- Learn from comparator and other authorities' road safety approaches and proven interventions.
- Adopt a Safe System approach, ensuring people, vehicles, and infrastructure work together to reduce collision risk.
- Align with the Bedfordshire Road Safety Partnership and Luton's integrated, cross-authority road safety work.
- Consider the future road safety implications of emerging technologies.

Challenge statement 6: Access to healthcare

The main hospital is over 4 kilometres to the west of the town centre, meaning not everyone has direct access and travel times are significant by public transport to the east and north of the town.

Need for intervention

Figure 10 shows location of Luton and Dunstable University Hospital is about 4 kilometres to the west of the town centre. For most residents, the hospital location is not within walking distance, and for many areas to the east of the town centre bus travel times are more than 30 minutes and may require two buses.

With most public transport trips requiring town centre interchanges, the journey time and distance can be unattractive. This can present a barrier for people who have mobility impairments from accessing healthcare as well as hospital employees and visitors.

On the other hand, GP surgeries can be accessed in under 15 minutes in most areas. Exceptions include parts of Icknield, Crawly and Farley wards.

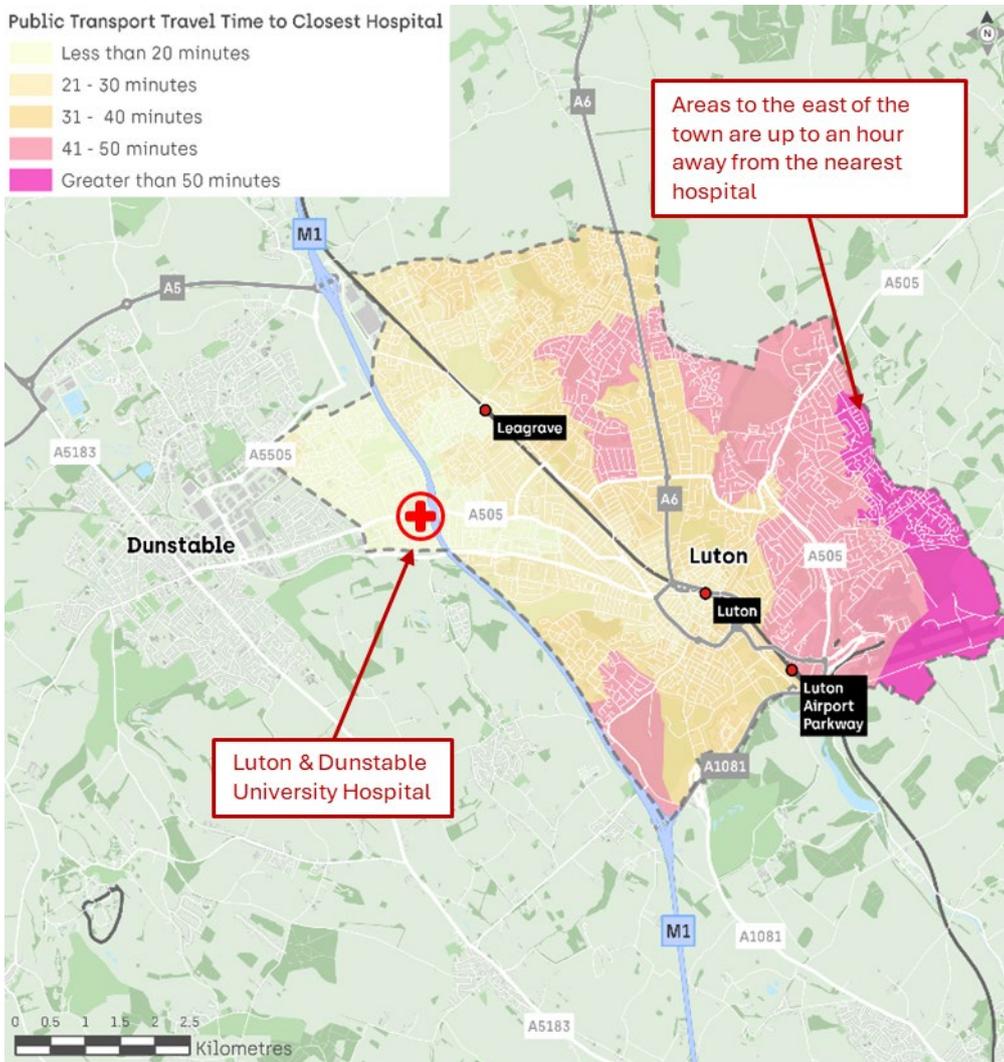


Figure 10: [Public transport and walk travel time to the closest hospital](#) (DfT, 2021)

Local transport plan implications

The Local Transport Plan should:

- Assess extending existing bus routes to the east and northeast and adding direct services from the south and north of the town.
- Where feasible, route services via GP surgeries.
- Evaluate more frequent, direct night services to support hospital shift patterns.

Challenge statement 7: Access to education

Most of Luton is within a 30-minute public transport and walk time of a sixth form / further education institution, however, many students need to take two buses to their school. This is less significant, but still prevalent, for secondary school students, particularly if they are not attending their nearest school.

Need for intervention

Access to further education varies across Luton, with several institutions located outside the town centre not well served by direct and frequent public transport such as Barnfield and Luton Sixth Form colleges. No further education opportunities are available to the northwest or southeast of the town.

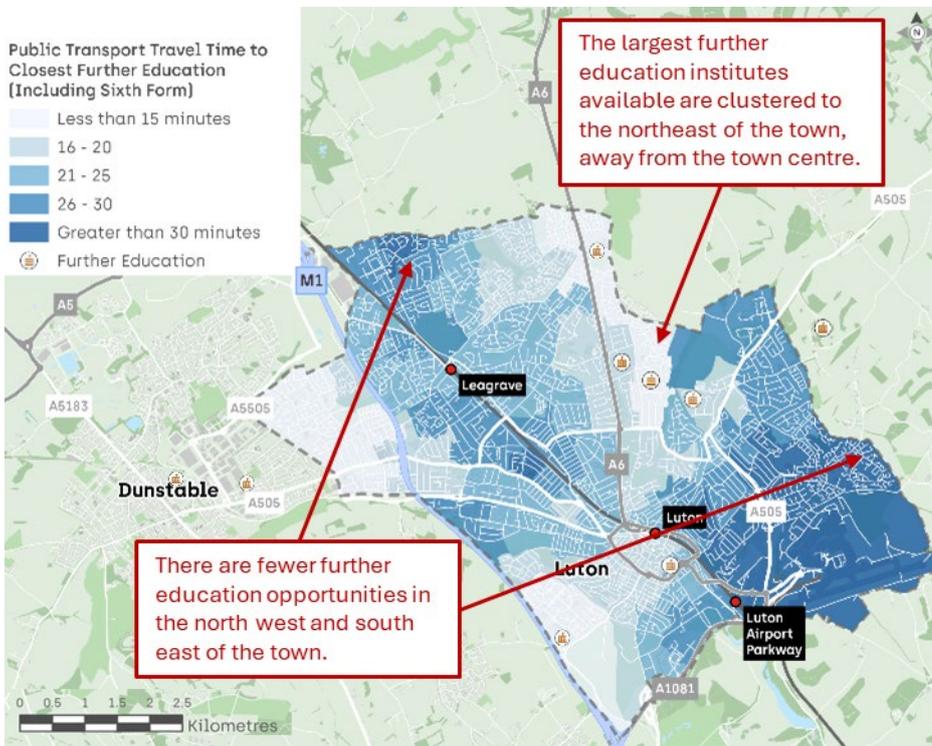


Figure 11: Public transport and walk travel time to the closest further education (DfT, 2021)

The proportion of the population holding Level 3+ qualifications is comparatively lower than in benchmark authorities. Luton also has a [higher proportion of people with no qualifications](#) (11%) compared to the East of England average (5%) and England average (6%).

