From: **NOMIS-SUPPORT G.G.** nomis.support@durham.ac.uk
Subject: Re: percentage outgoing commute per district
Date: 9 May 2019 at 13:15
To: Pieter Libin pieter.libin@vub.ac.be

NG

Hi Pieter

This is down to the treatment of homeworkers and people with no fixed place of work in the 2011 Census origin-destination (flows) datasets. In the 2001 census these groups could not be identified in the origin-destination datasets and as they had become a more significant proportion of the population by 2011, census users requested that ONS provide a way to identify them in the 2011 origin-destination data.

To achieve this, the commuting flows datasets include a special place of work geography called "at home, offshore, not fixed or outside UK". You need to include these special categories as well as the standard geographies when selecting place of work to get the total population count for an area.

You also asked about literature that explains how the collected data is extrapolated to the full population. This is available on the ONS website at:

https://www.ons.gov.uk/census/2011census/2011censusdata/2011censususerguide/qualityandmethods

If you have specific follow-up questions about the methodology, these would best be addressed to the Census Customer Services team (census.customerservices@ons.gov.uk; 01329 444972).

Best regards,
Sinclair

Sinclair Sutherland, Nomis helpdesk
t: 0191 334 2680
e: support@nomisweb.co.uk
w: www.nomisweb.co.uk

From: owner-support@nomisweb.co.uk <owner-support@nomisweb.co.uk> on behalf of Pieter Libin <pieter.libin@vub.ac.be>
Sent: 08 May 2019 19:06
To: support@nomisweb.co.uk
Subject: percentage outgoing commute per district

Dear,

let me start by thanking you for this great service.

I'm trying to compute the percentage of outgoing commuters per district, throughout the UK.
I believe that the WU03UK dataset is best suited for this purpose.

I performed a query with the following parameters:
- “Method of Travel To Work”: "All categories: Method of travel to work (2001 specification)”
- “Place of work”: Combobox “All” for the "2011 census merged local authority districts”, all other comboboxes “None"
- "Usual Residence”: Combobox “All” for the "2011 census merged local authority districts”, all other comboboxes “None”

This query results, as expected a matrix that encodes:
- all possible cross-district interactions
- intra-district population (on the diagonal of the matrix)

Please find the matrix that I exported in attachment.

From the “Method of Travel To Work” option, as I selected “All categories”, I would expect that one row contains the entire employed population.
This is confirmed at the top of the file, in the statement: “Population: All usual residents aged 16 and over in employment the week before the census”.

In order to compute the percentage of outgoing commute, I was planning:
- to compute the sum of each district’s row, i.e., district_total
- compute the amount of commute, i.e., district_total - no_inter_district_commute, where no_inter_district_commute is the value on the diagonal of the matrix
- the percentage of outgoing commute can than be computed as:
  (district_total - no_inter_district_commute) / district_total

Now, when I compare district_total, with the employment census data, there seems to be a difference.
When I sum the first row of the matrix, for the district of Hartlepool, I obtain a total population size of 32210.
However, when I lookup the employed population in Hartlepool [1], it is 35800 on average for the year 2011.

Do you know what could be the cause of this difference?

Furthermore, I was wondering that you could point me to literature that explains how the collected data is extrapolated to the full population?

Thanks in advance and kind regards,

Pieter

From: **Pieter Libin** pieter.libin@vub.ac.be
Subject: percentage outgoing commute per district
Date: 8 May 2019 at 20:06
To: support@nomisweb.co.uk

PL

Dear,

let me start by thanking you for this great service.

I'm trying to compute the percentage of outgoing commuters per district, throughout the UK.
I believe that the WU03UK dataset is best suited for this purpose.

I performed a query with the following parameters:
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Pieter

flow.csv