Presentation by

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Travel Time on the Digital Train

Chiltern Railways

If you think our way, travel our way.

"Continuously Connected Customer: WiFi on Trains"

6 Sept 2016

UWE Bristol | University of the West of England

Centre for Transport & Society

Outline

- Research context
- Research design
- Base line survey findings
- Conclusions
- What happens next

Context

- Government aim for free WiFi across rail network
  - Is it worth the investment?

Rail industry

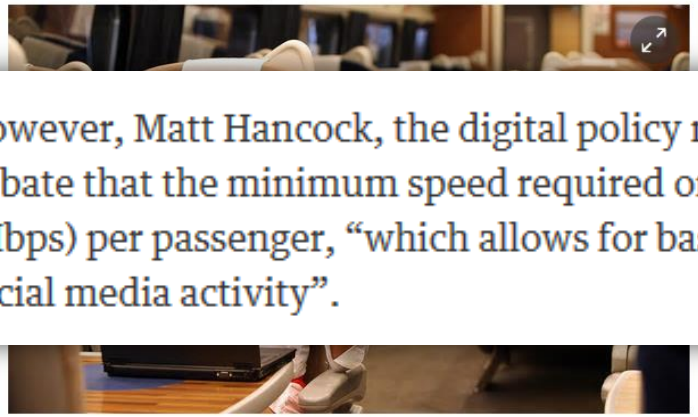
Government promise of fast, cheap Wi-Fi on trains goes off the rails

Despite pre-election pledge, standard specification is only one megabit per second with many firms failing to offer free access

Mark Leftly

Monday 21 November 2016 19.27 GMT

186 577



A woman uses a laptop on board a GNER train. Photograph: Lewis Whyld/PA

Train companies will only have to provide slow free Wi-Fi for customers despite a government pledge to introduce "fast, cheap internet connections" across the rail network.

Before the general election, the government announced that all train operators bidding on future franchises and direct contracts in England and Wales would have to include free Wi-Fi as part of their pitches.

However, Matt Hancock, the digital policy minister, revealed in a parliamentary debate that the minimum speed required on those bids was 1 megabit per second (Mbps) per passenger, "which allows for basic web browsing, basic email and social media activity".

https://www.theguardian.com/business/2016/nov/21/rail-network-fast-cheap-wi-fi-trains-internet-access

Existing research

- Limited evidence
- WiFi noted in some travel time use studies as important
  - Business travellers
  - Commuters (dependent on work culture)
  - Younger travellers
- STG study for DfT – Mobile connectivity (phone and internet)
  - Stated preference survey
  - Passengers are willing to pay more for some increase in mobile connectivity
  - only business travellers willing to pay for 80-100% connectivity
  - Passengers want reliability over internet speed
- US study WiFi may encourage more trips from existing passengers
  - Suggested growth 2.7%

Project partners & Funder

- Arriva Trains UK
  - Chiltern Railways
  - BAS LLP
  - CTS UWE

- TOC 15 - RSSB

Aims

What do passengers want?

The **primary aim** of the research is to understand the WiFi data requirements to meet rail passengers' expectations on board trains in order to inform the rail industry about supply needs.

What do passengers do?

The **secondary aim** is to develop a detailed knowledge base about the technologies used by passenger while on the move and associated internet access choices and how these activities affect modal choice and customer satisfaction.

Objectives

The **objectives** of the research are to provide robust evidence to the rail industry and telecoms suppliers regarding:

- Passenger response to different levels of WiFi data provision
  - changes in use of internet
  - customer satisfaction
  - attractiveness of rail travel over other modes
- understanding passengers' technical expectations of internet connectivity
  - type of mobile device (smartphones, laptops, tablets etc.)
  - mechanisms of connecting to the internet (WiFi, 4G etc)
- understanding the purpose for internet connectivity
  - work, social, personal, etc
  - email, file sharing, web browsing, social media, gaming, video
  - time/space use (productive time, passing time, privatising space, security concerns)
- how WiFi connectivity affects customer satisfaction and modal choice

