



# National Travel Survey

## Trip Chaining: 2002-2014

The National Travel Survey is the Department for Transport’s key source of data for understanding individual travel patterns. This factsheet summarises results about linked trips for different purposes (“trip chains”) during the morning peak, based on data for England from 2002 to 2014.

There are different ways in which ‘trip chains’ can be defined. Here, we adopt a loose definition which is equivalent to looking at the trips individuals make within a defined period of time - the morning peak (7 - 10 am). This includes both chains as more tightly defined (for example, where someone breaks a journey to work to take a child to school) but also travel patterns where, for example, within a defined time period, someone makes a trip for one purpose, returns home and then makes another trip (e.g. taking the children to school, returning home and then travelling to work). Essentially, we are looking here at individual people’s trip-making within the morning peak period.

The NTS is a valuable source for understanding travel patterns, however it applies several definitions which can obscure changing travel behaviour. In particular, the NTS defines a commute as a journey from home to usual place of work only. On this definition, 16% of all trips are for commuting. However, this means that if a (non-trivial) break in the journey is made, for example to take children to school on the way to work, the trip is no longer classified as a commute according to the definition. Understanding travel patterns such as trip chaining in more detail can be helpful in providing insight into such behaviours.

This factsheet presents a brief initial look at trip-chaining patterns. Much further work would be possible, and suggestions for follow-on analysis would be welcome.

### Proportion of working adults going from home to work via another destination during the weekday morning peak:



Full-time  
**9%**

Part-time  
**13%**



Full-time  
**12%**

Part-time  
**26%**

### Trends



Since 2002 ...

there has been little change for men or women in the percentage of morning chains direct from home to work

## Definitions used in this factsheet

In the NTS, a **trip** is defined as a one-way course of travel with a single main purpose. In this factsheet, the term **link** is used with the same meaning.

**Chain:** A series of 1 or more “links”, carried out by the same person for different purposes, within the given time period, (regardless of the length of pauses between trips). For the morning peak, only chains beginning from home were considered.

**Escort education** trips are those made by adults (aged 16 or over), to accompany a child aged between 5 and 16 where the main purpose is education, excluding trips over 50 miles. For the purpose of this factsheet, **school trips** refer to escorting children to or from school.

**Morning peak:** All trips which began after 07:00 and ended by 09:59, on weekdays (Monday - Friday).

**Work:** Destinations to usual place of work have been combined with business trips for other work-related purposes. These therefore include a wider range of trips than those usually coded as “Commuting”.

**Coverage:** All trips made by adults aged 16 or over, in England, between 2002 and 2014 inclusive.



## Most travel in the morning is direct to work

### Travel during the morning peak:

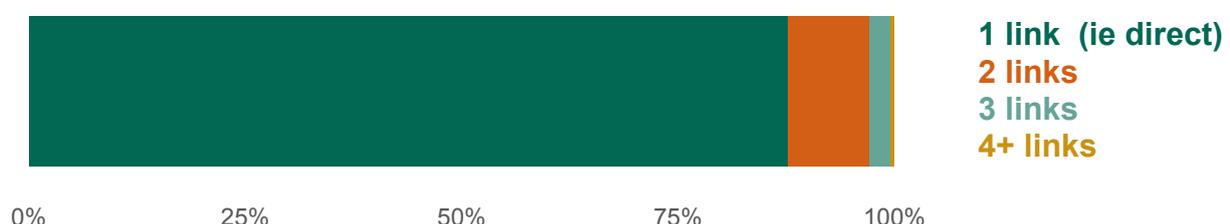
Looking at how people travel during the weekday morning peak period (7am - 10am), we see that, for all adults that travel during this period:

- **62%** make a trip to work
- **12%** make a trip to take a child to school
- **3%** both travel to work and take a child to school
- **29%** travel only for other purposes (e.g. shopping, personal business)

### Most people that travel to work do so directly:

Most people that travel to work during the morning peak go direct from home to work - this is a ‘chain’ which has just a single link (i.e. goes from A to B only, with no further travel). These direct journeys account for 88% of trips to work. The remainder include trips for one or more other purposes on the way, or after arriving at work - these are trips with 2 or more ‘links’.

