

Day-to-day variability in travel to, from and during work



Going to work – Groundhog Day?



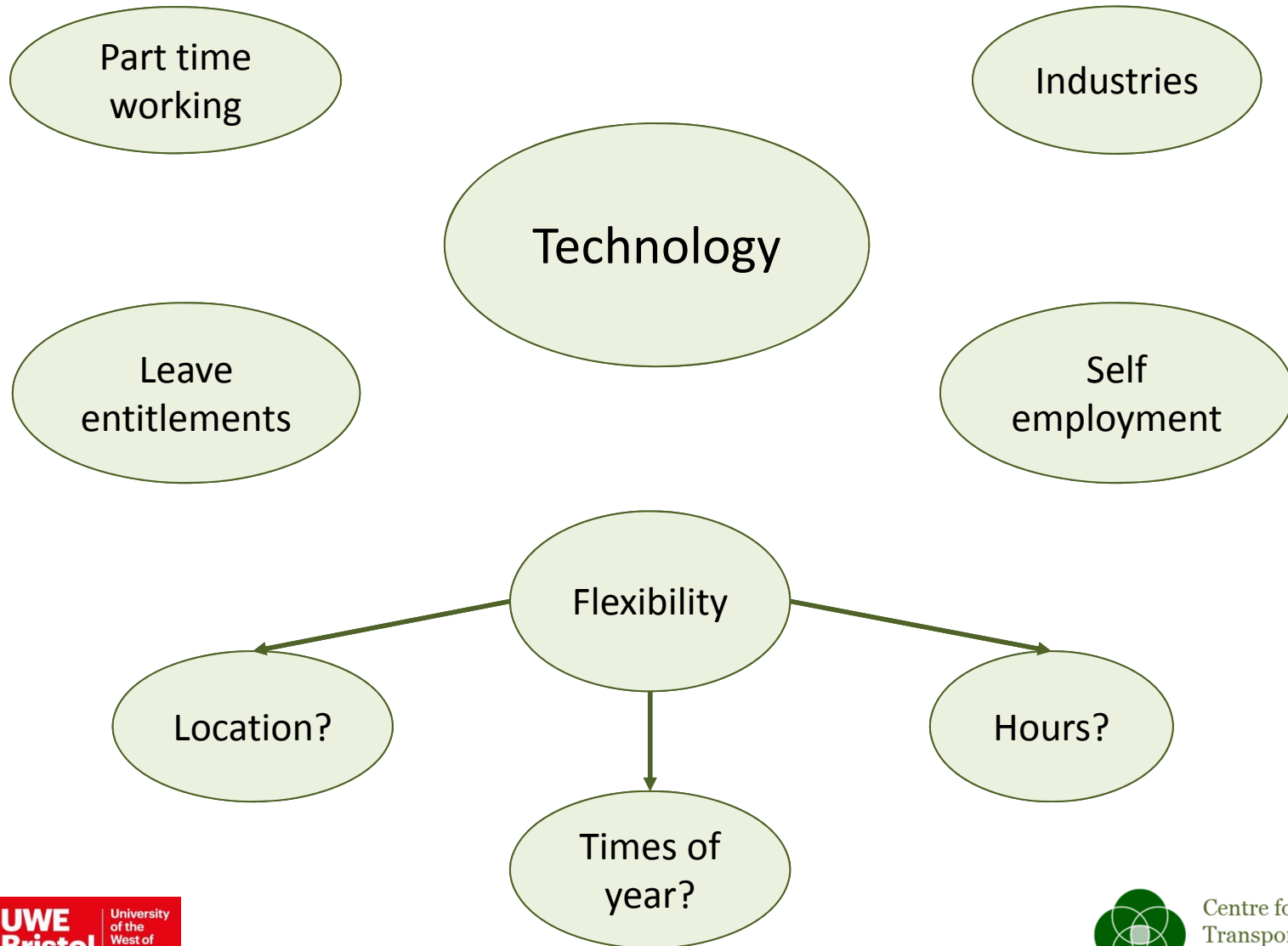
Why does it matter?