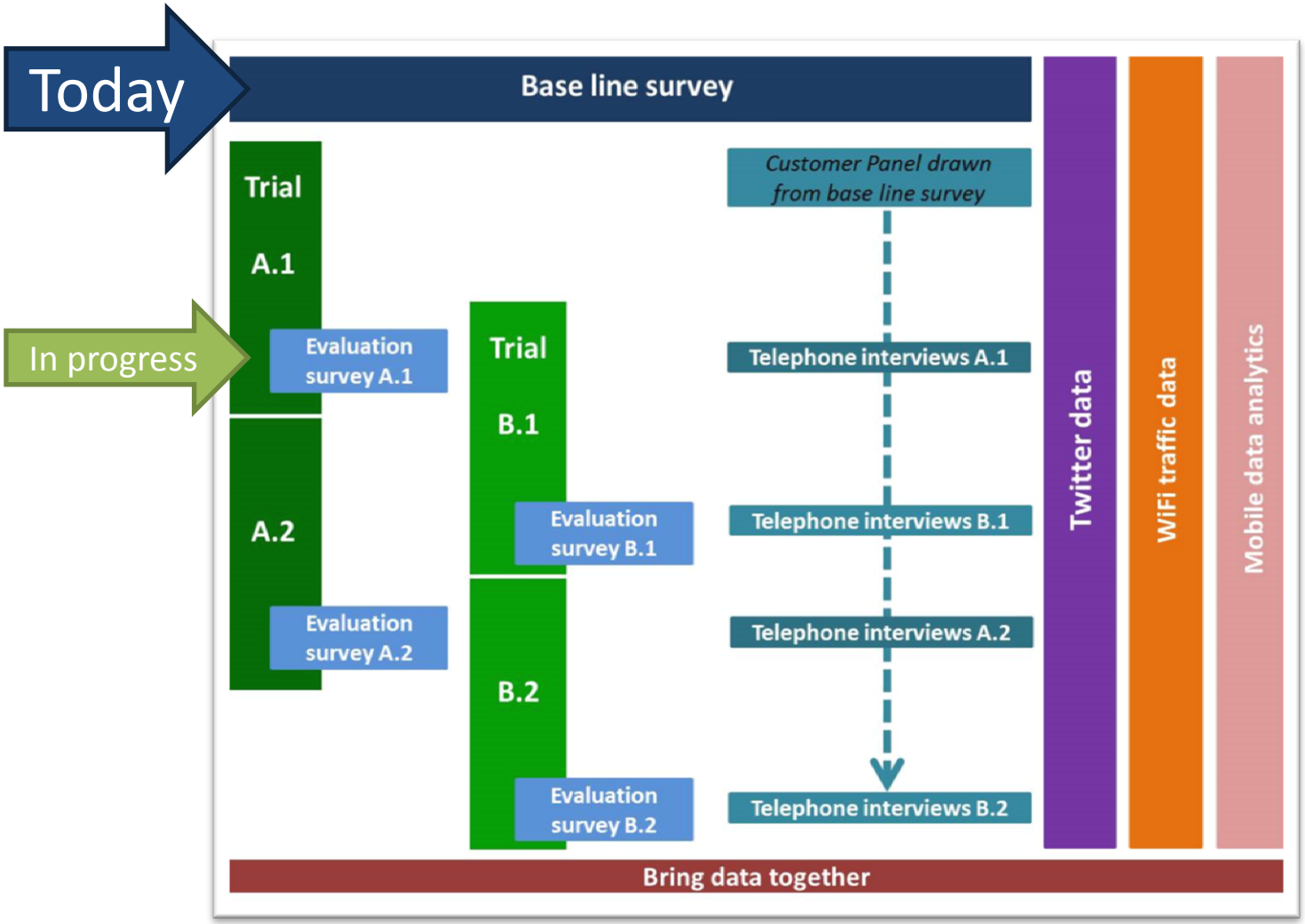
Research design

- Two Chiltern routes:
  - Birmingham to London
  - Aylesbury to London

- Trial A two levels of WiFi B'ham to London
  - 25MB (existing)
  - 75MB (A1) 20 weeks
  - 125MB (A2) 20 weeks

- NB MB per device

Quantitative and Qualitative



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The baseline survey and sample

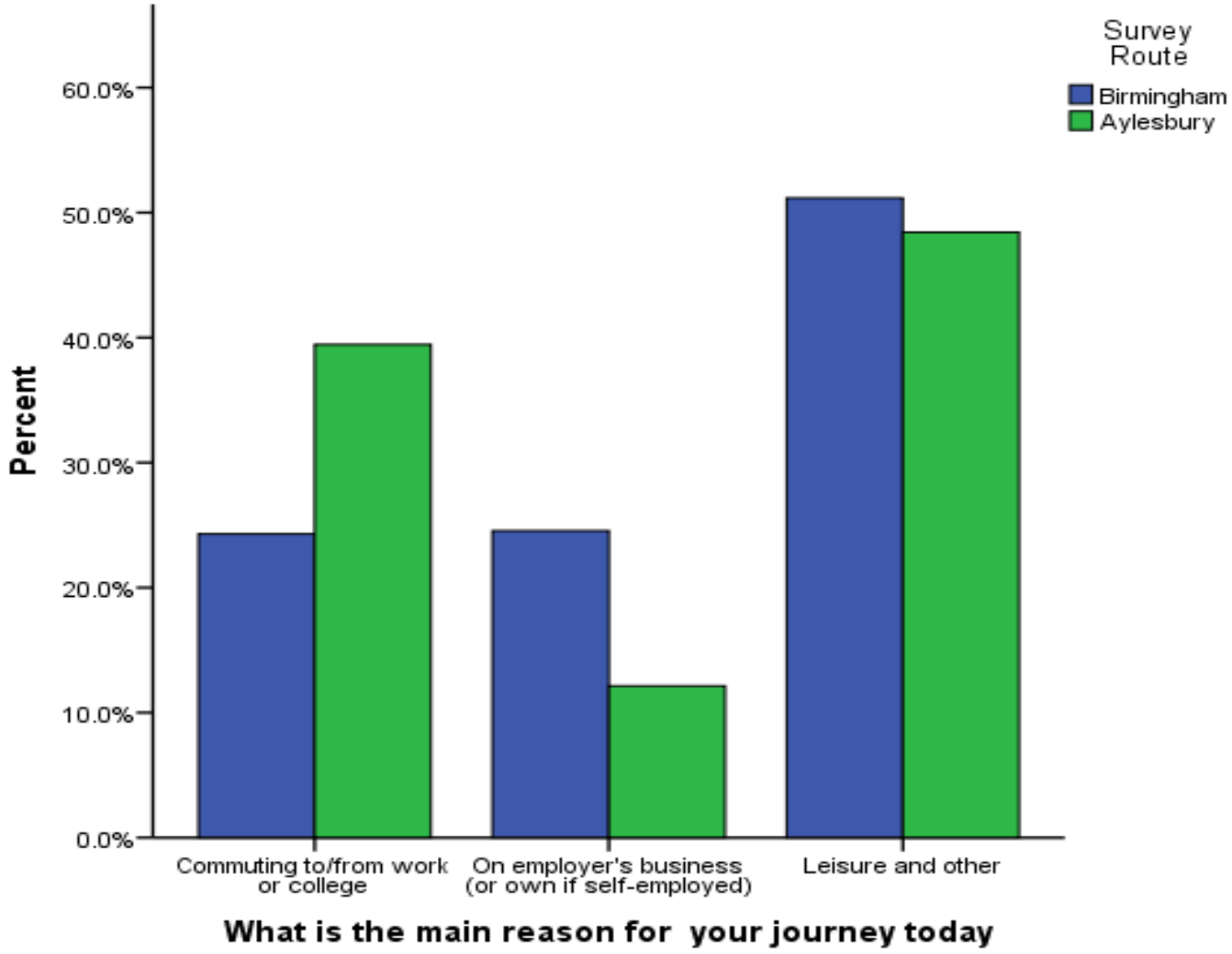
- Paper survey
  - Random selection of passengers (e.g. every 10th passenger)
  - Selected trains across day over a two week period
  - administered by Wavelength