Table 1: Level 3+ qualifications (DfE) and accessibility to FE colleges (DfT)

Area	Population with Level 3+ Qualifications in 2021(%)	% pop. within 15 minutes of FE college available by PT/walk	% pop. within 30 minutes of FE college available by PT/walk	% pop. within 45 minutes of FE colleges available by PT/walk	% pop. within 60 minutes of FE college available by PT/walk
Luton	54	15	91	100	100
Bedford	64	24	91	97	99
Central Bedfordshire	63	24	87	97	99
Milton Keynes	62	41	94	99	99
East of England	61	27	79	93	96

Access to primary schools by walking and public transport is generally strong. However, access to the nearest secondary school exceeds 20 minutes in High Town and Dallow. For pupils not attending their nearest secondary school, journeys are often longer and may require two bus trips.

Local transport plan implications

The Local Transport Plan should:

- Assess extending bus services to the east and northeast, and introduce direct services from the west and northwest. Include measures to improve secondary school access, especially from central areas.
- Consider additional concessionary fares to improve access to education and encourage bus use.

Challenge statement 8: Travel to work area

Luton has a very large hinterland, especially its travel to work catchment that is well-served by strong north-south transport connectivity. East-west connectivity is less strong and is shown in the shapes of the catchments.

Need for intervention

The travel to work catchment for both in- and out-commuting is well-served by strong north-south strategic transport connectivity. East-west connectivity is not as strong, which is shown in the extended north south shape of the catchment areas.

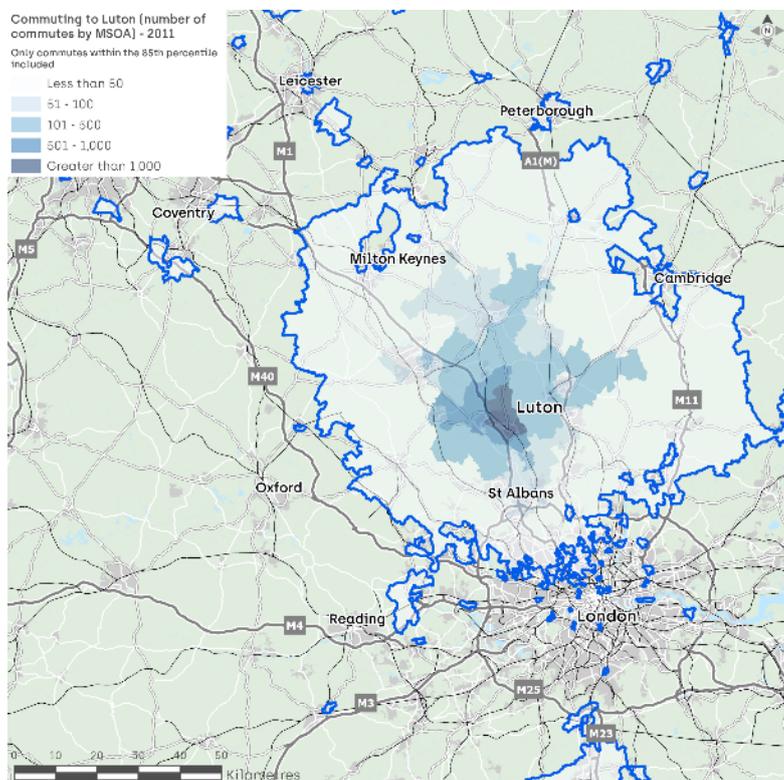


Figure 12: [Commuting to Luton](#) (ONS, 2011)

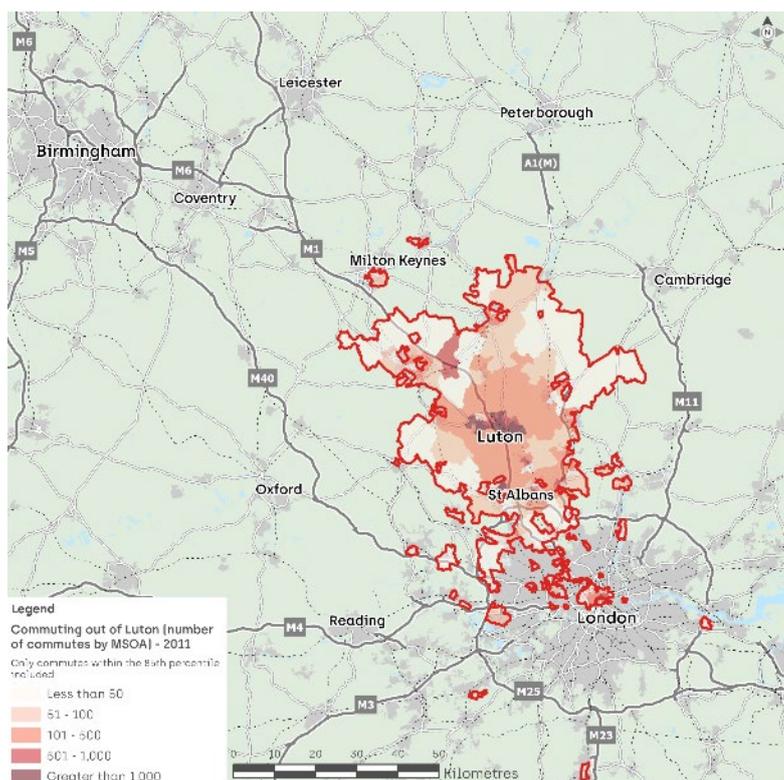


Figure 13: [Commuting out of Luton](#) (ONS, 2011)

Local transport plan implications

The Local Transport Plan should consider:

- Improved strategic east-west connectivity by public transport to both expand employment opportunities for residents and the labour market catchment for prospective employers.
- The case for more frequent and direct bus services (within the Enhanced Partnership) and longer operating hours to accommodate shift patterns for employees. This could work in synergy with potential rail improvements.

Challenge statement 9: Employment locations

Many key employment hubs are located on the edges of the town, where they are not always well served by public transport, meaning people often have to drive to access them including deliveries.

Need for intervention

As of 2023, there were an estimated 112,000 jobs in Luton. The largest employment sector is administrative and support service activities (32%), which is higher than the regional levels (11%). Human health and social work plus wholesale and retail together employ 20% of the workforce. Transport and warehousing account for 8%, higher than the regional 6%.

Employment is most densely focused in the town centre, however, there are sizeable industrial estates and business parks in the northwest and west of the town along the A505, at the airport and the corridor between the centre and the airport. Those that are least well served by public transport are in the northwest and northeast of the town. Operating hours can be limited during the late evening, night, and early morning, creating service gaps that disadvantage shift workers.