One person for 5 days \neq Five people for 1 day each

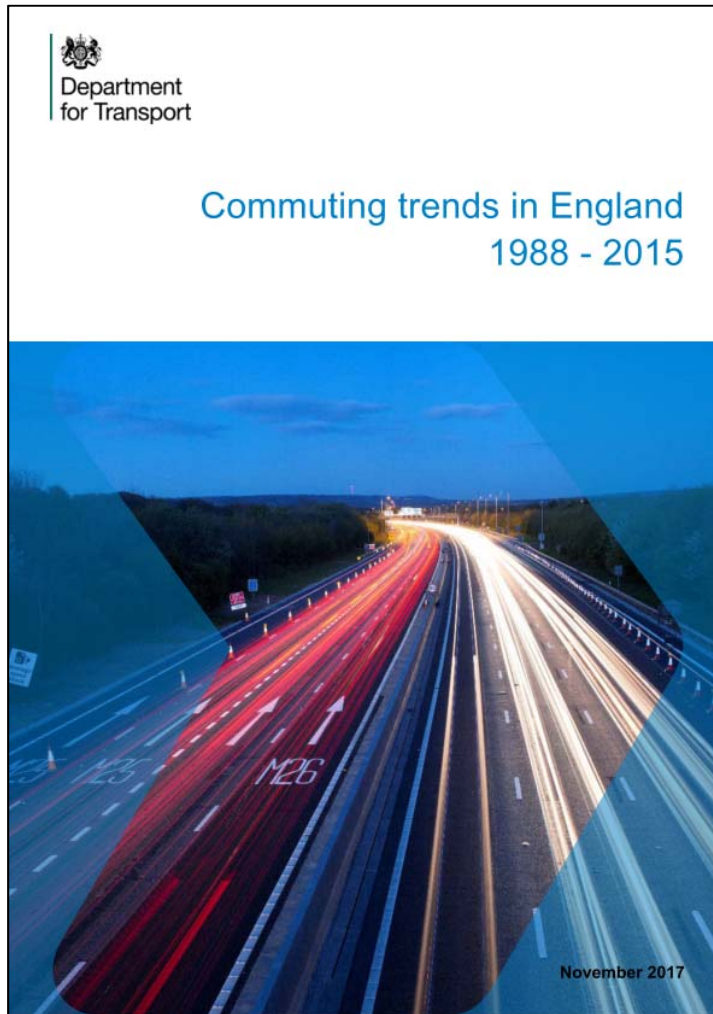
Need for flexibility in timing?

Multiple locations, multiple transport needs?

The nature of work is changing...



How is commuting changing?



- Overall decline in the number of commuting trips
- Commuting on fewer days per week
- Fewer commuting trips during the 'morning peak'
- More part time working
- More people are self-employed
- More home working
- Commute distance and duration increasing

This research

Can we identify groups of workers based on the predictability of their travel to, from and during work?





National Travel Survey

- Data for England
- 1998-2016 only
- Household and individual surveys
- Individual seven day travel diaries

DAY 1 Mon Tues Wed Thur Fri Sat Sun

Remember to complete your mileage chart

For help with filling in please unfold side flap for notes

On this day only, please include all walks (even walks under a mile)

Turn over for more journeys

JOURNEYS Please record each journey on a new row. Include very short ones and return journeys.