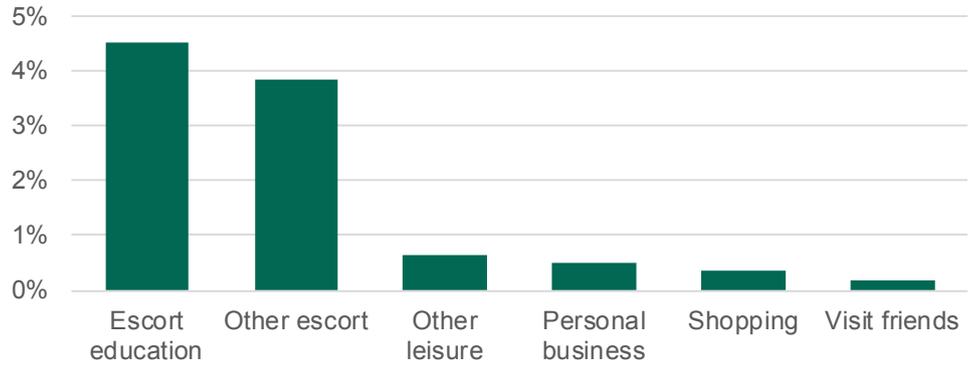
### Proportion of trips from home to work by number of ‘links’: England, 2002-2014



**When trips to work are not direct, the main reason is to take a child to school:**

When trips to work are not direct from home, the most common reasons are to take a child to school, or to escort someone else for another purpose (eg taking a partner to their work). Note that some of these 'trip chains' could involve then returning home, before travelling on to work.

**Proportion of trips to work by first destination from home (where this is not work): England, 2002-2014**



**Women are more likely to combine other purposes on their way to work**

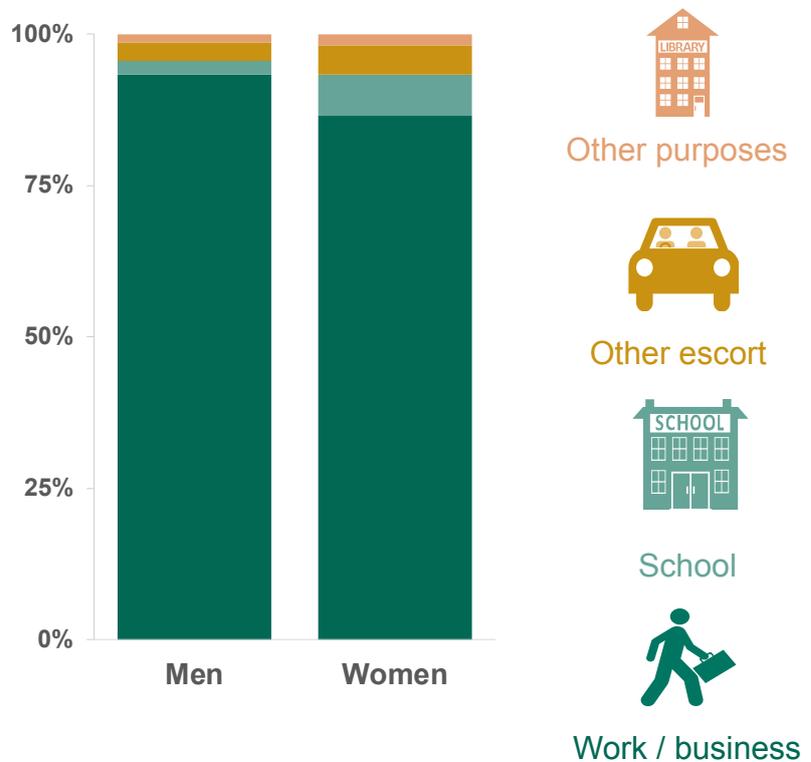
**Travel to work by gender:** There are gender differences in the proportion of people that combine travelling to work with trips for other purposes.

Women are more likely than men to combine other purposes on their way to work.

Of all people travelling to work during the morning peak, 93% of men go direct from home to work, compared with 86% of women.

Women are more likely than men to go to work via school (7%), escorting others (5%) or other purpose (2%).

