

The Car Dependency Scorecard

- A look at car dependency and what is being done around the country to reduce it



Choices needed to cut dependency

When transport issues are discussed by politicians or the media, the debate tends to be about cars versus public transport and whether people will really choose to leave their cars at home. But for a lot of the travel people do, there is no real choice at all – it's the car or nothing. Or at least that's how people see it. This enforced car use is sometimes referred to as "car dependency".

This car dependency is not just about public transport. There are many reasons why we have as a country become dependent on cars. New housing developments and business parks have been planned around cars and roads and without any public transport anywhere near. Local services – shops, school, and pubs – have closed so people have to travel further to do the same things, and have to drive where they once walked. For the journeys that are still local, people won't walk or cycle because the volume and speed of traffic makes it feel unsafe to do so. And poor/expensive public transport is also part of the picture.

This car dependency is not inevitable. The evidence from other European countries, or in fact from London and some other cities in the UK, is that combinations of planning and transport policies can cut car dependency and that many people respond by cutting their car use and choosing to travel differently or less. This is about giving people real choice, not forcing them to give up cars or driving if they don't want to.

This research aims to map car dependency in English regions properly for the first time. There have been many scorecards of transport, but they've tended to focus narrowly on what's being built or run; none have tried to cover the range of factors that influence how people get about or how much they have to travel.

There are some lessons for each region from this – and things that some areas can learn from others. We've looked at the barriers people face in making choices about travel – are there shops and services within "pram-pushing distance" (to use a phrase coined by David Miliband) or are they car-based? Are walking and cycling a real option for short journeys? How does public transport compare with the car?

We've also tried to look at policies and trends in each region – what's happening to fares, where transport investment is going. And we've tried to give regions credit where new ideas are being tried out. Even if they are only happening in one or two places now, schemes to improve rail station access or make cycling a real option show practical ideas that can be adopted elsewhere.

The real challenge this scorecard poses is to local and national government. Transport can't be thought about in isolation – it has to be linked to wider policies such as planning developments, schools, health services and leisure and making sure people can access these easily. Investment in public transport and cycling and in making streets attractive and safe for walking has to complement these wider policies – it can't work against them. Traditional transport programmes and indicators don't capture these links and so don't measure real progress as experienced by people on the ground.

Getting hold of meaningful statistics has not been easy, and we're not claiming this is the last word. We'd welcome ideas on improving this scorecard (contact details are on the last page) so that it gives a real reflection of how far people are forced to use cars in each area. We hope that people make use of the scorecard to see where their area could improve and the councils and Government use it to improve their decision-making, give people more choice in their travel patterns and thereby improve lives and the environment.



Stephen Joseph,
Executive Director

In this report we set out to show how easy it is for people to travel sustainably – by public transport, cycling and walking – in the different regions of England.

Studies show that people's decisions about how to travel are complex, but there are several key issues that come up over and over again – for example, cost and reliability.¹ We set out to discover how significant the barriers to using public transport were for people in each region.

We know that England is car-dependent; besides the high share the car has of journeys made and miles travelled, the cost of travelling by car is, generally speaking although not everywhere, also lower than that of public transport.

So we have tried to answer key questions to find out why the nation is so dependent on the car, and to highlight regions showing good practice and regions where car-dependence is a special problem. We have looked for information on a number of themes to help us to do this – for example, accessibility, quality, affordability and road safety.

How do we know there is a problem?

The problem is clear. In England just over one-third of trips are made by walking or public transport – but in London this rises to over half.² Everywhere except in the North East and in London, public transport is more expensive than the car – even taking the car's capital cost and maintenance into account:³

	Journeys mainly by walking or public transport	Cost of public transport relative to car (where car = 1)
North East	38.0%	0.97
North West	36.6%	1.41
Yorkshire & Humber	35.6%	1.34
East Midlands	35.4%	1.32
West Midlands	31.9%	1.43
East of England	31.9%	1.57
London	56.3%	0.77
South East	30.6%	1.36
South West	31.0%	1.92

What sources have we used?

To put together the scorecard, we have taken information from a number of sources. The data were chosen to describe how good transport options are for people in the regions. The data about each of the 34 factors we used were converted into scores showing each region's performance, which were in turn combined to give each region's overall grade.

