

Travel and transport

Background and explanation of our proposals

Transport is responsible for a quarter of the city's carbon emissions from direct fuel and energy use. These emissions come from petrol, diesel and LPG vehicles.

Leicester's population is expected to keep growing, so more people will need to access work and facilities. If changes are not made this will add to Leicester's carbon emissions.

We believe that the way we travel and access the services we need will have to change to tackle the climate emergency. Ultra-low emission vehicles (ULEVs)* will need to be part of the answer. However, we don't think Leicester should rely only on ULEVs to make its travel and transport carbon neutral.

** Ultra-low emission vehicles or ULEVs produce a very low level of carbon emissions. They include electric and hydrogen vehicles. Some models of 'plug-in hybrid' electric vehicle also meet the definition.*

1. A much larger share of journeys taken by walking and cycling

We believe that the role of walking and cycling needs to substantially increase. These zero-carbon modes of travel can help Leicester avoid a rise in congestion as the population goes up. They can also reduce carbon emissions and air pollution. A bigger role for walking and cycling would help to limit the extra electricity demand from electric vehicles to ensure that the grid in Leicester can cope.

Many people in the city don't have access to a car. Making it easier to walk and cycle is a vital part of ensuring that everyone has access to convenient and affordable transport.

The council has been working over many years to promote walking and cycling. This includes providing a high quality network of safe cycle tracks along main roads and through neighbourhoods. We are proposing to continue this work. Upcoming projects include a bike share scheme and more cycle parking in the city. Also developing walking and cycling routes and networks beyond the city centre.

We've seen positive results from our promotion of walking and cycling so far. However, in common with other UK cities, we have not seen the levels of increase that we think will be necessary. We aim to meet the government target for 2024 of a 10% share of journeys by bike. As such, we will need to look at new ways to increase uptake. We are interested to hear ideas from the public about this.

2. A much larger share of journeys on public transport

For journeys which can't be made by walking or cycling (or walking or cycling only), there needs to be an increase in the role of public transport. This will need to be provided by ultra-low emissions vehicles.

In terms of bus services, the council will need to continue working with the private bus companies. We have previously completed a range of projects to support increased

bus use. These include the remodelling of Haymarket Bus Station to increase capacity and the creation of 'bus priority corridors'.

We are proposing to continue with measures to improve bus services and reduce emissions. These include more bus priority measures, connecting services, better links between bus services and other travel modes, more accessible bus stops and the introduction of smart ticketing and real time information.

We believe that park and ride services will play an important role. We are introducing electric buses for the Birstall Park and Ride site and an option for the future could be to convert the other sites to electric buses. We could also look at the potential for more park and ride services.

The council is considering the introduction of a Workplace Parking Levy (WPL) on employers who provide dedicated parking spaces for staff. Revenue from a WPL would be spent on sustainable transport improvements and a public consultation will be held on the proposals in due course. We are also preparing a new Local Transport Plan (LTP4). This will address the climate emergency by including measures which will reduce carbon emissions. There will be a separate public consultation for LTP4 too.

As with walking and cycling, we believe that a step-change in the role of public transport will be needed. We think there needs to be a focus on making it easier to make journeys by more than one mode without a car. Alongside steps to improve public transport, we think that measures will be needed to manage the demand for, and impact of, private vehicle journeys. This will need to include consideration of car parking, road capacity and access.

We would like to hear ideas from the public about how Leicester can achieve the big increase in the share of journeys by public transport that we'll need.

3. Moving to zero carbon vehicles

In the future all vehicles including private cars, public transport, taxis and business vehicles will need to be zero carbon. In the short term this means moving to ultra-low emission vehicles (ULEVs). We think that electric vehicles will be the main technology that's used. These will be capable of becoming zero carbon when coal and gas is no longer used in the generation of electricity for the national grid. In addition, hydrogen may be needed as a fuel for lorries.

The council has already started to replace our fleet vehicles with electric vehicles where we can. We could look at the potential to speed up this replacement programme. It would require increased spending on our fleet for a number of years. Businesses, other public service providers and residents could also look at replacing their diesel, petrol or LPG vehicles with electric or 'plug-in hybrid' electric vehicles (PHEVs) too.

Grants are available to encourage people to buy electric vehicles and the government could promote quicker uptake by increasing these grants or extending the grant scheme for longer. It could also bring forward the date of 2040 when it is planning to phase out sales of new petrol and diesel cars.

Electrification of the Midland Mainline would also reduce diesel engines travelling through the city.

4. Improved zero carbon vehicle charging and refuelling infrastructure

To support the use of electric vehicles there will need to be a big increase in the number of charging points. They will be needed in public and workplace car parks, at company fleet depots, on-street and at home.