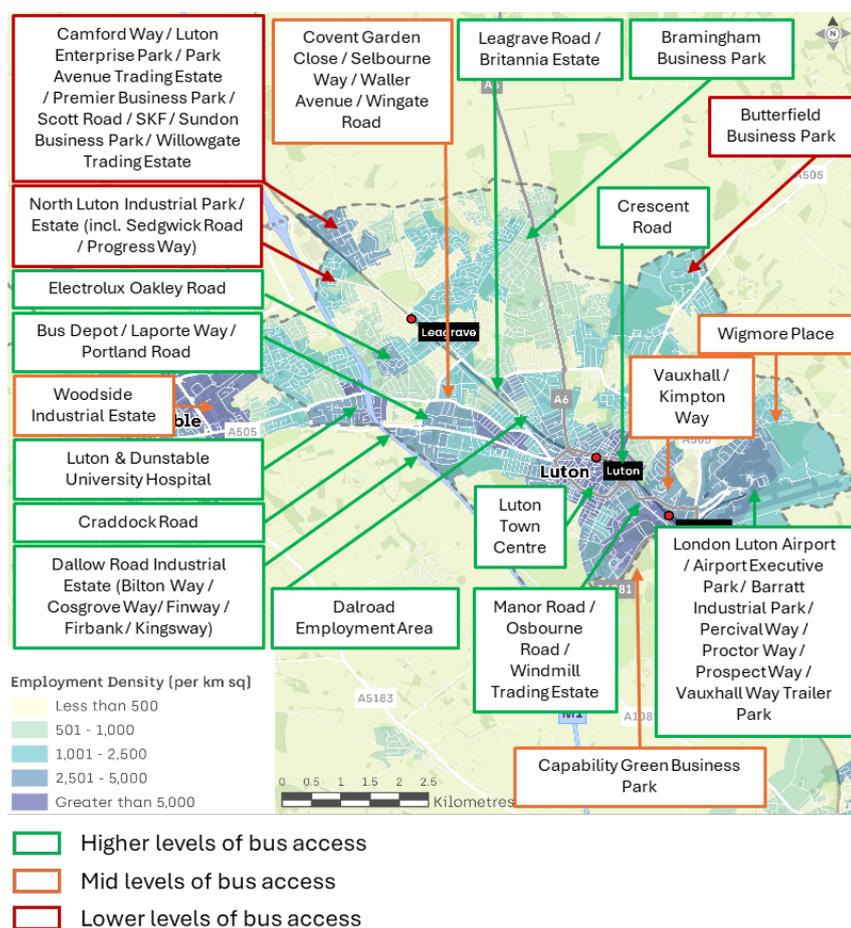


Figure 14: [Employment density](#) and key business parks (ONS, 2022)

Local transport plan implications

The Local Transport Plan should consider following:

- Improve public transport and shared mobility to better connect peripheral areas with key employment hubs.
- Ensure planned developments in the new Local Plan are served by high-quality, sustainable transport from the outset.
- Support lower-carbon freight through mode shift (e.g., rail, cargo bikes, consolidation) and enabling technologies (e.g., routing, telematics, zero-emission vehicles).

Challenge statement 10: Planned developments

Planned developments in Luton will add pressure to the local transport networks. Urban extensions could considerably alter local travel patterns, requiring significant investment to accommodate them sustainably and not disbenefit existing communities.

Need for intervention

The focus for development is the town centre, the airport, areas between the town centre and airport, business parks on the urban fringes, and urban extensions to the north and east of Luton in neighbouring authority areas.

Development on the urban fringes and in adjacent areas to Luton (e.g. East of Luton, North of Luton) and in Dunstable and Houghton Regis is likely to result in overall growth in the population of the built-up urban area. Many 'new' residents and workers in these developments will be living far away from the town centre and Luton's main transport hubs. If development is not to exacerbate congestion to unacceptable levels, sustainable, affordable, reliable travel alternatives are essential, along with fast digital connectivity.

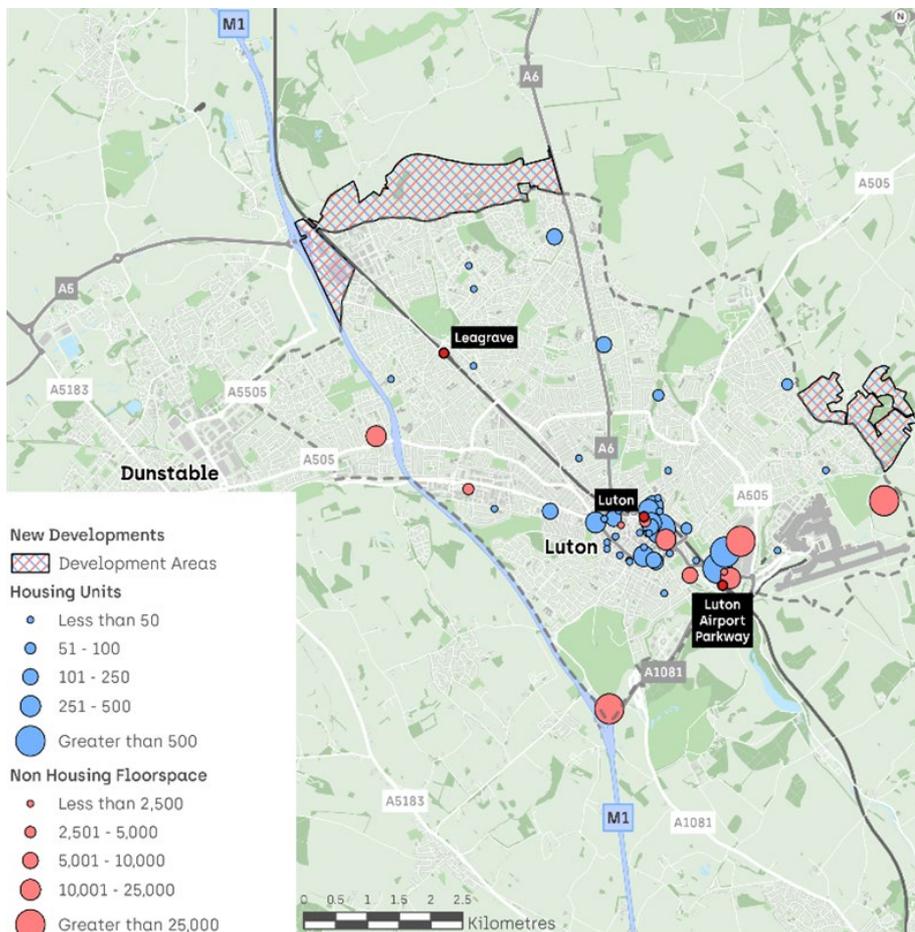


Figure 15: Planned development site in Luton (Luton Council, 2017)

Local transport plan implications

The Local Transport Plan should:

- Support the new Luton Local Plan so future development, regeneration, and public realm improvements are delivered sustainably.
- Increase sustainable transport capacity in the town centre and surrounding areas.
- Improve sustainable links to new urban extensions by connecting people to jobs, key services, and leisure, including potential cross-town services.

Challenge statement 11: Airport expansion

An expanded London Luton Airport will lead to increased demand for travel to, from and around the airport and nearby development sites.

Need for intervention

The expansion plans for London Luton Airport seek to increase capacity to accommodate up to 32 million passengers per annum. This is almost double the number of passengers seen in the 12 months to July 2024 as show in Table 2.

Table 2: [Projections for LLA passenger uptake](#) (London Luton Airport, July 2024)

Year	Passengers per annum (millions)
2024	16.4
2027	21.5
2039	27
2043	32

Figure 16 shows passenger and freight demand over the past seven years.

