

New 'Connectivity' statistics and travel time data



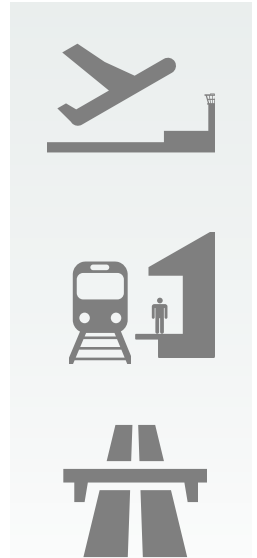
Department for Transport

Are you interested in travel times to strategic destinations, or comparing the connectivity of different areas?

The Department for Transport has developed a new statistical dataset and indicators which aim to measure transport 'connectivity' in a nationally consistent way. We have published [experimental statistics](#) and are **seeking [feedback](#) from potential users** on usefulness, the approach and potential further developments and applications.

The statistics are based on a large dataset of estimated travel times from each neighbourhood in England (origins) to a set of major transport network access points (destinations) – airports, larger stations and major road junctions – separately for travel by car and public transport, and for peak and off-peak periods. Conceptually, this data is equivalent to results of millions of journey planner queries.

Although these statistics focus on transport-related destinations, the methods could easily be extended to other types of destination (for example major trauma centres or distribution centres), and to time periods and geographies other than those shown.



How could the statistics be used?

The dataset allows a series of nationally-consistent summary indicators to be produced and mapped. Potential applications could include:

Analysing travel times

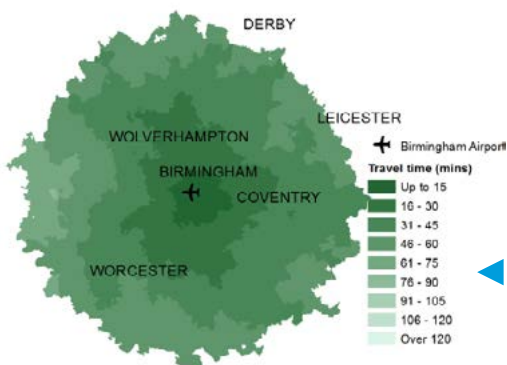
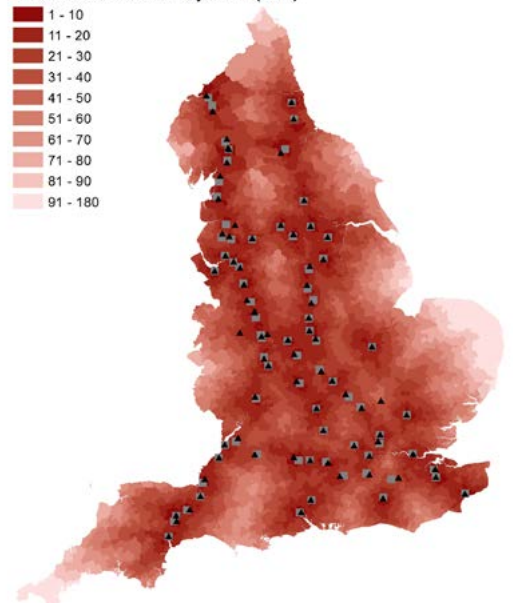
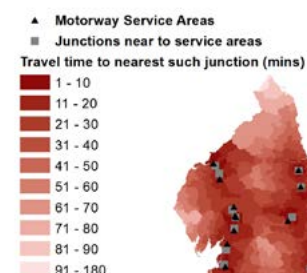
- Visualising patterns at national and local level
- Calculating summary statistics
- Validating transport (or other) models.

Travel times to motorway junctions near service areas, morning peak

e.g. approximately 70% of the population of England is within 30 minutes drive of a motorway service area.

The average travel time is an estimated 27 minutes.

Travel times to Birmingham airport by car, morning peak



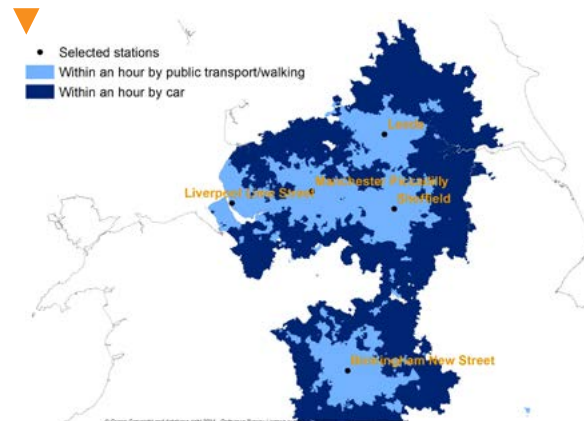
Comparing destinations

- Calculating travel time catchments
- Measuring local access (ease or difficulty of getting to a particular destination)

Comparing connectivity of different areas

- e.g. % population within given travel times of destinations
- Defining nationally-consistent indicators to show and quantify 'hot' and 'cold' spots of connectivity within and between areas
- Could be used as a sense check of other evidence

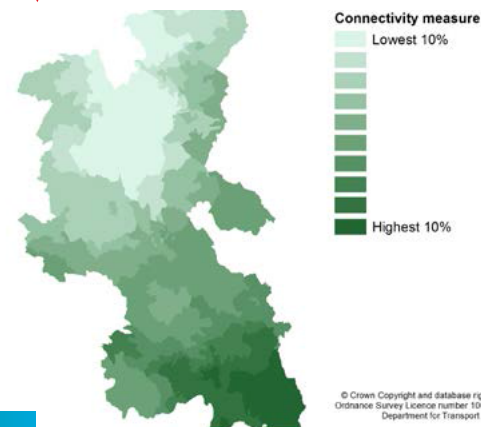
Travel time catchments for selected rail stations



e.g. around 5 million people live within an hour of Birmingham New Street station by car in the morning peak.
70% of people living within 20km can get there in half an hour.

Indicator showing connectivity to airports, within Buckinghamshire (darker shading = better connectivity) ▼

e.g. over 90% of the population of the West Midlands are within an hour by car of one of the 15 largest British airports compared with 36% of people living in the South West



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Request for feedback

We would be grateful for any feedback, either by completing our [short user feedback survey](#), by email to subnational.stats@dft.gsi.gov.uk or phone 020 7944 3076. We would particularly like views on:

- ▶ Are statistics of this type potentially useful (and if so, for what uses)?
- ▶ Are there other destinations of interest we could add? Other geographies that would be helpful?
- ▶ Would you be interested in figures for other years, to enable monitoring of trends?
- ▶ Do you have any comments on the way we've calculated or presented the results?
- ▶ Should we continue to develop statistics like this?

Further information

We have illustrated some potential applications in a short report, set out details of how the figures are calculated, and also made the dataset available on data.gov.uk, to allow users to explore further - see links to the right.

These connectivity statistics are a development of the established [accessibility statistics](#) which DfT has published for many years, and which provide a local-level measure of the availability of transport to key local services such as schools, food stores and GPs. The content of these statistics is currently being reviewed, and any feedback is welcome. The next statistics, for 2013, will be published in August.

Although this data has been commissioned by DfT, there are software packages, used for accessibility planning, which enable similar calculations to be performed and 'what if' type analyses to be carried out. We are currently exploring the use of these and are happy to discuss if we could potentially help with your work.

Links...

[Summary report](#)

[Statistical data tables](#) comparing local authorities and destinations

[Technical guidance notes](#)

[Underlying data on data.gov.uk](#)

Online [user feedback form](#)