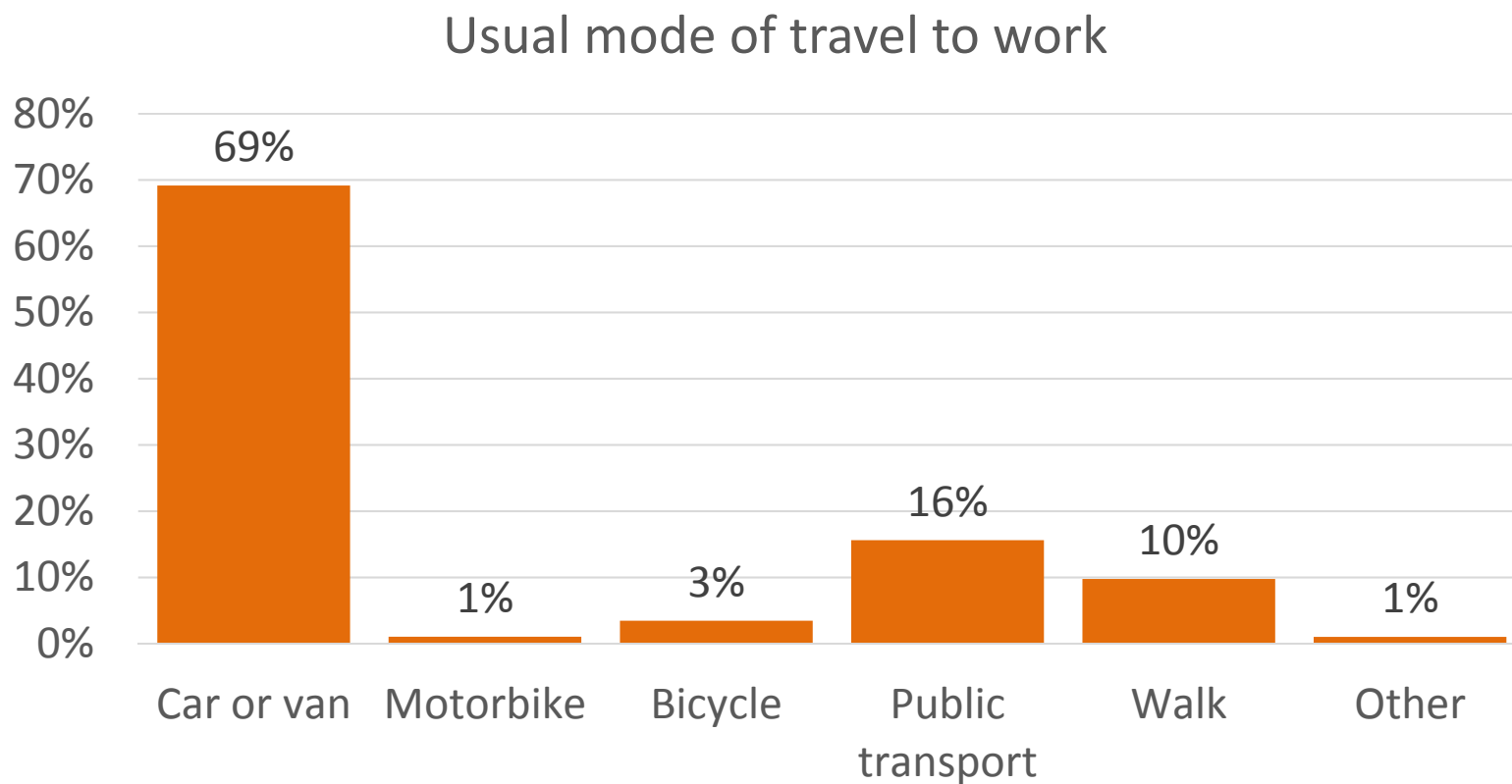
JOURNEYS					STAGES				Only fill in these columns if you used a CAR or OTHER MOTOR VEHICLE			Only fill in these columns if you used PUBLIC TRANSPORT		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
What was the purpose of your journey? <small>See Note A</small>	What time did you leave? <small>See Note B</small>	What time did you arrive? <small>See Note C</small>	Where did you start your journey? (Tick Home or give the name of the village, town or area) <small>See Note D</small>	Where did you go to? (Tick Home or give the name of the village, town or area) <small>See Note E</small>	What method of travel did you use for each stage of your journey? <small>See Note F</small>	How far did you travel? (Miles) <small>See Note G</small>	How long did you spend travelling? (Minutes) <small>See Note H</small>	How many people travelled including you? <small>See Note I</small>	Which car or other motor vehicle did you use? <small>See Note J</small>	Were you the driver (D) or a passenger (P)? <small>See Note K</small>	How much did you pay for parking? <small>See Note L</small>	What type of ticket did you use? <small>See Note M</small>	How much did your ticket cost? <small>See Note N</small>	How many times did you board? <small>See Note O</small>
1	Time : : <input type="checkbox"/> am <input type="checkbox"/> pm	Time : : <input type="checkbox"/> am <input type="checkbox"/> pm	<input type="checkbox"/> Home	<input type="checkbox"/> Home	1					<input type="checkbox"/> D <input type="checkbox"/> P	£ : : <input type="checkbox"/> NI		£ : : <input type="checkbox"/> NI	
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USE THIS SPACE FOR ANYTHING ELSE YOU WANT TO TELL US