- Sample
  - Birmingham to London n = 1246
  - Aylesbury to London n = 1132

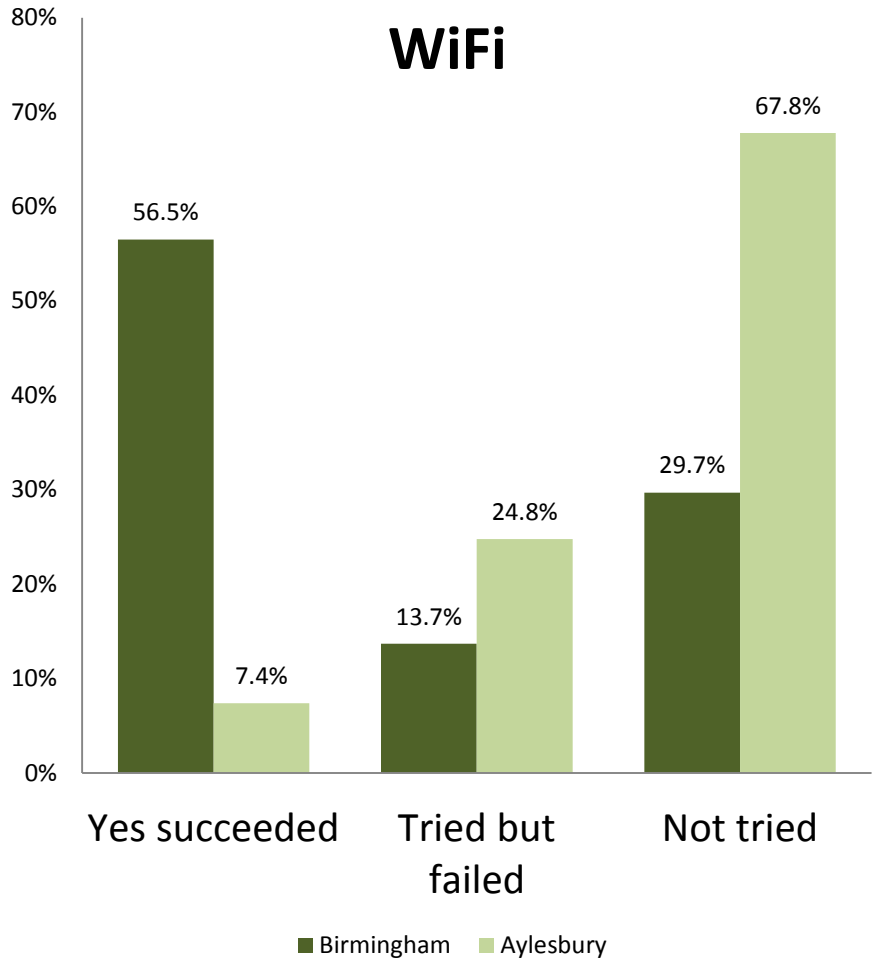
Passenger profiles

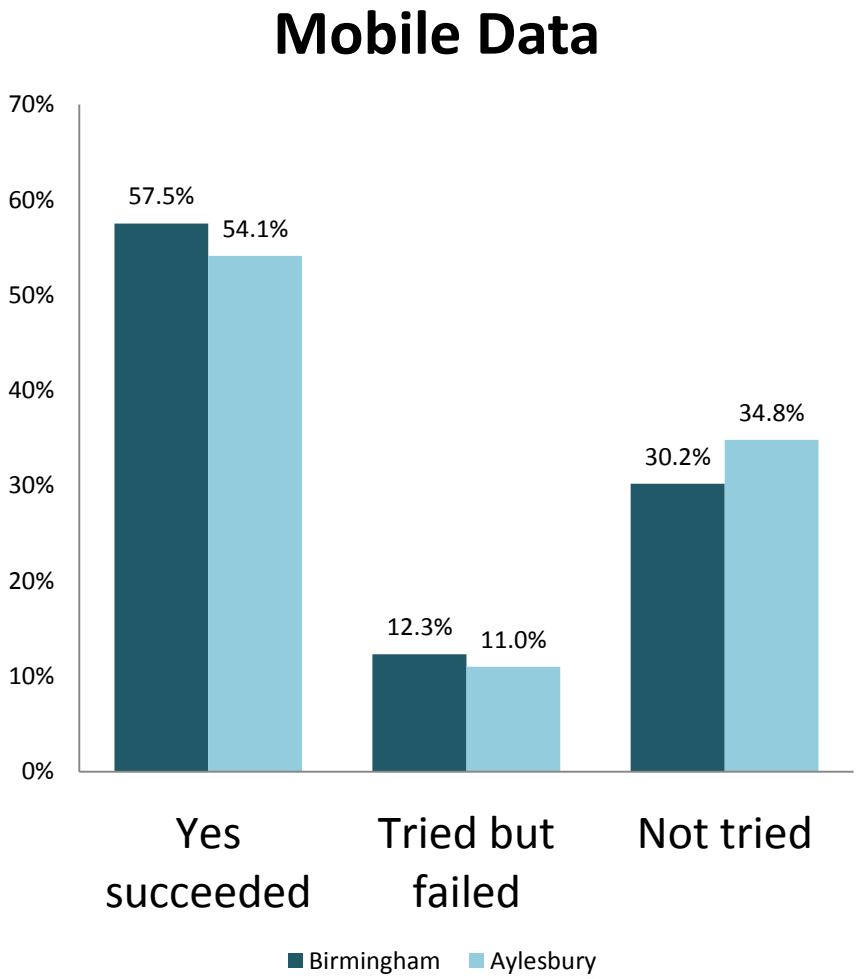
- 10% more men than women
- Just over 40% professional/senior managerial
- Ages 19-54