¹ Mulberry Research & Consulting Ltd (for the Department for Transport), Psychological Factors Affecting Transport Mode Choice: Identification and Measurement Tool Development. Retrieved from <http://www.dft.gov.uk/rmd/project.asp?intProjectID=10051>

² Department for Transport, *Regional Transport Statistics 2008*, Table 1.1

³ Our analysis of National Statistics' *Family Spending 2008*, Tables A37 and A40, and Department for Transport's *Regional Transport Statistics 2008*, Tables 1.1 and 1.2

The sources were chosen around several themes:

- How quickly people can get to school, work, public services and amenities without driving, and whether planning policies are improving this
- Whether walking and cycling are good options
- How good the public transport provision is in terms of punctuality, reliability and the extent and accessibility of the service
- How affordable public transport is, how well it is funded, and how many people are satisfied with it

How we used the sources

We faced a challenge when combining our sources, because the statistics related to different topics and were in many cases not directly comparable. We evaluated several grading options, including using the scores as they were without modifying them, and several options which involved placing each score on a scale from zero to 100 or 1 to 10 and using averages to work out the final grade, with or without weighting.

We were looking for a system which made each factor in some way directly comparable to the next, took some account of the different scales and ranges of the source data, and allowed us to be consistent in our treatment of each region and its scores so that we could gain a good view of the overall picture. After much consideration, we have opted for a system which considers only the range in the source data. We have graded the regions described by the source data on a scale from 1 to 10, so that for every question we ask, at least one region will be given a mark of 1 out of 10 and another a mark of 10 out of 10, with the rest of the scores spread out between the two. Data is 'inverted' if necessary so that higher scores always point in the direction of least car dependency.

So it is important to realise that when we give a region a score of 1 out of 10, or 10 out of 10, against a question we ask, this cannot necessarily be translated into an absolute answer to the question. It is just a way of saying how good this region is when compared to its rivals. We are not condemning the region, nor are we saying it is perfect.

The most important question we have asked ourselves is: "How car-dependent is each region?" and we hope that each region's overall grade will provide a rough answer. Each detailed question is important because it contributes to the regions' car-dependency – and every score must be taken together with the others rather than in isolation. We have taken 34 scores which each have just a little meaning on their own and created a composite grade that we intend to be more than the sum of its parts.

This scorecard is about assessing how dependent each region is on the car, not primarily about comparing one region with another. While comparison was necessary to do the scoring, it is only used to give us a better idea of, relatively, how well a region performs on each factor. Scoring from one to eight (the number of regions analysed) would tempt people to regard the marks as 'rankings', which they are not intended to be. Scoring from one to 10 instead gives scores to which people can easily relate.

Geographical area covered

There are a number of reasons why we decided to focus on the English regions, and not to grade London, Wales, Scotland or Northern Ireland.

The situation in London is so different from elsewhere – in terms of decision-making and funding – and so a comparison would have been unfair. This includes separate funding at a higher level than other regions and regional government, including greater powers for the regional transport body (Transport for London). It is also an overwhelmingly urban region.

The other nations of the United Kingdom have devolved administrations and some statistics relating to them are maintained by different bodies from those relating to England. This is a particular problem for Northern Ireland.

Information we were not able to include

We found that much of the information which we would have liked to include in the grading could not be included. This was either because the information was not available in an easily accessible form, or – in most cases – because we did not find any statistics at all about our subjects. Here are some examples:

How much public subsidy do bus services receive?

Information on this is held by the Association of Transport Co-ordinating Officers in their annual benchmarking survey, but we have not been able to access it. We believe that the Department for Transport should take responsibility for maintaining this information, and make it public.

How overcrowded are buses and trains?

Although serious overcrowding on trains is known to be an important barrier to public transport use, little detailed information about it is published. We would like the Department for Transport, train and bus companies and other responsible agencies to publish the regional data they have on overcrowding so that we can include it in future editions.

How many people can reach a train station in a short time by walking, cycling or public transport?

Although the Department for Transport publishes information annually about the numbers living within 13 minutes of a bus stop, the numbers living close to train, tram and metro stations are not published. We would like to see this included in future editions of Government statistics.

How much does it cost people to travel by rail and by bus, tram and metro, for every mile travelled?

