

## 2011 Census Travel to Work Pattern Data

### Introduction

ONS has recently published some initial sets of ‘flow’ (Origin – Destination) data from the 2011 Census, including travel to work flow patterns. So far, fairly basic data at Local Authority and MSOA level has been published, though data for smaller areas is expected shortly, and data containing further detail is expected during the autumn. This report details the key results from the Travel to Work pattern data at local authority level for the Tees Valley so far, and shows how the flows have changed since the 2001 and 1991 Censuses.

### Notes on Data

The flows record the journey to work for anyone (aged 16+) in employment in the week preceding the Census in 2011. People are recorded by the place of usual residence and their normal place of employment. People who work at home, or who’s workplace is not fixed (eg a Plumber), are recorded separately, though in this report, they are included in the count of working within the district of their home residence. People working offshore are classified separately, along with those who work outside the country. However, significant numbers of people are recorded as travelling to work in Scotland, and it is likely that many of these may actually work offshore. The Census was taken in March 2011, when the Redcar blast furnace was closed – this will obviously have an impact on the results, particularly flows to Redcar & Cleveland borough.

### Overall Numbers

	Residents in Work			Workers		
	1991	2001	2011	1991	2001	2011
Darlington	39,140	42,972	49,215	39,830	45,540	52,345
Hartlepool	31,370	33,973	37,894	30,280	32,066	34,337
Middlesbrough	46,440	49,269	54,709	57,540	57,422	63,077
Redcar & Cleveland	52,630	54,322	56,593	46,650	45,659	46,104
Stockton on Tees	65,520	75,891	87,397	65,960	76,283	86,629
<b>Tees Valley</b>	<b>235,100</b>	<b>256,427</b>	<b>285,808</b>	<b>240,260</b>	<b>256,970</b>	<b>282,492</b>

*Residents in Work: People usually resident in Tees Valley, who were in employment (16+)*

*Workers: Anyone 16+ in employment with a work address in the Tees Valley*

Overall, it’s clear that the number of both residents in work, and people working within the Tees Valley has steadily increased over the last 20 years. The number of Tees Valley residents in work has increased 11% since 2001 and nearly 22% since 1991, whilst the number of people working in the Tees Valley has gone up by 10% since 2001 and 18% since 1991. The exception has been in Redcar & Cleveland, whether the number of people working there has changed little. In contrast, the number of residents in work and those working in Stockton has increased by around one third since 1991.

## Travel to Work Flows

A spreadsheet showing detailed flows at local authority level is available [here](#). A further sheet with data at county level with changes since 1991 and 2001 is available [here](#). In addition, this report has an Appendix with some key summary data. Diagrammatic maps showing travel to work flows are also included towards the end of the report.

Generally, the pattern of flows has changed little since 2001, especially within the Tees Valley itself. The overall levels of self-containment within the Tees Valley remain very high with nearly 87% of residents working within the Tees Valley (88% in 2001), and an unchanged 88% of people who work within the Tees Valley are residents. At borough level, self-containment has increased very slightly since 2001. Middlesbrough remains the least self-contained borough with only 52% of people working there living in the borough, and Hartlepool the most self-contained, with 75% of workers also living there. Some flows to Redcar & Cleveland have decreased, reflecting in part, the non-operation of the blast furnace at the time of the Census.

### Tees Valley Flows to/from Neighbouring Counties

	Durham	North Yorks	Tyne & Wear	Leeds	Day Commuters	Elsewhere
Out Flow 2011	10,568	9,662	5,843	663	27,073	10,992
In Flow 2011	17,461	8,947	4,567	250	31,876	2,873
<i>Net Flow 2011</i>	-6,893	715	1,276	413	-4,803	8,119
Out Flow 2001	8,699	6,768	4,692	598	20,981	9,774
In Flow 2001	14,795	9,595	3,671	178	28,604	2,835
<i>Net Flow 2001</i>	-6,096	-2,827	1,021	420	-7,623	6,939