- Only 2% do not have access to the internet at home or work

Journey purpose



Connecting to the internet





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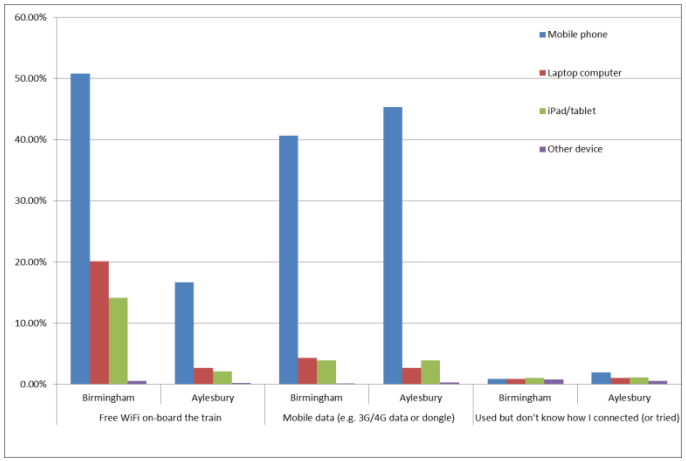
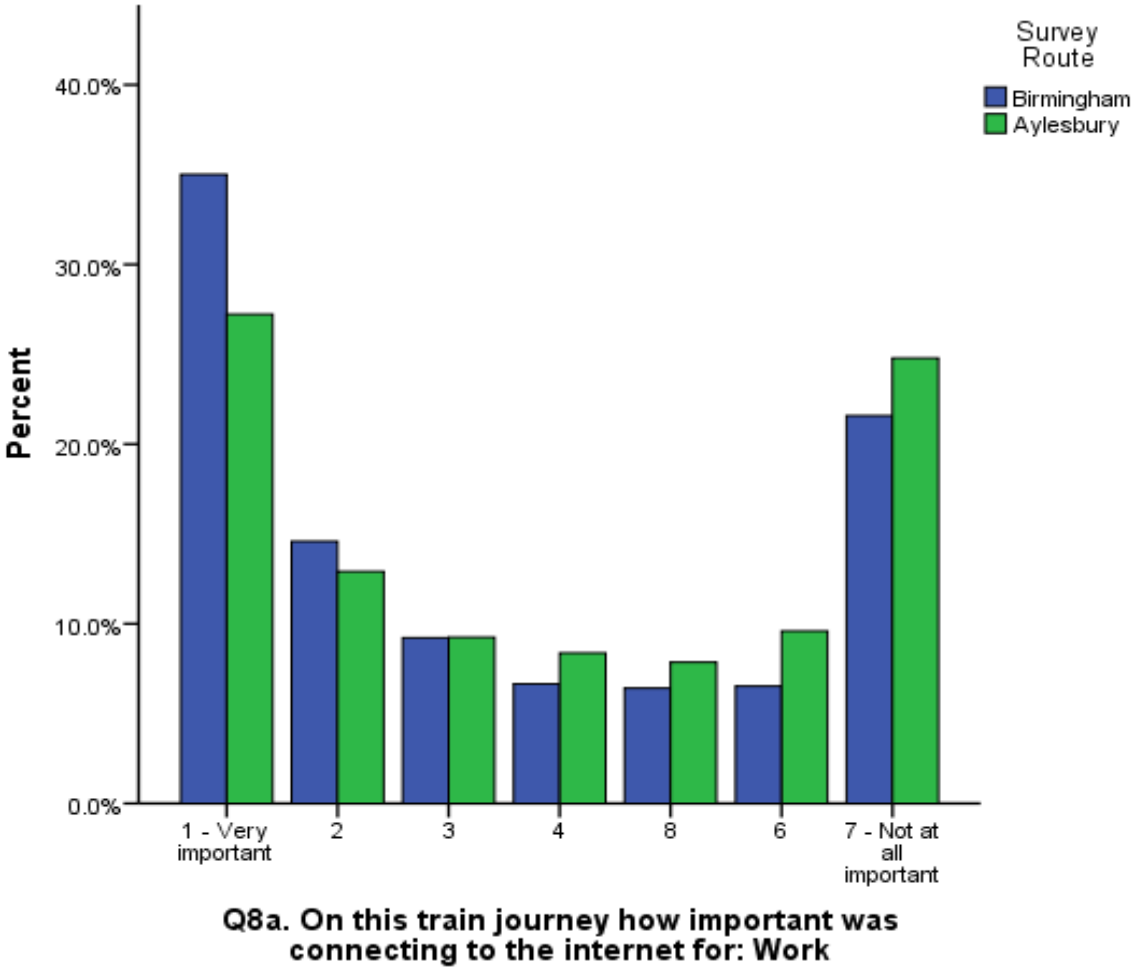
Devices used to connect