We have worked out average figures for public transport cost by using National Statistics' household spending surveys and combining them with information from the Department for Transport. But we would like to be able to find and compare the cost of rail and local bus, tram and metro travel, and we'd like to see detailed information about the cost of travel for different categories of people – for example, elderly people, children and families.

How many cycle paths are there? And are they fit for purpose?

Consistent information about cycle paths is hard to come by. Specifications for the paths are many and varied, and while paths designed to some of these specifications are excellent, those designed to others are next to useless and, some argue, make roads more dangerous. We would like to see a concerted effort by Government to create a definitive record of cycle paths of the various types so that we can evaluate how well the regions promote and facilitate cycling.

Conclusion on methodology

We have taken a wide variety of sources and combined them to produce grades showing car dependency in the English regions. We have made our best effort to create a scorecard which is as fair, consistent and accurate as possible, but our methodology is not perfect. It is difficult to combine scores, and not easy to compare them in a like-for-like manner. We would like to produce this scorecard again in future years, so we welcome comments and suggestions which would enable us to make it even better and help to keep track of the regions' progress in creating viable and sustainable travel options for everyone.

There are several key questions we would like to be able to answer in the future, but cannot at present. The Government, and other bodies which hold this information, should make it public so that we can use it in future editions.

Details of sources used

The sources were chosen around several themes and we detail data sources – the most recent we could find -- below

How easy is people's access to public services, work and amenities? Does planning policy favour sustainable travel?

How many people in the countryside can easily get to a post office, to a primary school and to a pub? (Three factors)

Commission for Rural Communities, *Availability of Services and Outlets by Region 2009*. Percentage of the rural population in the English regions that has a post office, primary school and pub within 2km.

How many households can get to a hospital or GP within 15 minutes? (Two factors)

Department for Transport, *National Travel Survey 2008*, Table 6.10 (Shortest journey time to local facilities on foot or by public transport: 2005 to 2008): Custom subset supplied by Department for Transport

How many people live close to a food store and work? (Two factors)

Department for Transport, *2008 Core Accessibility Indicators*, '16-74-year-olds within 20 minutes of employment by public transport, walking and cycling' and 'Households within 15 minutes of a food store by public transport, walking or cycling'

How many people live close to a bus stop?

Department for Transport, *Regional Transport Statistics 2008*, Table 1.14 (Bus availability by region of residence – households within 13 minutes' walk of a bus stop with a service at least once an hour)

How dense are new developments on greenfield land?

Department for Communities and Local Government, *Live Tables on Land Use Change Statistics*, Table P231 (Land Use Change: Density of new dwellings built, England, 1989 to 2008), On Non-Previously Developed Land

How much of new development takes place on brownfield land?

Department for Communities and Local Government, *Live Tables on Land Use Change Statistics*, Table P212 (Land Use Change: Proportion of new dwellings on previously developed land, by Region, 1989 to 2008), Including conversions

How many Station Travel Plans has each region developed?

Compiled from list of Station Travel Plans on the web at <http://www.stationtravelplans.com/>, September 2009.

How many Access for All station certifications has the region received?

Compiled from list of Access for All stations on the Department for Transport website, September 2009
(<http://www.dft.gov.uk/transportforyou/access/rail/railstations/access/accessforallstations>)

Are walking and cycling good options?

What are the numbers of vehicles driving on major and minor urban roads? (Two factors)

Our analysis of Department for Transport, *Road Traffic Statistics: 2002*, Table 2.2 (Motor vehicle flows by road class, country and Government Office Region: 2002) and Department for

Transport, *Road Statistics 2008: Traffic, Speeds and Congestion*, Table 3.2 (Motor vehicle traffic by road class, country and Government Office Region: 2008)

What are the figures for pedestrians and cyclists killed or seriously injured on the road?
Our analysis of Department for Transport, *Road Casualties Great Britain: 2007*, Table 46b (Casualties by road user type, severity and local authority: 1994-98 average)

How fast does traffic flow during the morning peak in large towns and cities?
Our analysis of Department for Transport, *Road Statistics 2008: Traffic, Speeds and Congestion*, Table 6.2 (Percentage and number of target route segments by urban area, speed band and variability band during morning peak, ten largest urban areas: year ending August 2008)

How many cycling towns does each region have?
Number taken from the website of the Department for Transport, September 2009 (<http://www.dft.gov.uk/cyclingengland/cycling-cities-towns/>)

How many Home Zones does each region have?
List of Home Zones compiled, after advice from the Institute of Highway Engineers, from lists of Designated Home Zone Case Studies (http://www.homezones.org.uk/public/casestudies/cs_search.cfm), Home Zones Challenge sites (http://www.homezones.org.uk/challenge/home_zones_challenge.htm) and pilots and completed schemes (<http://www.homezones.org/homeUK.html>).