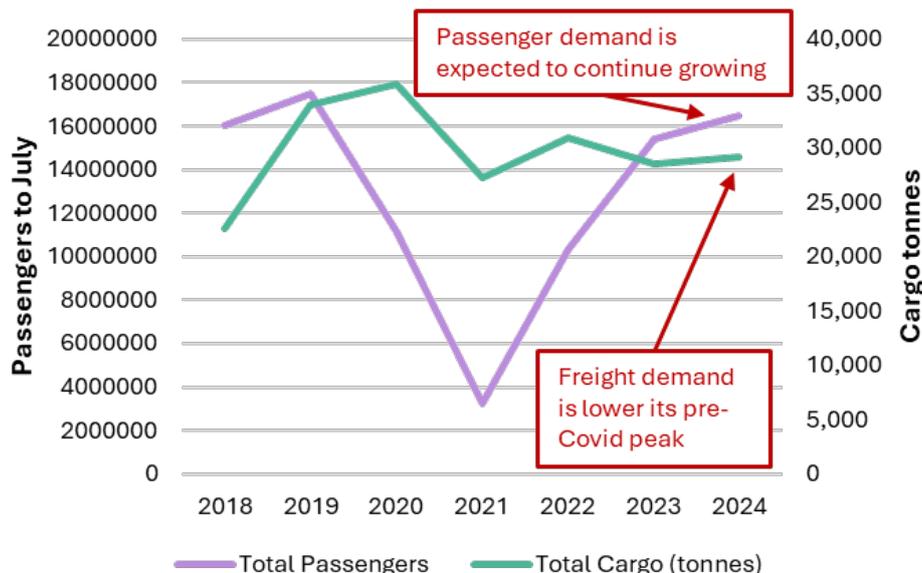


Figure 16: [Historic passenger and freight demand](#) (London Luton Airport, 2024)

The airport indirectly employs over 9,000 people and a further 6,100 jobs could be unlocked. This calls for a step change in how the airport and nearby development sites are connected.

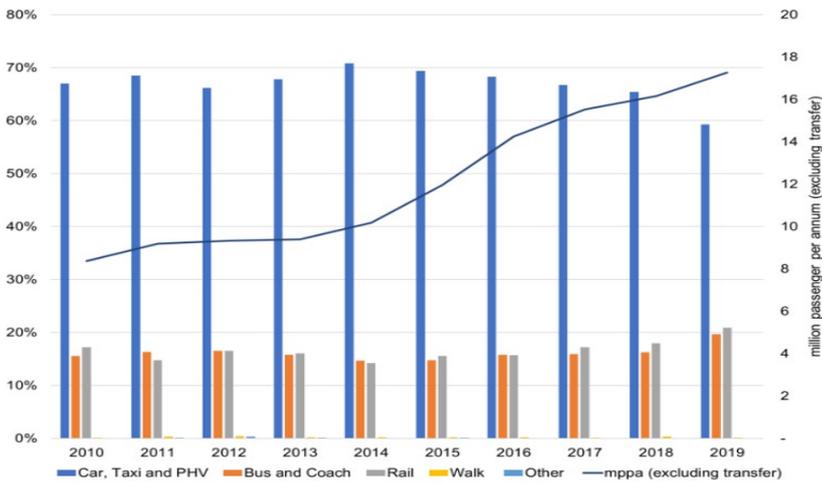


Figure 17: Passenger mode share 2010-2019 (Luton Rising, CAA)

The quality and capacity of sustainable transport provision should be expanded alongside the airport, business parks, and accommodate shift patterns.

Local transport plan implications

The Local Transport Plan should:

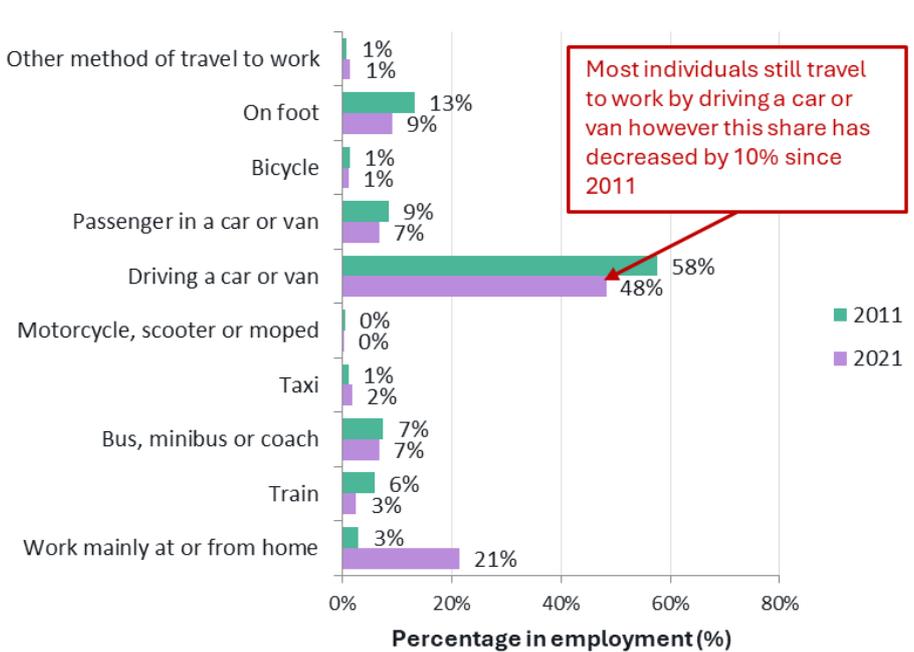
- Improve the quality, accessibility, and capacity of sustainable transport connections, including links to surrounding developments.
- Plan interventions for all user groups, not only passengers, but also staff, visitors, and business travellers, and account for events such as rail strikes.

Challenge statement 12: Mode share

Luton has a high car mode share, presenting challenges but also opportunities for mode shift to more sustainable modes for shorter distance trips.

Need for intervention

Private vehicle use remains the dominant mode for travel to work in Luton, even during a national 'lockdown', 55% of those in employment used a private vehicle as a driver or passenger.



*Census data for 2021 was subject to rapid changes in travel patterns due to Covid-19.

Figure 18: Travel to work mode shares in 2011 and 2021 (ONS, 2011 and 2021)*

Car ownership has also increased by 10 percent between 2011 and 2021. As of 2021, 75 percent of households have access to at least one car, with about a third have access to two or more. Unless alternative modes are made more attractive, affordable and accessible, car dependency and high levels of use will be difficult to address.

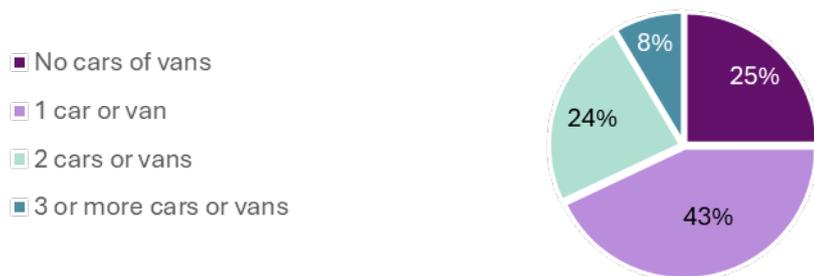


Figure 19: Car availability among households in 2021 (ONS, 2021)*

The rise of hybrid working has led to the redistribution of trip demand across the day, as a greater share of journeys are undertaken for leisure and other non-work purposes. There is a need to ensure that transport networks, particularly public transport services, can accommodate changing travel patterns and working lifestyles.

Local transport plan implications

The Local Transport Plan should seek to:

- Deliver and promote reliable, accessible and affordable alternatives to driving, including car clubs, public transport, shared mobility, micro-mobility and active travel.
- Improve first / last mile connectivity to transport hubs, to facilitate interchange, particularly for longer distance journeys.

Challenge statement 13: Access to private vehicles

Many parts of Luton have low levels of car ownership and access, highlighting the need for high quality, reliable public transport, active travel and digital improvements to provide the connectivity required by residents.