- Free WiFi
  - Smartphone
  - Laptop
  - iPad/tablet

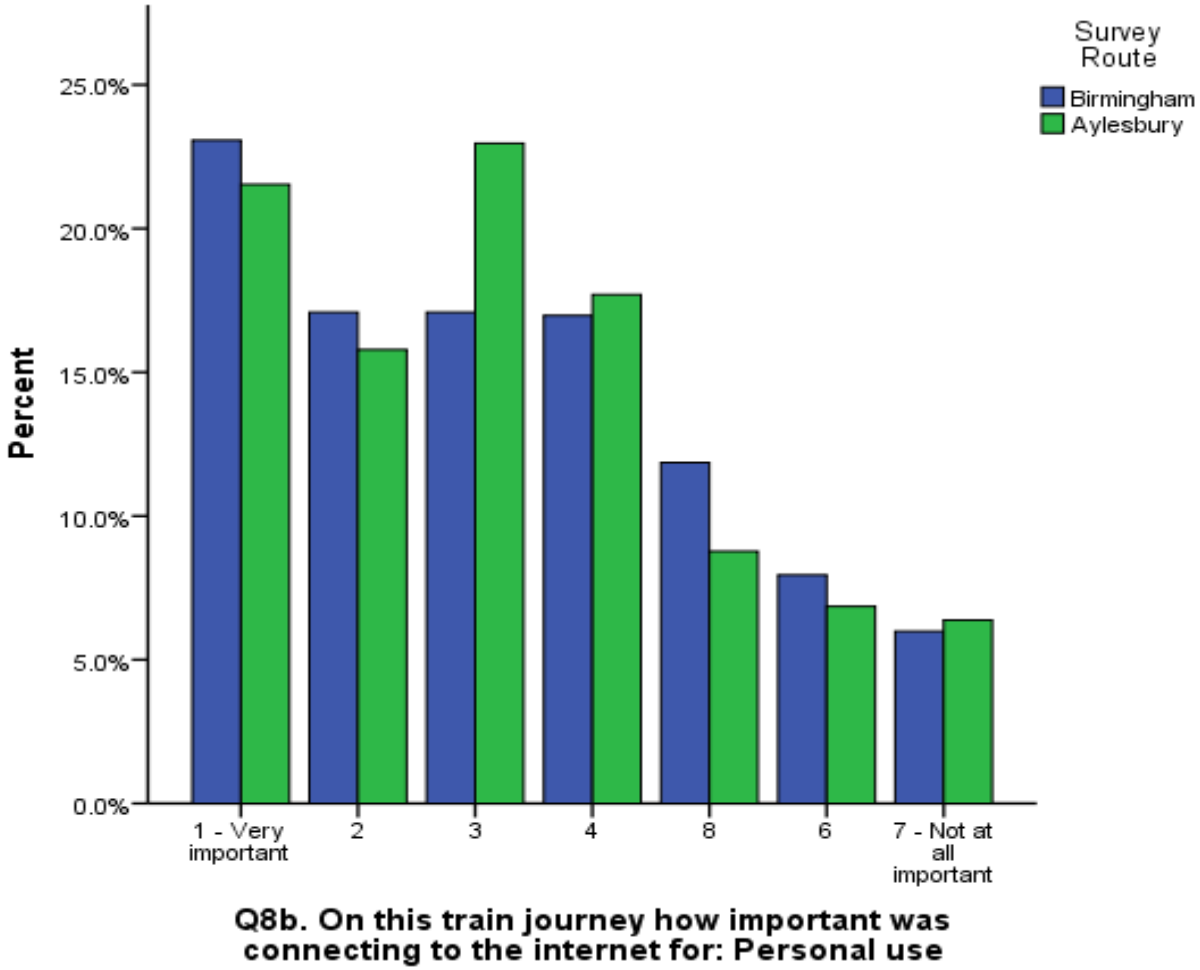
- Mobile data
  - Majority smartphone
  - A small number using laptops/tablets