How good the public transport provision is in terms of punctuality, reliability and the extent and accessibility of the service

How many scheduled trains are cancelled?
Association of Train Operating Companies, 2009

Did the distances covered by trains increase?
Our analysis of Office of Rail Regulation, *National Rail Trends: 2008-2009 Yearbook*, Table 1.4 (Timetabled train km), Percentage change 2008-09 on 2007-08

Did the distance covered by buses increase?
Our analysis of Department for Transport, *Regional Transport Statistics 2008*, Table 2.2 (Bus kilometres - GOR, FMC and country: 1997/98 - 2007/08)

How many infrequent buses are on time?
Infrequent is defined as five or fewer buses an hour. Source: Department for Transport, *Bus punctuality statistics GB: 2007*, Table 1 (Percentage of non-frequent buses on time by type of stop and region/country: 2007), All Bus Stops

How many trains arrive on time?
Our analysis of Office of Rail Regulation, *National Rail Trends: 2008-2009 Yearbook*, Table 2.1b (Public Performance Measure by TOC)

How many stations are served by the tram or metro? and How big is the tram or metro network?
(Two factors)
Department for Transport, *Transport Statistics Great Britain 2008*, Table 6.2 (Rail systems: 1997/98-2007/08)

How affordable is public transport, is it well funded, and how many people are satisfied with it?

How much does public transport cost per journey? and For families who travel just by public transport, how much of their gross income do they spend on travel?

Our analysis of National Statistics' *Family Spending 2008*, Tables A37 and A40, and Department for Transport's *Regional Transport Statistics 2008*, Tables 1.1 and 1.2

How much have rail fares risen above inflation in the last year?

Our analysis of Office of Rail Regulation, *National Rail Trends: 2008-2009 Yearbook*, Table 5.1 (Average change in price of rail fares 1997-2009)

How much have bus fares risen in the last year?

Our analysis of Department for Transport, *Transport Statistics Great Britain 2008*, Table 6.15 (Local bus services: fare indices by area: 1997/98-2007/08)

How much of local transport capital settlement is spent on integrated transport?

Our analysis of Department for Transport, *Local transport capital settlements* from 2005-06 to 2008-09

How much support do the railways receive for every mile passengers travel?

Our analysis of Office of Rail Regulation, *National Rail Trends: 2008-2009 Yearbook*, Table 6.2c (Subsidy per passenger kilometre by TOC)

How much of the Government's 2005 Kickstart stimulus did each region receive?

Our analysis of the Department for Transport web page *Kickstart 2005* (<http://www.dft.gov.uk/pgr/regional/buses/busgrants/kickstart/kickstart2005>), September 2009

How many people are very or fairly satisfied with local transport information and local bus services? (Two factors)