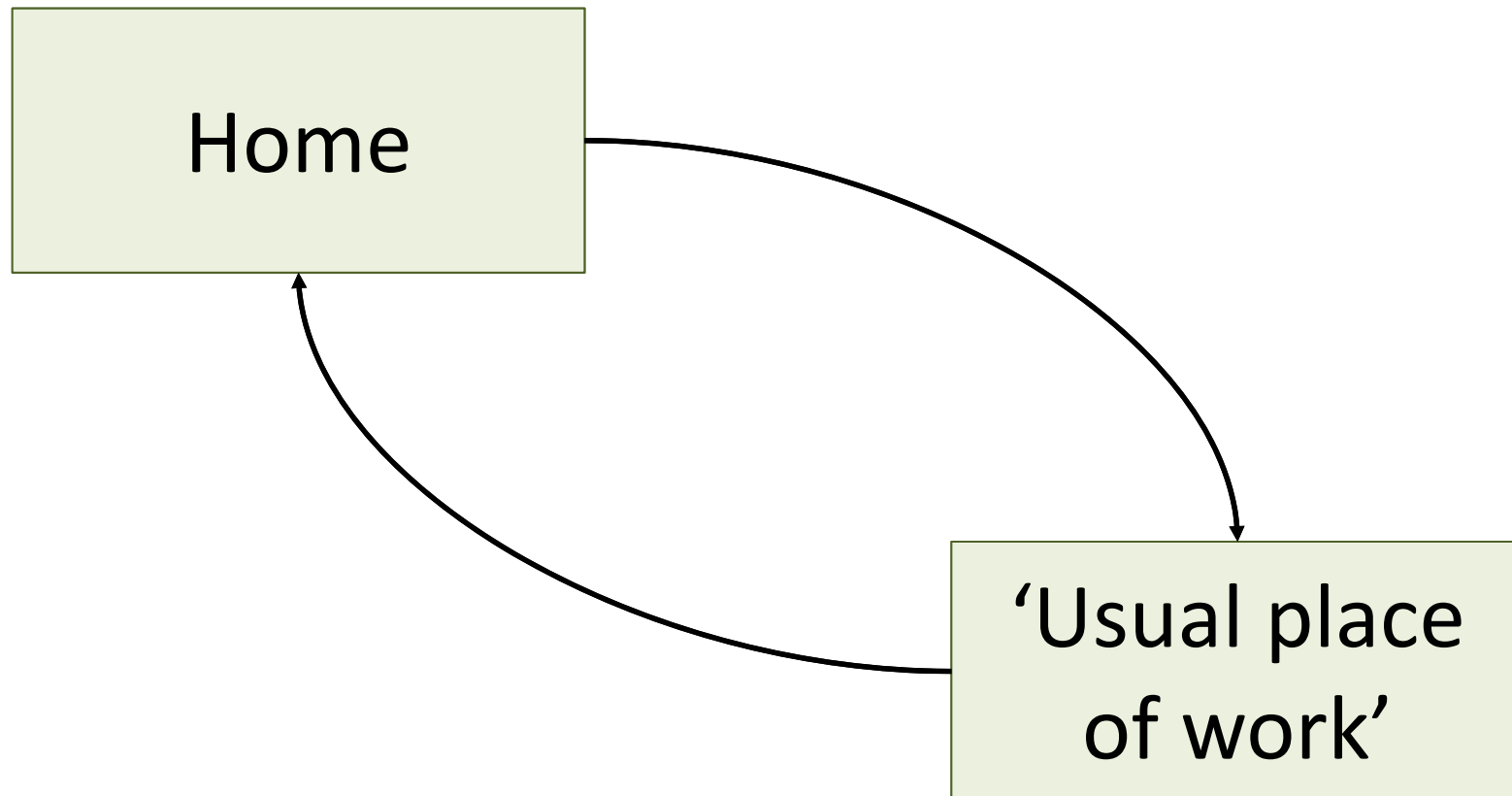


Overview of employed respondents

- 118,194 people with more than one diary day
- 74% full time / 26% part time
- 87% employee / 13% self-employed



National Travel Survey definitions



Clustering variables

Days travelled

Usual workplace?

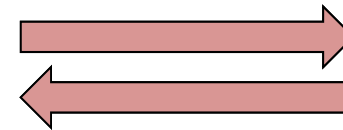
Other?

Trips made

Commuting?

Business?