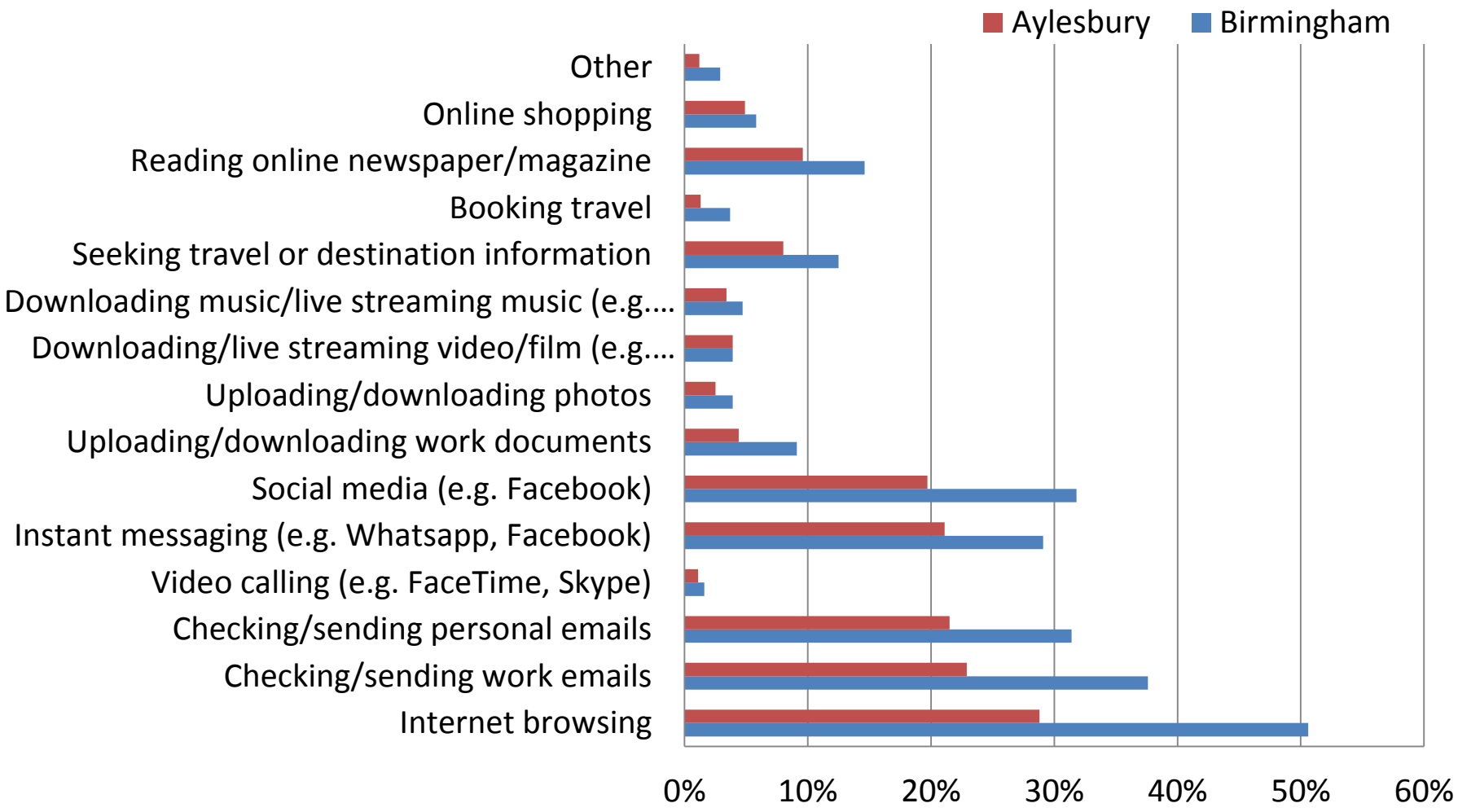
Importance of the internet: work



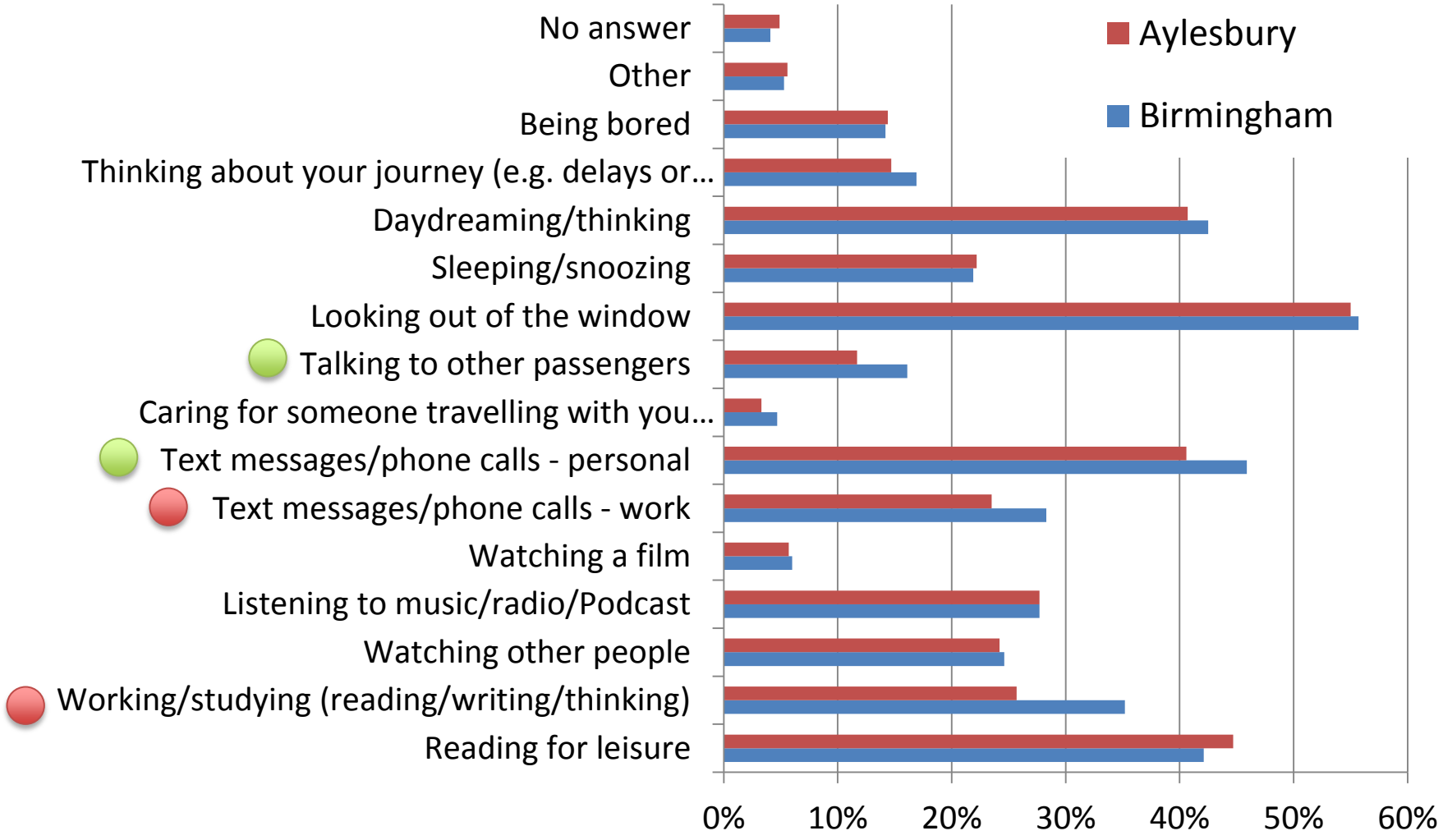