*Day Commuters: people travelling between the Tees Valley and anywhere in the North East, North Yorkshire, York or Leeds. Negative net flow figures indicate a net inflow.*

Changes have been to flows to and from areas outside the Tees Valley have been more significant. Flows to and from Durham and to and from Tyne & Wear have all increased, with an increased net inflow from Durham compared to 2001. However, whilst the outflow to North Yorkshire has increased, the inflow has actually decreased, meaning that the historic net inflow has changed to a small net outflow. This is a surprising finding, indicating that increasing numbers of people are finding jobs within North Yorkshire, rather than the Tees Valley. However, the net inflow has been falling over time - from 4,260 in 1991 to 2,827 in 2001.

In terms of commuting journeys likely to be taken on a daily basis (assumed to be to/from areas within the North East, North Yorkshire, York and Leeds), both in and outflows have increased, though associated with the decreasing flow from North Yorkshire, the daily net inflow has declined. Regarding journeys to further parts of the country, journeys to work outside of the UK (including workers in the offshore industry) have increased, though journeys to and from other parts of the UK beyond the daily commuting range are little changed. There remain significantly more Tees Valley residents who travel to work in other parts of the country than people doing the reverse, for example 1,629 Tees Valley residents work in London and the South East, compared to 363 residents of those areas working in the Tees Valley.

### Small Area Information

Data on travel to work patterns will in principle be made available down to small areas such as output areas and Workplace Zones, though there will be restrictions on the availability of this data. So far, ONS has released data flows to MSOA level – unlike previous Censuses,

data for Wards will NOT be published. Even MSOA to MSOA flow data is complicated to analyse, with around 10,000 potential flows within the Tees Valley alone, many of which will be very small. As a first step, we have summarised the origins of workers in the 21 MSOAs with the most workers (accounting for around 62% of all workers).

### Origins of Workers in MSOAs with Most Workers

MSOA Area Covered	Workers	Darl	Hart	Mbro	R&C	Stock	Durham	Nth Yorks
Faverdale/ Morton Park	11,098	43%	1%	3%	2%	8%	24%	4%
Darlington Town Centre/ North Rd	15,261	60%	1%	2%	1%	6%	18%	5%
Lingfield	7,690	55%	1%	3%	2%	8%	17%	5%
Middleton St George / Airport	3,131	38%	1%	3%	3%	12%	10%	6%
Hartlepool Harbour /Headland/ Hospital	4,839	1%	64%	2%	1%	7%	11%	0%
Hartlepool Marina	5,221	1%	70%	3%	1%	7%	8%	0%
Hartlepool Town Centre	7,403	1%	71%	3%	1%	7%	8%	1%
Seaton Carew/Power Station	3,888	1%	52%	5%	4%	14%	8%	2%
Hartlepool Queens Meadow	3,110	1%	55%	5%	3%	12%	8%	1%
Mbro – Centre/Riverside Park /University	26,296	3%	3%	39%	19%	22%	4%	4%
James Cook Hospital	9,181	2%	2%	42%	22%	17%	3%	6%
Redcar Town Centre	5,092	1%	0%	7%	75%	4%	0%	2%
Wilton / Teesport	8,964	2%	3%	17%	52%	14%	2%	4%
Guisborough	3,716	1%	1%	8%	67%	6%	1%	6%
South Bank/ Skippers Lane	6,952	2%	2%	22%	43%	14%	2%	3%
Seal Sands	8,605	3%	10%	12%	9%	49%	6%	3%
Wynyard	3,818	5%	7%	6%	5%	37%	11%	1%
N Tees Hospital	4,722	3%	7%	5%	3%	62%	7%	2%
Stockton TC/Portrack/ Preston Farm	21,669	4%	4%	13%	8%	56%	5%	3%
Teesdale/ Teesside Park	10,385	4%	4%	19%	10%	47%	5%	3%
Thornaby Centre/Teesside Ind Est	4,209	3%	2%	16%	8%	55%	4%	3%