Need for intervention

Despite car ownership rates increasing by 11% between 2011 and 2021, a quarter of households in Luton have no access to a car. This is higher than other benchmark authorities including, Bedford, Central Bedfordshire and Milton Keynes.



Figure 20: Percent of households with no cars or vans in 2021 (ONS, 2021)

Latest data from the DVLA (September 2024) shows that 91,805 cars and 7,927 LGVs are currently registered in Luton. This highlights a significant increase from 2011, when 74,836 cars and 6,364 LGVs were registered.

In areas such as Poets to the northeast of the centre and Wigmore to the east of the town centre, up to 25 percent of households without a car are faced with poor public transport journey times to key services, often exceeding 40 minutes (i.e. to the hospital). Without appropriate intervention, these individuals are at risk of being left behind in terms of accessibility to healthcare and employment opportunities as it shown in Figure 21.

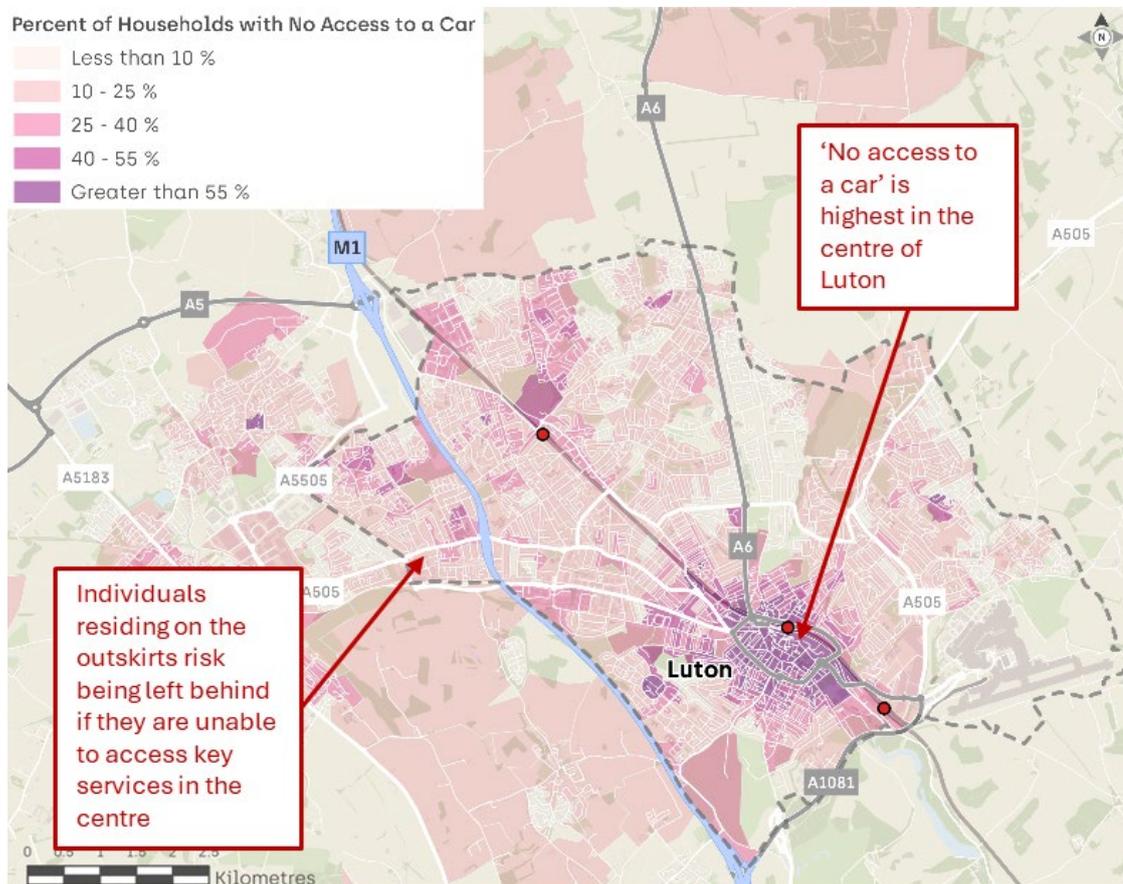


Figure 21: Percent of households in Luton with no cars or vans in 2021 (ONS, 2023)

Local transport plan implications

The Local Transport Plan should consider:

- Targeted interventions to support those residents without a car where other alternative transport options may be lacking or not present. Interventions should include measures to ensure that car parking does not impede the ability of people to use other modes.
- Management of on-street and off-street parking to ensure that sufficient supply exists for those who rely on private vehicles.

Challenge statement 14: Bus services and journeys

Bus patronage is high compared to benchmark authorities and has recently recovered to exceeding pre-pandemic levels. On some routes, in some areas, and for some demographic market segments, demand is now exceeding pre-pandemic levels.

Need for intervention

Since the pandemic, there has been an increase in passenger journeys per head in Luton. This trend is similar across other benchmark authorities, albeit Luton has higher levels of demand. This has been supported by a successful Bus Service Improvement Plan securing over £20 million and Enhanced Partnership with operators to improve infrastructure, services and the customer experience. As such, an additional 7,000 bus trips (Systra, 2023) per month have been introduced with frequency enhancements, new services and subsidised buses in the evenings and on Sundays.

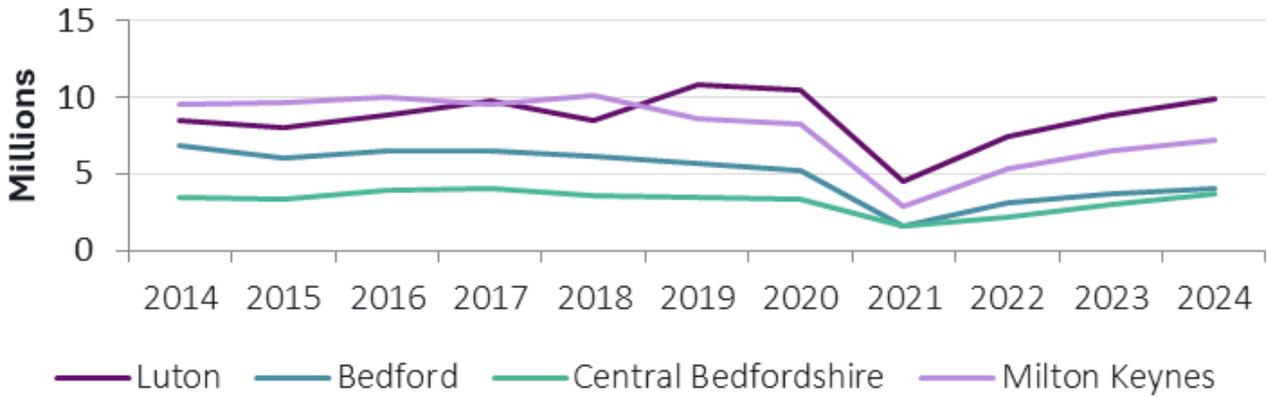


Figure 22: Passenger journeys per head of population per annum (DfT, 2024)

This is a strong foundation for further growth in service provision, supporting infrastructure, and enhanced customer experience to increase bus patronage further.

This could include increased service frequency to peripheral neighbourhoods; more cross-town and direct or orbital services; longer operating hours; more affordable fares, and more zero emission vehicles, among other options.