Importance of the internet: personal



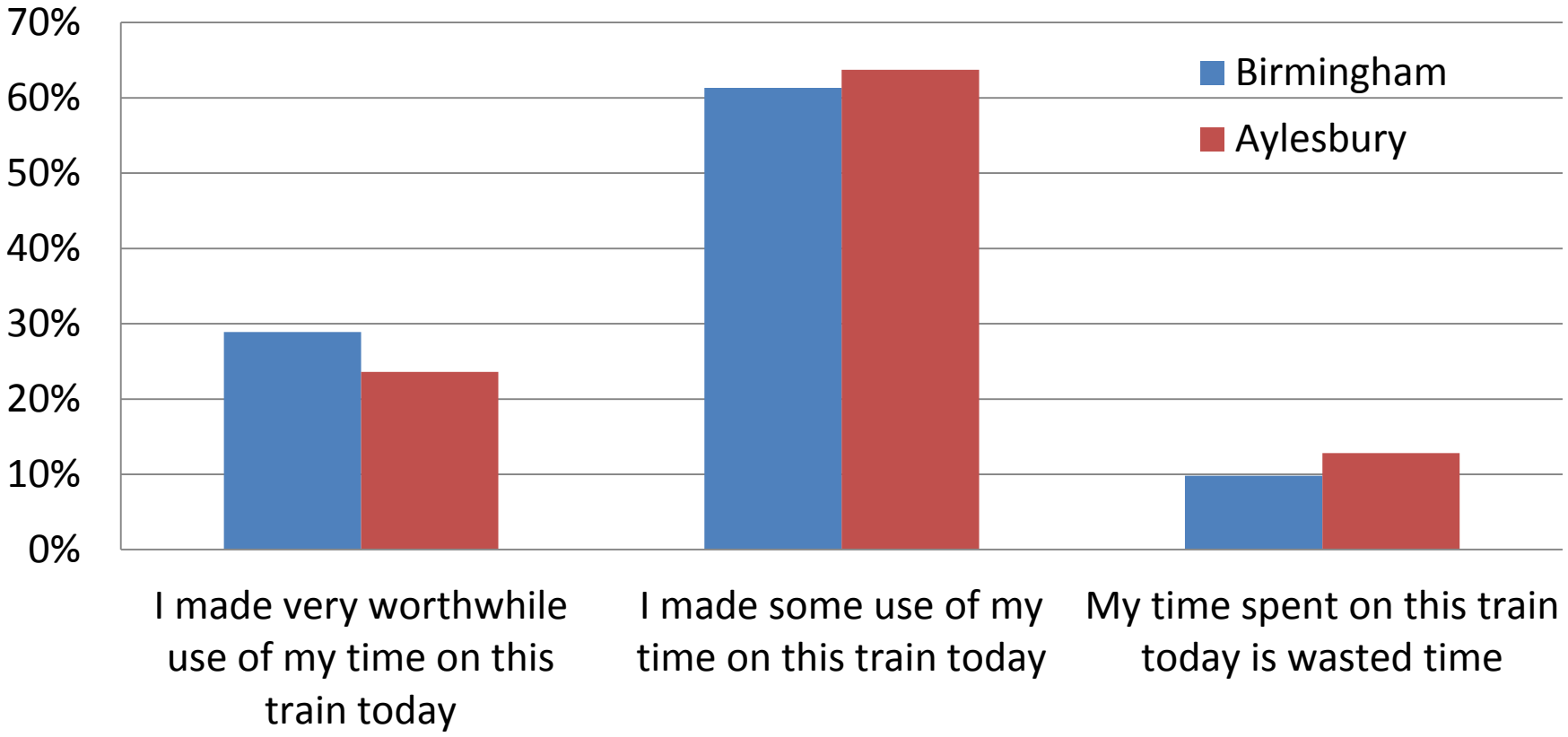