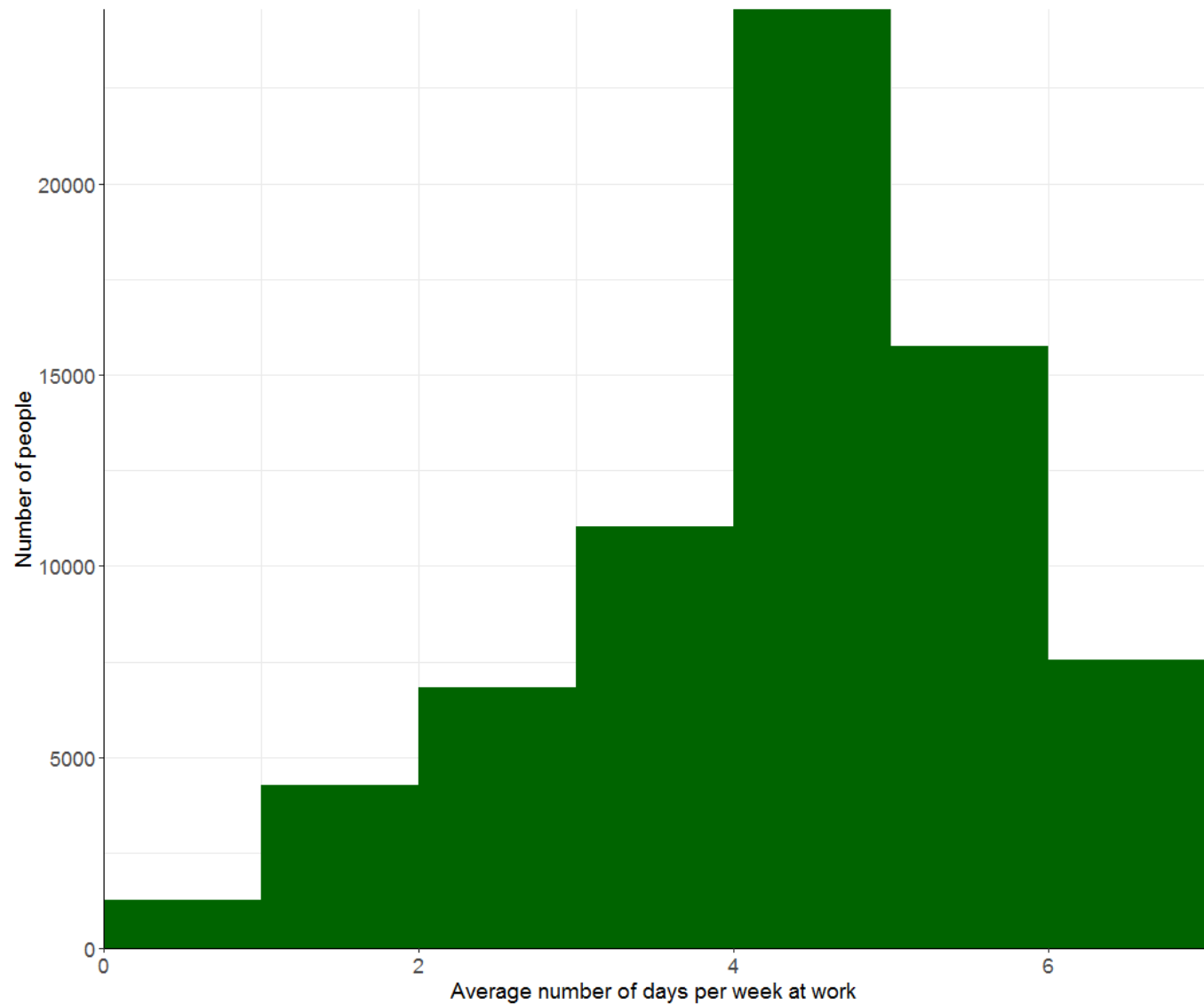
Times of day



Four clusters of survey respondents

Description	% of people	Days per week at usual workplace	Days per week at other workplaces	Commute trips per day	Variability in time depart FOR work	Variability in time depart FROM work
Infrequent	20%	0.6	0.1	0.1	N/A	N/A
Spatially variable	8%	0.6	3.9	0.3	N/A	N/A
Temporally variable	12%	5.0	0.1	2.0	high	high
Regular	60%	4.7	0.1	1.6	low	low