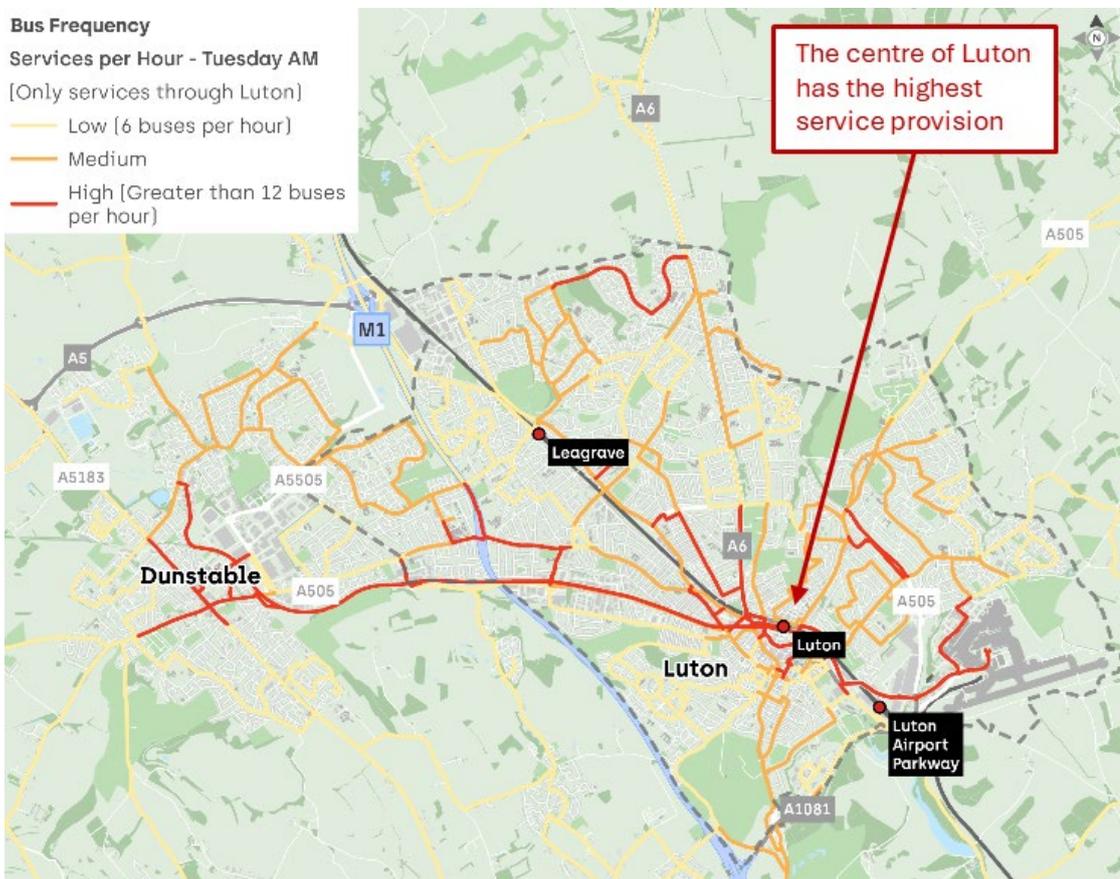


Figure 23: Bus Frequency in Luton (DfT, 2023)

Local transport plan implications

The Local Transport Plan should:

- Align with the Bus Service Improvement Plan, setting a framework for long-term growth in services and patronage under the Enhanced Partnership.
- Target investment toward the most vulnerable users and use on-demand services to fill gaps in provision.

Challenge statement 15: Rate of decarbonisation

Transport is not decarbonising fast enough. Car and freight movements are forecast to grow which will mean increased emissions and congestion on our road networks without rapid conversion of the vehicle fleet, mode shift, and reducing the need to travel.

Need for intervention

The forecast rate of decarbonisation for Luton, even with faster uptake of zero emission vehicles, will not get 'tailpipe' transport emissions to net zero by 2040, nor 2050, and result in expending of the carbon budget during the 2030s.

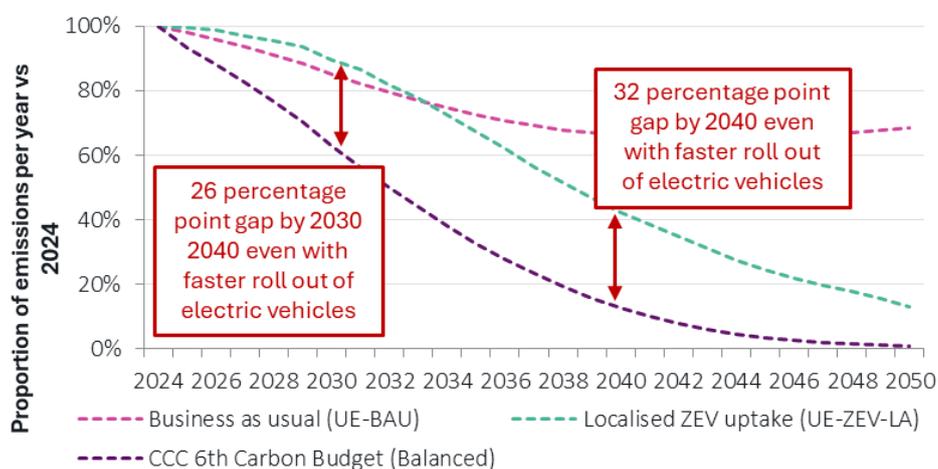


Figure 24: Trajectory of emissions for Luton (Carbon Assessment Playbook, 2024)

Furthermore, car vehicle kilometres travelled are due to grow by 25% between 2019 and 2050; and freight kilometres are due to grow by 50%, vehicles that are harder to decarbonise until further battery advances can more easily power heavier vehicles. This means that by 2050, freight emissions will account for over 55% of all emissions.

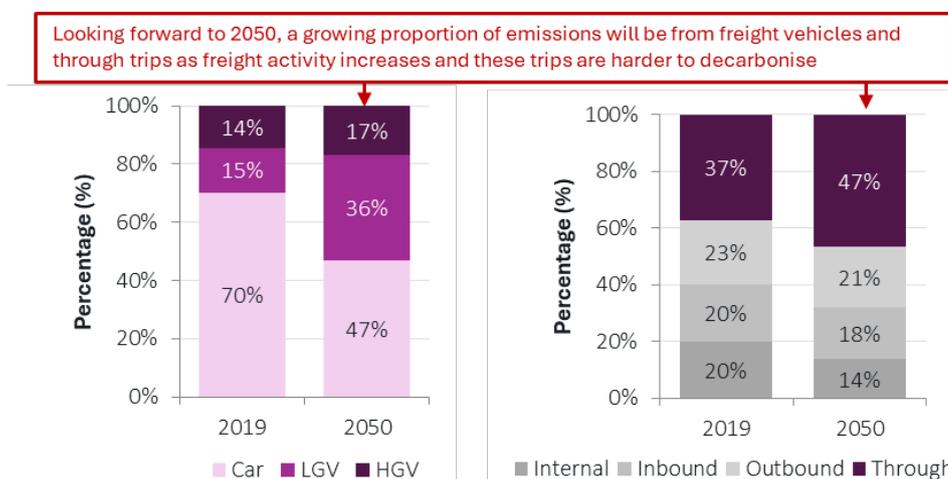


Figure 25: Emissions by vehicle in Luton (Carbon Assessment Playbook, 2024)

Additionally, trips that have either their start or finish outside of Luton or only pass through Luton account for most emissions and will increase as a proportion. Luton Council has less influence over longer distance and through trips.