Department for Communities and Local Government, *Place Survey 2008*, Table 1

	North East	North West	Yorks & Humber	East Midlands	West Midlands	East of England	South East	South West
Car dependency factors								
<i>How quickly people can get to school, work, public services and amenities without driving, and whether planning policies are helping</i>								
How many people in the countryside can easily get to a post office?	10	6.8	7.9	5.9	1	5.1	4.1	5.3
How many people in the countryside can easily get to a primary school?	10	8.5	9.3	8.2	1	6.4	6.5	4.2
How many people in the countryside can easily get to a pub?	3.6	5.1	6.1	6.2	1	2	10	4.2
How many households can get to a hospital within 15 minutes?	9.8	1	4	5.1	7.7	4.3	3	10
How many households can get to a GP within 15 minutes?	10	7	8.3	2.3	2.2	3.5	3.9	1
How many people live close to a food store?	1.3	5.8	7.3	5.4	4.6	10	1	5.1
How many people live close to work?	1	5.2	7.2	6.4	4.9	10	2.5	4.9
How many people live close to a bus stop?	10	9.3	7.9	4.5	5.8	2.4	4.5	1
How dense are new developments on greenfield land?	8.3	7.2	10	6.1	1	8.3	10	5.5
How much of new development takes place on brownfield land?	4	10	8	2	9.5	1	5.5	5
How many Station Travel Plans has each region developed?	5.5	1	5.5	1	5.5	10	5.5	5.5
How many Access for All station certifications has the region received?	1	6.6	2.1	2.1	1	3.3	10	3.3
<i>Whether walking and cycling are good options</i>								
What are the numbers of vehicles driving on major urban roads?	1	10	7.5	7	4.5	9.5	7	5
What are the numbers of vehicles driving on minor urban roads?	1	8.4	10	7.2	1	1.9	2.9	6
What are the figures for pedestrians and cyclists killed or seriously injured on the road?	6.1	2.3	1	7.4	4.9	8.7	7.4	10
How fast does traffic flow during the morning peak in large towns and cities?	1	10	7.9	9.4	5.9	n/a	n/a	5
How many cycling towns does each region have?	3.3	10	3.3	3.3	5.5	10	1	7.8
How many Home Zones does each region have?	3.1	10	2.4	1	3.1	3.8	5.8	4.5

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	North East	North West	Yorks & Humber	East Midlands	West Midlands	East of England	South East	South West
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Car dependency factors

How good the public transport provision is in terms of punctuality, reliability and the extent and accessibility of the service

How many scheduled trains are cancelled?	9	9.2	9	6.4	1	6.8	9.6	10
Did the distances covered by trains increase?	1	5.2	1	10	10	9.2	5	9.7
Did the distance covered by buses increase?	1	3.9	2.1	9.5	7.4	7.9	10	7.9
How many infrequent buses are on time?	1	1	1	1	1	10	10	10
How many trains arrive on time?	4.5	10	5	4	1	5.2	5.7	5.2
How many stations are served by the tram or metro?	4.4	10	3.3	2.2	2.3	1	1	1
How big is the tram or metro network?	10	7.9	4.3	2.6	3.3	1	1	1

How affordable public transport is, how well it is funded, and how many people are satisfied with it.

How much does public transport cost per journey?	10	6.5	5.6	5.1	6.3	2	1.7	1
For families who travel just by public transport, how much of their gross income do they spend on travel?	10	6.1	6.5	6.6	5.2	5.8	6.2	1
How much have rail fares risen above inflation in the last year?	1	1	1	1	1	1	10	1
How much have bus fares risen in the last year?	3.3	1	1	10	3.3	10	10	10
How much of local transport capital settlement is spent on integrated transport?	4.6	10	7.3	5.4	7	4.1	5.3	1
How much support do the railways receive for every mile passengers travel?	9.3	9.3	9.3	3.9	10	1	3	2.4
How much of the Government's 2005 Kickstart stimulus did each region receive?	6	7.1	3.3	5.3	1	10	6.5	6.8
How many people are very or fairly satisfied with local bus services?	8.5	9.4	9.7	10	8.7	1	3.4	2.6
How many people are very or fairly satisfied with local transport information?	8.9	9.3	10	8.5	7	1	4.1	3.7

TOTALS	5.4	6.8	5.7	5.3	4.3	5.4	5.6	4.9
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Duncan MacKenzie is currently working as an intern for Campaign for Better Transport. He is studying for a Master's in Environmental Law and is interested in sustainable transport and climate change. Outside work he volunteers for Young Friends of the Earth Europe, used to indulge a passion for cycling before his bicycle was stolen and enjoys singing, reading, travel, swimming and cross-country skiing when time allows.

Duncan thanks the staff at Campaign for Better Transport for helping to make this project possible.

Campaign for Better Transport is the leading transport NGO. Our compelling arguments and ideas have won us the support of national decision-makers and local activists, enabling us to secure transport policies and programmes that improve people's lives and reduce environmental impact.

Our work is improving public transport, reducing traffic and tackling climate change. Find out how we're doing – and how you can help us do more: bettertransport.org.uk

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September 2009