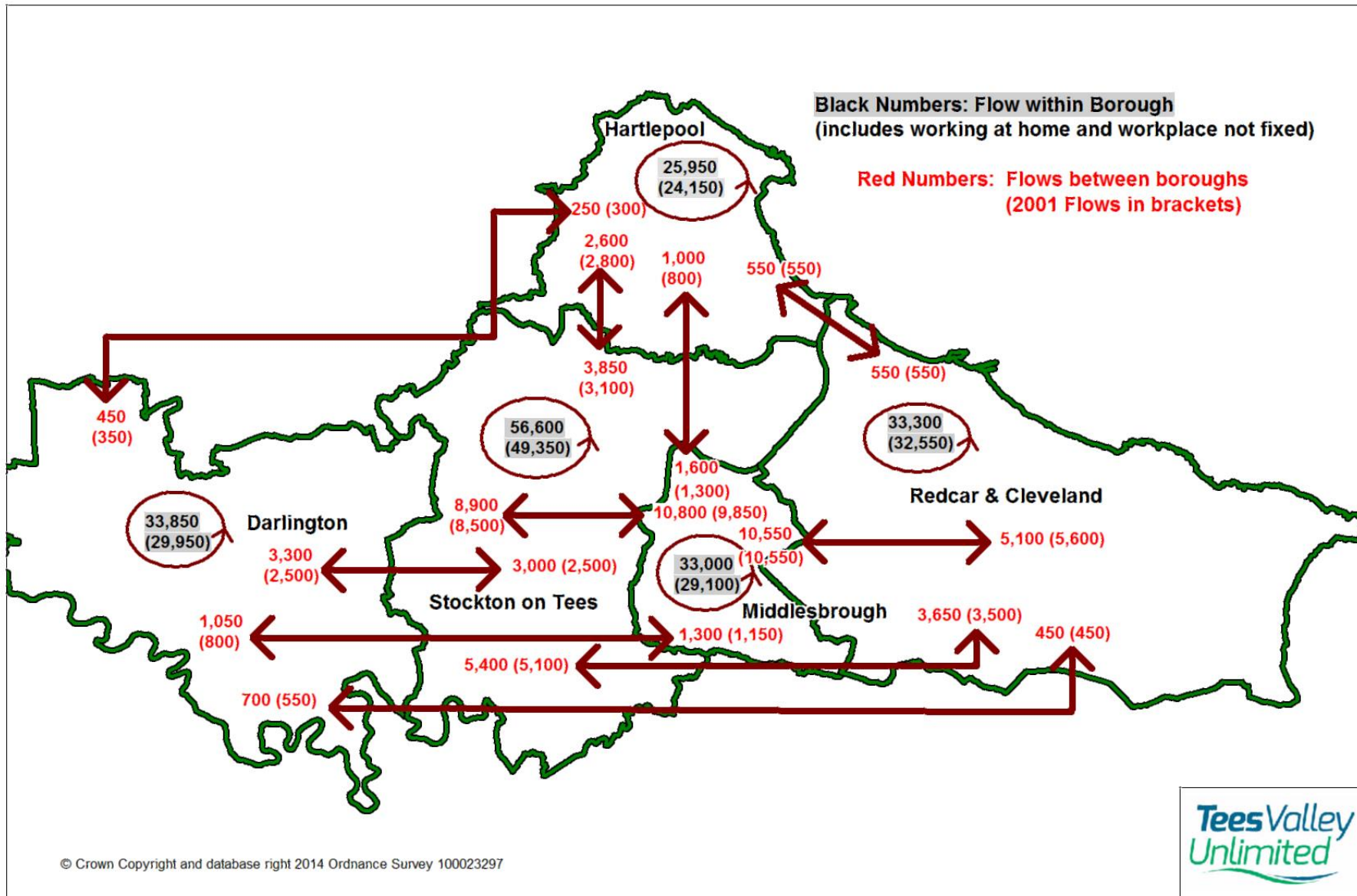
The above table shows that in general, most workers live reasonably close to their place of work, with relatively small proportions crossing a borough boundary in most cases. However, Durham residents provide a significant proportion of the workers in most of the key Darlington MSOAs, and also in the Hartlepool area.