**Where people go first from home, for people travelling to work, by gender: England, 2002-2014**

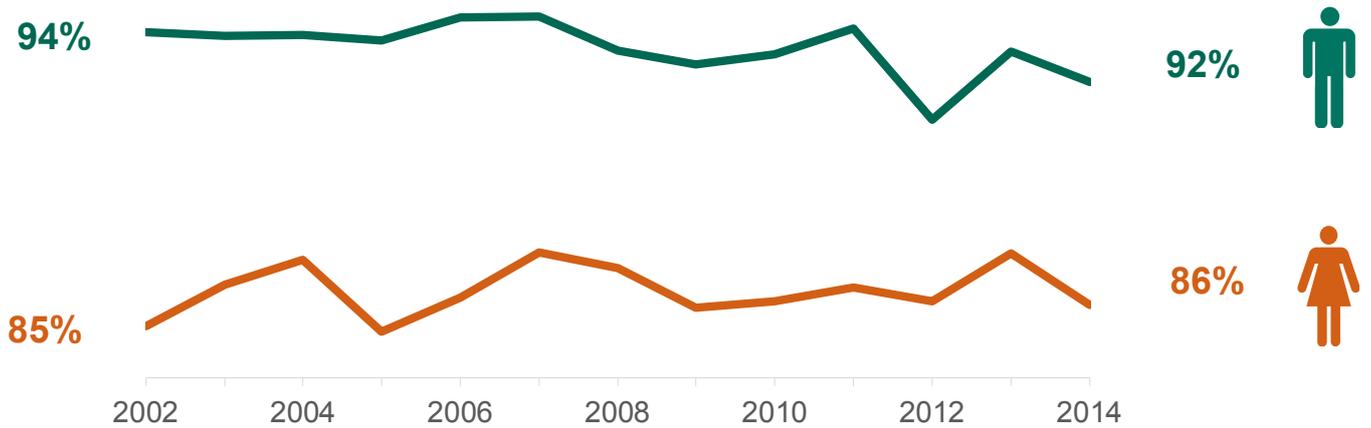




## Proportion of trips direct from home to work broadly stable since 2002

The proportions of trips directly from home to work in the morning, and the associated gender differences, have changed little over the time period studied here (using the definitions considered here).

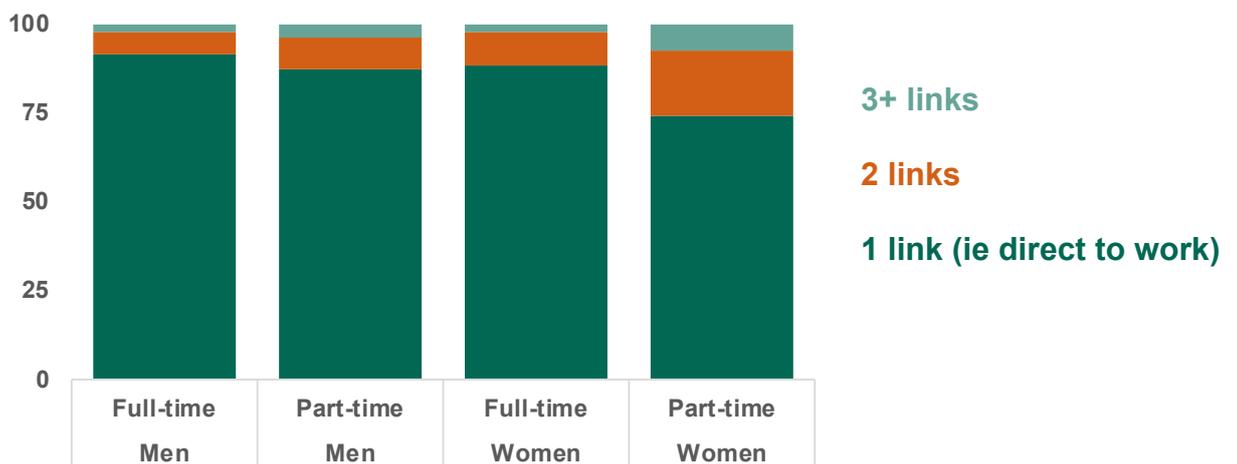
### Trips directly to work, as % of all trips which involve travelling from home to work, by gender (morning peak only)



## Women working part time are more likely to 'trip chain' than others

Looking at people who travel from home to work during the morning peak period, women who work part time are less likely to travel to work directly than either women that work full time, or men of either working status (ie full or part time). 26% of women working part time include trips for other purposes (eg taking children to school) as part of the journey to work - these are 'trip chains' which involve more than 1 link.

### Number of 'links' in trip chains which involve travelling from home to work, by gender and employment status





## Background and references

### The National Travel Survey

The National Travel Survey is the Department for Transport's key source of data on personal travel behaviours since 1965. Data is collected from around 16,000 individuals each year through a face-to-face interview and a 7-day travel diary. The survey covers residents of England of all ages, which makes it a powerful tool to understand topics like travel to work or school.

### Tables and raw data

Statistics from this factsheet relate to published tables:

- ▶ [NTS0303](#): Average number of trips, by main mode, since 1995/97
- ▶ [NTS0409](#): Average number of trips by purpose and main mode
- ▶ [NTS0502](#): Trip start time by trip purpose (Monday to Friday only)
- ▶ [NTS0601](#): Average number of trips by age, gender, and main mode, since 1995/97
- ▶ [NTS0611](#): Average number of trips by age, gender and purpose, since 2002

### Further possible analysis

This factsheet just examines some of the basic features of trip chaining. It would be possible to make further analysis, such as:

- ▶ What other purposes are combined with school trips?
- ▶ How do chains containing school trips vary between single parents, and 2 or 3 adult households?
- ▶ How does trip chaining vary between households with or without children?
- ▶ What purposes are combined with evening trips from work, just as far as home?

### Further references

More details about travel behaviours of English residents can be found in the 2014 National Travel Survey [publication](#):

More factsheets on specific topics from the National Travel Survey can be found at: <https://www.gov.uk/government/publications/nts-factsheets>

### Contact us

For any questions or queries in relation to this factsheet, please contact the National Travel Survey team:

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