The council has already installed a number of charging points in car parks and has plans to increase this number. We also have a pilot scheme coming up to install on-street charge points. The government provides a grant to support the installation of chargers in homes and businesses, and could support EV uptake by continuing this scheme.

To enable the large scale take-up of electric vehicles we expect that the local grid operator, Western Power Distribution, will need to increase the capacity of the grid in parts of the city. For those with solar photovoltaic panels and electric vehicles there will be an opportunity to use 'vehicle-to-grid' technology. This stores any extra solar energy generated in the panels in the electric vehicle battery, which can also be sold into the grid at times of peak demand. The council is carrying out a vehicle-to-grid trial scheme at the moment.

If hydrogen technology does also play a role, there will also need to be hydrogen refuelling stations developed locally.

5. Greater sharing of vehicles

Some people think that with new transport technologies and online booking systems we may start to see a culture change in which private car ownership starts to reduce. A proportion of people might opt to replace individual car ownership with a combination of walking, cycling, public transport and membership of e-bike share and electric car club schemes for those journeys where a bike or car is necessary. New types of 'demand responsive' transport service could become popular such as pre-bookable bus services and, ultimately, bookable driverless electric vehicle services. This type of shift in attitudes to individual car ownership could help speed up the reduction of carbon emissions from travel.

6. Reducing the need for travel

A further way to reduce carbon emissions from travel is to reduce the vehicle trips that people need to make to access services. This could mean making sure that as many services as possible are available online. Also, ensuring that services and facilities are provided within walking distance of where people live. The council's planning policies already promote key facilities and services in local neighbourhoods. Refer to the Land use, green space and development of the city section for more on this.

Summary of our proposals

Vision for travel and transport

- A much greater share of journeys will need to be made by walking, cycling and public transport. A city-wide network of walking and cycling routes, along with improved public transport, will be among the improvements needed to make this possible.
- Journeys that can't be taken by walking, cycling or public transport will need to be made by ultra-low emission vehicles. These will mainly be electric vehicles, although new HGVs may need to be hydrogen-powered.
- Electric charging-points will need to be widely available across the city. The electricity grid in Leicester may need upgrading to allow this. More solar panels will help provide some of the electricity needed.
- Some electric cars will need to be part of 'vehicle-to-grid' systems. These store surplus renewable electricity from solar panels in electric car batteries. They help the electricity grid by selling it to the grid when demand is high.
- Alternative travel and transport services, such as ride-sharing, electric car clubs and e-bike share could be used more instead of private car journeys.
- Services and facilities will need to be easy to access without car journeys. This includes making them accessible online, and available nearby within communities.

Potential actions for travel and transport

Potential actions by the council

1. The council could continue to invest in infrastructure for walking and cycling. It could also expand existing programmes to encourage people to walk and cycle.
2. Subject to consultation, the council could introduce a Workplace Parking Levy and use the funds to improve sustainable transport.
3. The council could continue to invest in improved public transport. It could consider an increase in the number of Park and Ride sites and convert more of the existing ones to use electric buses.
4. The council could look at further ways to reduce demand for private vehicle journeys. This could mean changing vehicle access to areas, changing parking, and supporting shared transport services.
5. More could be invested in replacing the council's own vehicles with ultra-low emission vehicles.
6. More publicly accessible electric vehicle charging points could be installed by the council.

Potential actions by businesses and other organisations

7. Employers could encourage staff to commute to work on foot, by bike or using public transport. They could also set a policy to reduce carbon emissions from business travel and deliveries.
8. Employers could replace their existing vehicles with 'ultra-low emission' alternatives and install charging points for fleet and staff electric vehicles.

9. Public transport providers could invest in new and improved services with smart ticketing and real-time information. They could also replace their fleet with 'ultra-low emission' vehicles.
10. Local companies could grow and create jobs by designing and building components for ultra-low emissions vehicles.

Potential actions by individuals

11. Individuals could switch to walking, cycling or public transport instead of using a car for journeys where possible.
12. Individuals could join car sharing schemes and car clubs in preference to owning private vehicles.
13. Instead of a petrol or diesel vehicle, individuals could buy an ultra-low emission vehicle.
14. Those with an electric vehicle and photovoltaic (PV) panels could buy 'vehicle to grid' equipment to store and trade their renewable electricity via the vehicle battery.

Potential actions by the government

15. The government could increase the funding available to local government to make improvements to walking, cycling, public transport and electric charging infrastructure.
16. The government could continue and increase the grants provided to individuals and businesses for ultra-low emission vehicles and charging points.
17. The government could end sales of petrol and diesel cars earlier than 2040, as is currently planned.