### Summary

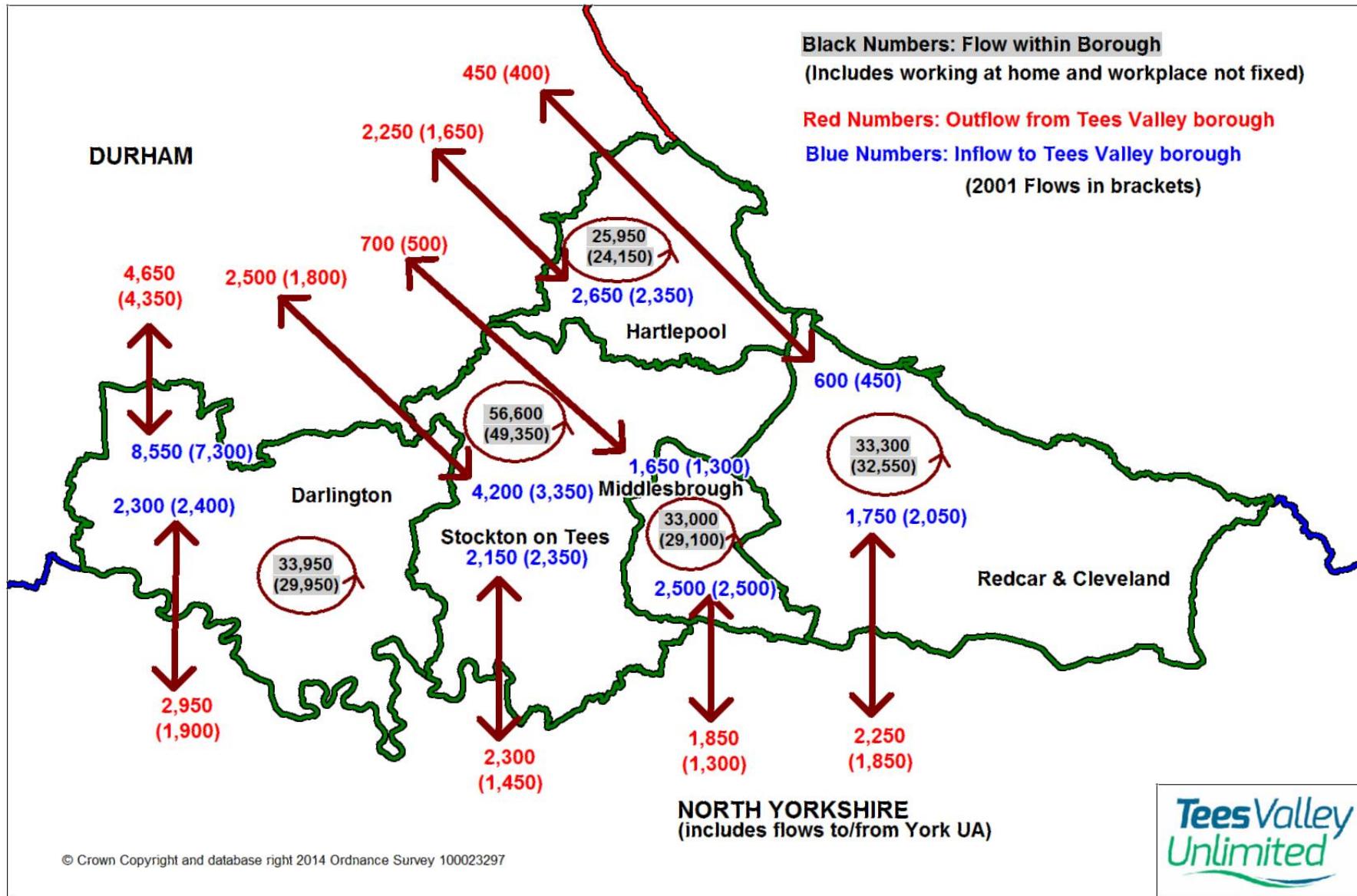
The travel to work data from the 2011 Census shows that the number of people travelling to work has increased significantly compared to previous Censuses. Whilst most flows have increased, overall commuting patterns within the Tees Valley have changed very little, with levels of self-containment remaining high at over 87%, with most people living reasonably close to their place of work. In contrast, there were bigger changes to flows between the Tees Valley and Neighbouring counties. There were significant increases in flows to and from Durham, with a higher net inflow especially to Darlington. However, inflows from North Yorkshire have decreased, resulting in the previous net inflow becoming a small net outflow. A substantial number of Tees Valley residents work in other parts of the country, though this number hasn't increased since 2001, though more Tees Valley residents are working abroad or offshore.

