

How green is bus travel?

The average bus in 2016/17 carried just 11.9 passengers. If you excluded the very crowded peak time service buses in our major towns and cities, the average figure for bus use would be considerably lower. It makes many bus services an expensive way of carrying a few people, and means there is a substantial output of exhaust gases, particulates and CO₂ for the typical bus passenger. The argument for large buses is a better ratio of passengers to the cost of the driver and vehicle, but where in many cases there are insufficient passengers wanting that route at that time it obviously dearer and less environmentally friendly than a mini bus or taxi sized vehicle.

This is compounded by the fact that the average bus is 7.6 years old. That means there are still many diesel buses running on UK roads that do not meet modern standards of exhaust emission control. We see these buses discharging smoke and particulate matter as they stand at bus stops or in bus stations with engines running, or as they accelerate away from traffic lights or congestion points.

In 2016 29 cyclists and pedestrians died from accidents involving buses, and 232 people sustained serious injuries from crashes involving buses. Bus drivers usually drive safely and carefully. Many of the crashes were probably not the fault of the bus, but the bus is a large vehicle to deploy on many of our narrow and crowded streets leading to conflicts with other road users. Buses can add to congestion by their need to stop on the carriageway to drop off and pick up, and some bus lanes are designed in ways which greatly reduce the total capacity of the road which they are part of. A road of variable width can offer more traffic conflict by directing buses onto a bus lane for a short distance then back onto the narrow road, then back into the bus lane in ways which slow traffic and may cause misunderstandings and collisions.

Buses are good ways of moving lots of people in very busy urban areas at peak times, and quite good ways of moving people throughout the day in places where enough people want to use these services so they can be frequent. Outside busy places and periods it is not possible to offer a frequent bus service, given the costs of running a large bus. The lack of frequent services then reduces the numbers of people who find it potentially useful. Many people want more flexible public transport like dial a ride services executed by mini buses. Many would prefer a car based service, if it could be made affordable. These different options would also reduce the number of very large vehicles on small roads.