Local transport plan implications

The Local Transport Plan should seek:

- Adopt an avoid–shift–improve framework:
 - Avoid: reduce the need to travel, including through virtual alternatives.
 - Shift: invest in and promote mode shift to more sustainable modes.
 - Improve: accelerate conversion of vehicle fleets to zero emission, alongside more sustainable energy generation and resilient power networks.
- Work in partnership with neighbouring authorities, England’s Economic Heartland, government and arm’s-length bodies, and the private sector to address longer-distance trips and enable freight/commercial fleet decarbonisation.

Challenge statement 16: Zero emission vehicle uptake and charging

The uptake of zero emission vehicles (ZEVs), including private, commercial, freight vehicles and buses is low compared to other areas, placing Luton behind its comparators in the transition to net zero carbon.

Need for intervention

Figure 26 shows how the uptake in Luton compares to nearby areas and England in Q2 2024. Less than 3% of all cars in Luton are zero emission, whereas this figure is more than double in England. Zero-emission buses are only starting to be rolled out in Luton whereas several other towns and cities in England are close to achieving fully zero-emission networks. Given the high capital costs associated with the purchase of electric vehicles, there is scope to suggest that this is linked to the level of disposable income in the area.

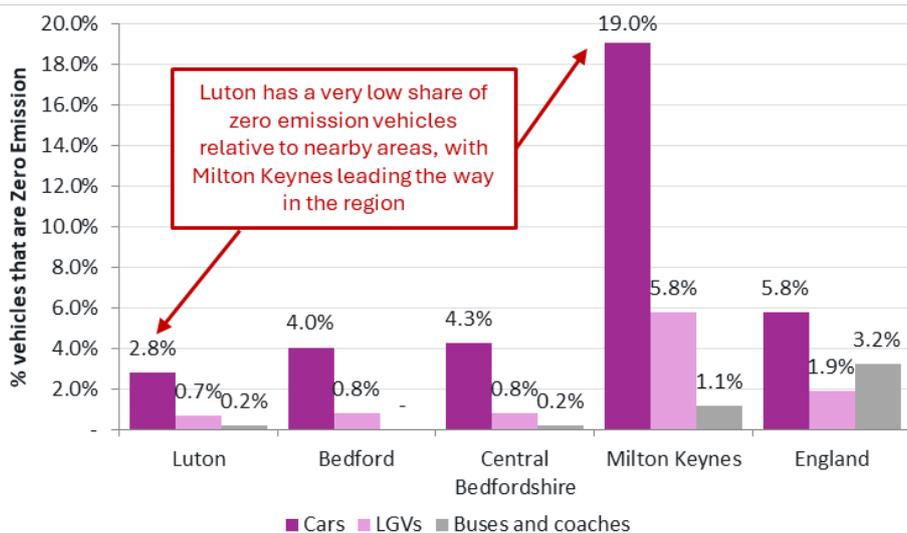


Figure 26: [Proportion of Zero Emission Vehicles in Q2, 2024](#) (DfT, 2024)

The slow roll out of charge points, whilst increasing between 2019 and 2024 has been lower than other areas. Luton has a very low density of charge points per capita compared to other areas. Bedford has three times as many chargers per 100,000 people, and Milton Keynes over six times as many as it shown in Figure 27.

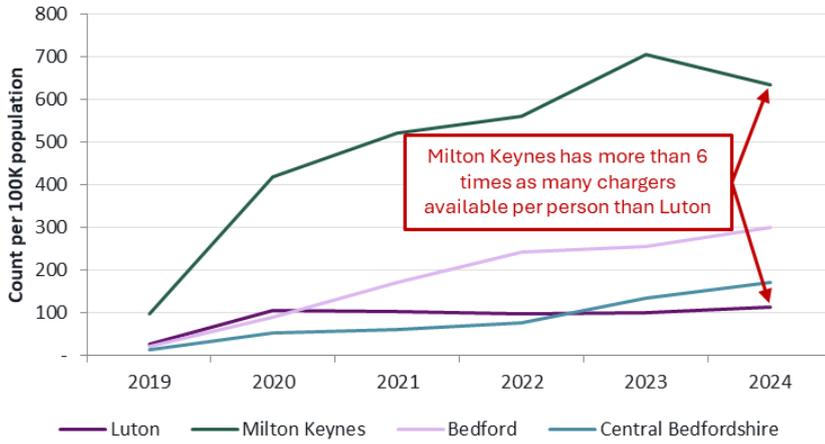


Figure 27: [Publicly available electric vehicle charging devices](#) (DfT, 2024)

This may reduce the confidence of users to switch to electric modes as they cannot easily access charge points near where they may live or work.

Local transport plan implications

The Local Transport Plan should:

- Accelerate zero-emission vehicle uptake and supporting infrastructure to increase the pace of decarbonisation in line with regional trajectories.
- Pursue complementary measures alongside ZE vehicle rollout to sustain decarbonisation and encourage modal shift.

Challenge statement 17: Network congestion

Many links and junctions of the strategic and major network in and around Luton encounter congestion. High car dependency and increasing levels of goods vehicles movements are the cause, resulting in congestion with poor journey time reliability and negative environmental and road safety impacts.

Need for intervention

Luton town centre currently suffers from notable congestion, with key affected roads including the A505 connecting to Dunstable and Luton Airport, as well as the A6. This results in a poor network quality, measured by Level of Service (LoS), due to too much traffic on the roads.

Figure 28 shows the Level of Service is similarly poor in Dunstable and comparable authorities such as Bedford, with an improved LoS in Milton Keynes. Compared to neighbouring authorities, Luton’s A-road network has consistently seen the highest vehicle delays.

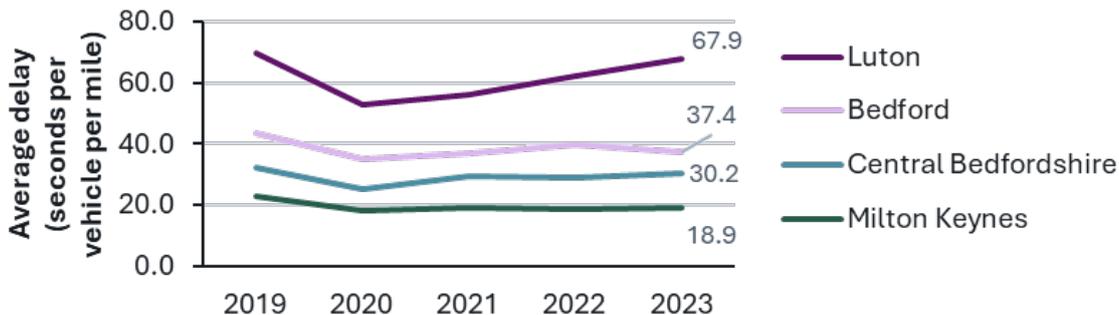


Figure 28: [Average vehicle delay across locally managed A-roads](#) (DfT, 2024)

Poor highway service quality reduces journey reliability, increases driver stress, contributes to poor air quality and public health. Preventing congestion requires shifting more people to public transport, walking and cycling. This demands significant improvements in the alternatives, providing more capacity, greater flexibility, accessibility and an integrated network that better meets users' needs.