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## 2011 CENSUS TRAVEL TO WORK DATA - FLOWS BETWEEN TEES VALLEY BOROUGHES



## 2011 CENSUS TRAVEL TO WORK DATA - FLOWS TO NEIGHBOURING COUNTIES



Appendix  
2011 Flows - Summary

Usual Residence	Darl	Hart	Mbro	R&C	Stock	Tees Valley	T&W	Durham	NYorks	Other UK	Non GB	Resident Wkrs
Darlington	33,866	266	1,300	467	3,014	<b>38,913</b>	1,177	4,629	2,941	1,326	229	<b>49,215</b>
Hartlepool	433	25,958	1,591	534	3,865	<b>32,381</b>	1,359	2,269	282	1,100	503	<b>37,894</b>
Middlesbrough	1,030	990	32,993	5,111	8,889	<b>49,013</b>	760	710	1,861	1,529	836	<b>54,709</b>
Redcar & Cleveland	682	558	10,569	33,291	5,387	<b>50,487</b>	639	465	2,256	1,607	1,139	<b>56,593</b>
Stockton-on-Tees	3,317	2,590	10,779	3,652	56,611	<b>76,949</b>	1,908	2,513	2,322	2,569	1,136	<b>87,397</b>
<b>Tees Valley</b>	<b>39,328</b>	<b>30,362</b>	<b>57,232</b>	<b>43,055</b>	<b>77,766</b>	<b>247,743</b>	<b>5,843</b>	<b>10,586</b>	<b>9,662</b>	<b>8,131</b>	<b>3,843</b>	<b>285,808</b>
Tyne & Wear	1,075	793	854	327	1,518	<b>4,567</b>						
County Durham	8,552	2,665	1,656	592	4,176	<b>17,641</b>						
N Yorks / York	2,301	250	2,480	1,745	2,171	<b>8,947</b>						
Elsewhere	1,089	267	855	385	998	<b>3,594</b>						
<b>Tot Workers</b>	<b>52,345</b>	<b>34,337</b>	<b>63,077</b>	<b>46,104</b>	<b>86,629</b>	<b>282,492</b>						

Change 2001-2011

Usual Residence	Darl	Hart	Mbro	R&C	Stock	Tees Valley	T&W	Durham	N Yorks	Other UK	Non GB	Resident Wkrs
Darl	3,903	-27	139	36	501	<b>4,552</b>	216	282	1,049	125	19	<b>6,243</b>
Hart	87	1,788	275	6	758	<b>2,914</b>	293	612	68	-177	211	<b>3,921</b>
Mbro	229	182	3,878	-504	375	<b>4,160</b>	114	206	539	14	407	<b>5,440</b>
R&C	129	30	42	741	296	<b>1,238</b>	162	78	384	-171	580	<b>2,271</b>
Stock	835	-187	918	148	7,269	<b>8,983</b>	366	709	854	163	431	<b>11,506</b>
<b>Tees Valley</b>	<b>5,183</b>	<b>1,786</b>	<b>5,252</b>	<b>427</b>	<b>9,199</b>	<b>21,847</b>	<b>1,151</b>	<b>1,887</b>	<b>2,894</b>	<b>-46</b>	<b>1,648</b>	<b>29,381</b>
T&W	345	123	104	60	264	<b>896</b>						
Durham	1,258	300	340	139	809	<b>2,846</b>						
NYorks	-112	13	-44	-318	-187	<b>-648</b>						
Other	131	49	3	137	261	<b>581</b>						
<b>Total Workers</b>	<b>6,805</b>	<b>2,271</b>	<b>5,655</b>	<b>445</b>	<b>10,346</b>	<b>25,522</b>						