Regular work travel

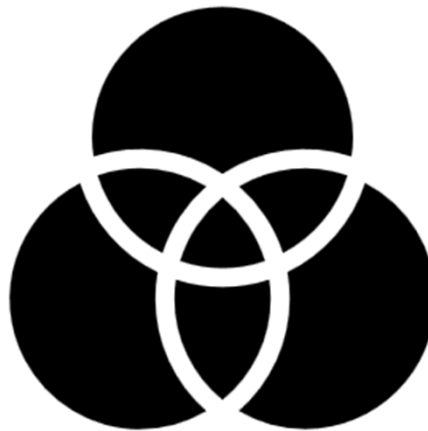


Infrequent

12% are aged
60+



41% part time



23% self employed

14% home workers

Spatially variable

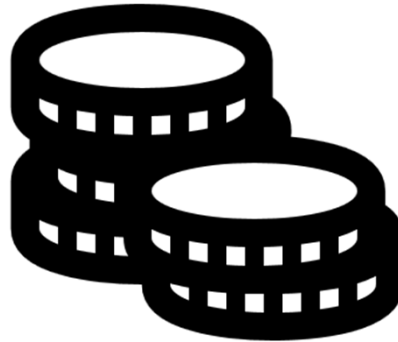
12% are aged
60+



Part time



Self employed



Work from home at
least once per week



Temporally variable

Mostly employees with a usual workplace who are unlikely to work from home

Higher % earn less than £25k per year than regular group

8% are aged
20 or younger

8% are aged
60+

Regular

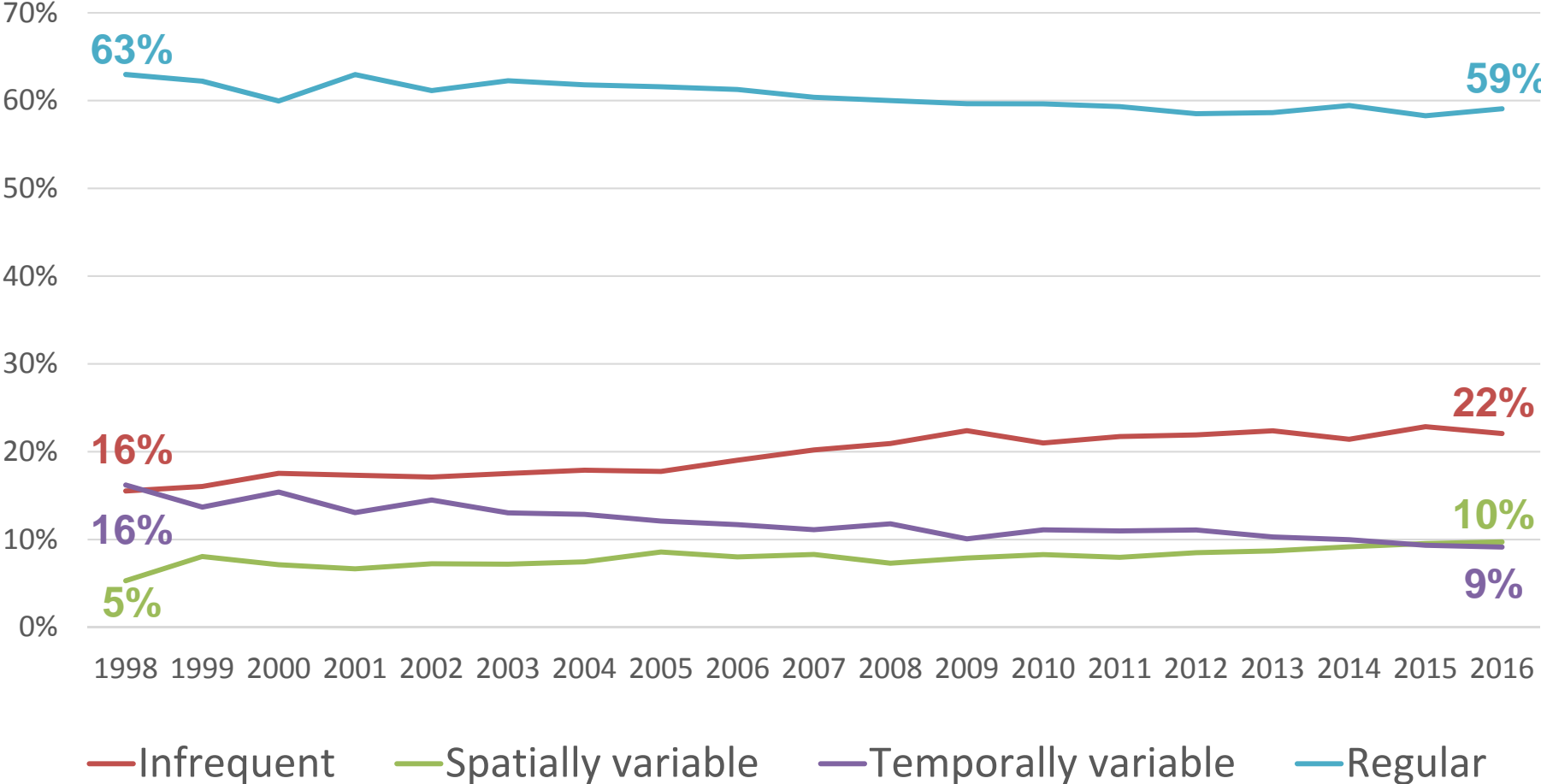
Mostly employees with a usual workplace

Only 4% work from home at least once per week

83% live in urban areas

8% are aged
60+

Changes over time



Mode choice for commuting trips

Description	Trend over time	Usually by car	Usually by bike	Usually walk	Usually by public transport
Infrequent	up	64%	2%	19%	12%
Spatially variable	up	80%	2%	5%	11%
Temporally variable	down	73%	5%	8%	10%
Regular	down	69%	4%	8%	18%

Take home messages

- Things are changing... Are we keeping up?
- Are we collecting all of the data we need about work and travel?
- What about the future?

Further work is required!

Thank you for listening!



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