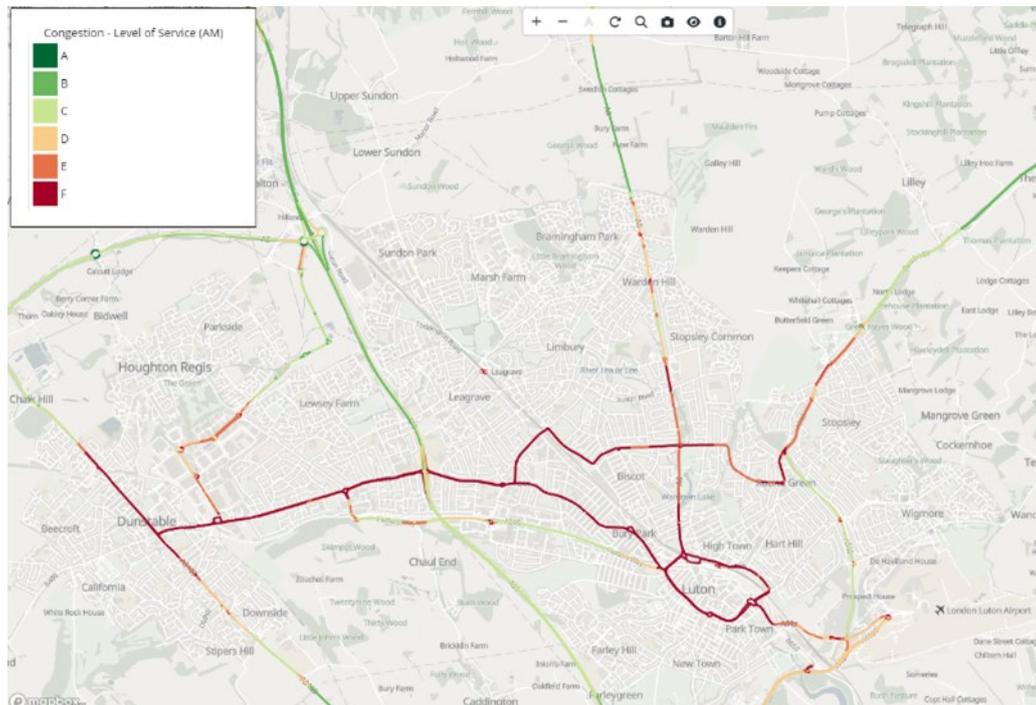


Figure 29: Network Level of Service, Morning Peak Period (EEH, 2022)

Local transport plan implications

The Local Transport Plan should:

- Consider interventions that relieve and better manage network congestion, including traffic mitigation measures, freight management, park and ride schemes and improving the public transport offer in Luton town centre.
- Focus on highly congested areas with low network quality, to improve journeys for those that rely on their car, while encouraging more people to consider the sustainable alternative modes.

Theme alignment

The 17 challenge statements in this Need for Intervention Report align well with the seven key emerging themes for the new Local Transport Plan to consider. There is a clear many to many relationship between each of the statements and multiple themes which will allow for a cross cutting Local Transport Plan.

Table 3: Local Transport Plan theme alignment

Area	Theme 1: Enable inclusive growth through enhanced sustainability connectivity and access to economic opportunities	Theme 2: Increase sustainable transport choices for all and reducing car dependency	Theme 3: Create safer, active and healthier places that are liveable for everyone	Theme 4: Tackle inequalities through accessible, affordable, and reliable transport choices that connect people with the key services and opportunities they need sustainably	Theme 5: Embrace diversity across Luton through meaningful collaboration on transport plans, policies and schemes	Theme 6: Drive rapid decarbonisation in the movement of people and goods and ensuring innovation and technology benefit local communities	Theme 7: Support the financial viability of local services and develop a realistic, affordable implementation plan
Population age profile	✓	✓	✓	✓	✓		
Social exclusion	✓	✓	✓	✓	✓		
Physical activity	✓	✓	✓	✓			
Noise and air quality		✓	✓	✓	✓	✓	
Safety	✓	✓	✓	✓	✓		
Access to healthcare	✓			✓	✓		
Access to education	✓	✓	✓	✓	✓	✓	
Travel to work area	✓	✓	✓	✓	✓	✓	
Employment	✓	✓	✓	✓	✓	✓	
Planned development	✓	✓	✓	✓			✓
Airport expansion	✓	✓	✓	✓	✓	✓	✓
Mode share	✓	✓	✓	✓	✓	✓	
Access to cars	✓	✓		✓		✓	
Bus services and journeys	✓	✓	✓	✓	✓	✓	✓
Rate of decarbonisation		✓	✓			✓	
ZEV uptake and charging	✓	✓	✓	✓	✓	✓	
Network congestion	✓	✓	✓	✓			✓

Conclusions and next steps

This Need for Intervention Report highlights the key challenges for Luton, supported by grounding evidence to support an emerging rationale for change. In summary, there are a few key takeaways that highlight the need for intervention and change to inform Luton's new Local Transport Plan vision and aspirations:

- Luton has a young and also an aging population, which means its transport network needs to be resilient and responsive, supporting inclusive connectivity and quality of life for all residents. The changing population profile presents both challenges and opportunities for local public transport provision, ensuring that bus travel is accessible and meets the needs of all passengers. The densely populated and urbanised areas of Luton provide opportunities for sustainable mobility options that enable walking, wheeling, cycling and public transport for local trips.
- The mixed picture of deprivation and public transport connectivity across Luton requires targeted investment to reduce transport related social exclusion and improve access to sustainable travel options. Ongoing improvement of public transport offer is important to ensure that frequent, reliable services are accessible to facilitate access to employment, education, healthcare, leisure and green spaces. High levels of poor health and high levels of obesity in Luton can be addressed with high quality and safe active travel connections to support walking, wheeling and cycling for shorter distance trips. A more sustainable mix of travel will reduce air and noise pollution and improve public health.
- Employment hubs in and around Luton town centre benefit from strong public transport connectivity and more sustainable patterns of freight movement. However, employment sites further out are less accessible, often relying on car use due to limited a public transport offer. Planned growth in Luton and surrounding areas, coupled with the expansion of Luton Airport, will put significant pressure on existing road network. To accommodate this growth, new areas should be well-served by reliable, sustainable, and affordable transport options to encourage a shift away from car dependency. Improved integration of public transport across Luton and neighbouring areas is key to increase bus and rail use.
- For the movement of goods – freight – there are similar challenges. A lack of consolidation centres and low levels of take up for more sustainable alternatives and technologies, plus an increase in light goods vehicles (e.g. vans) for household deliveries, has resulted in increased congestion and associated negative impacts. Considering and assessing the viability of more sustainable alternatives, technologies, and fuels/propulsion mechanisms, as well as interactions with the planning system and power distribution networks will be important for the Local Transport Plan.
- Many areas of Luton have low car ownership and poor public transport access. Car travel remains the dominant mode for commuting, however, and without more attractive and accessible alternatives, changing this reliance and resulting congesting will be challenging. This reinforces transport-related social exclusion, which must be addressed with affordable, reliable, and sustainable options. While recent bus service improvements have led to increased patronage, especially post-pandemic, there is a need to expand services to vulnerable groups, ensuring bus travel is accessible, affordable, and safe for all.
- Decarbonisation of travel and transport aims to reduce the negative effects of transport including congestion, emissions and collisions in Luton. A growing proportion of emissions from car freight vehicles does not support a low carbon future which heightens the need for affordable, reliable and sustainable alternatives. Luton lags behind other comparator authorities for their uptake of zero emission vehicles, including private car, freight and bus. Encouraging a modal shift will help to mitigate the impacts of traffic growth, support healthy communities and environments, and Luton's transition to net zero.

Next Steps

This baseline report will be used to further develop our understanding of the key issues and opportunities for Luton and inform an ambitious vision for Luton's new Local Transport Plan. Alignment of the challenge statements with the emerging Local Transport Plan key themes ensures that there is breadth and the challenges resonate with the key policy priorities for Luton. This report and the supporting work provides a robust framework for a new vision-led Local Transport Plan. A summary of the process to inform an evidence and stakeholder led Local Transport Plan is shown below.