In these tables, places of residence are arranged in rows, whilst the places of work are in columns. As there are two flows (one in each direction) between a pair of boroughs, care should be taken to ensure that the correct flow is identified from the tables.

## Where Residents Work 2011

	Darl	Hart	Mbro	R&C	Stock	Tees Valley	T&W	Durham	NYorks	Other UK	Non GB
Darlington	68.8%	0.5%	2.6%	0.9%	6.1%	79.1%	2.4%	9.4%	6.0%	2.7%	0.5%
Hartlepool	1.1%	68.5%	4.2%	1.4%	10.2%	85.5%	3.6%	6.0%	0.7%	2.9%	1.3%
Middlesbrough	1.9%	1.8%	60.3%	9.3%	16.2%	89.6%	1.4%	1.3%	3.4%	2.8%	1.5%
Redcar and Cleveland	1.2%	1.0%	18.7%	58.8%	9.5%	89.2%	1.1%	0.8%	4.0%	2.8%	2.0%
Stockton-on-Tees	3.8%	3.0%	12.3%	4.2%	64.8%	88.0%	2.2%	2.9%	2.7%	2.9%	1.3%
<b>Tees Valley</b>	13.8%	10.6%	20.0%	15.1%	27.2%	86.7%	2.0%	3.7%	3.4%	2.8%	1.3%

## Where Workers Live 2011

	Darl	Hart	Mbro	R&C	Stock	Tees Valley
Darlington	64.7%	0.8%	2.1%	1.0%	3.5%	13.8%
Hartlepool	0.8%	75.6%	2.5%	1.2%	4.5%	11.5%
Middlesbrough	2.0%	2.9%	52.3%	11.1%	10.3%	17.4%
Redcar and Cleveland	1.3%	1.6%	16.8%	72.2%	6.2%	17.9%
Stockton-on-Tees	6.3%	7.5%	17.1%	7.9%	65.3%	27.2%
<b>Tees Valley</b>	75.1%	88.4%	90.7%	93.4%	89.8%	87.7%
Tyne & Wear	2.1%	2.3%	1.4%	0.7%	1.8%	1.6%
County Durham	16.3%	7.8%	2.6%	1.3%	4.8%	6.2%
N Yorks / York	4.4%	0.7%	3.9%	3.8%	2.5%	3.2%
Elsewhere	2.1%	0.8%	1.4%	0.8%	1.2%	1.3%

Flow Summary	Within	Outflow			Inflow			Net Flow		
		TV	Day	All	TV	Day	All	TV	Day	All
Darlington	29,963	5,047	14,006	15,439	4,182	17,587	18,479	865	-3,581	-3,040
Hartlepool	25,958	6,423	10,432	11,936	4,404	8,192	8,379	2,019	2,240	3,557
Middlesbrough	32,993	16,020	19,525	21,726	24,239	29,353	30,084	-8,219	-9,828	-8,358
Redcar and Cleveland	33,291	17,196	20,744	23,302	9,764	12,493	12,813	7,432	8,251	10,489
Stockton-on-Tees	56,611	20,338	27,390	30,786	21,155	29,275	30,018	-817	-1,885	768
<b>Tees Valley</b>	247,743		27,073	38,065		31,876	34,749		-4,803	3,316
<b>2001 Tees Valley</b>	225,896		20,981	30,755		28,604	31,439		-7,623	-684

Day Flows: To/From any district in the NE, North Yorkshire, York or Leeds