Internet based activities



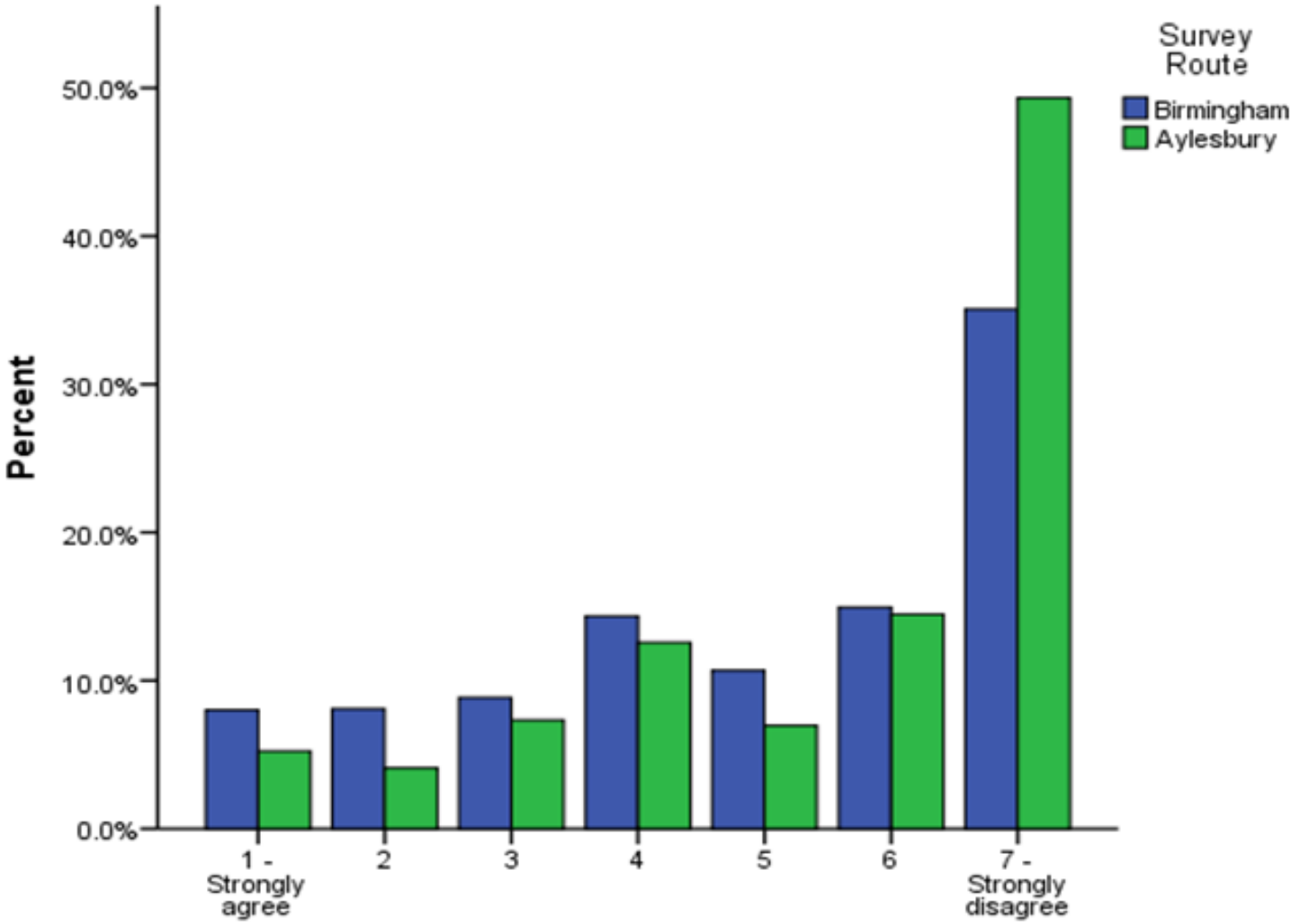
Non-internet activities



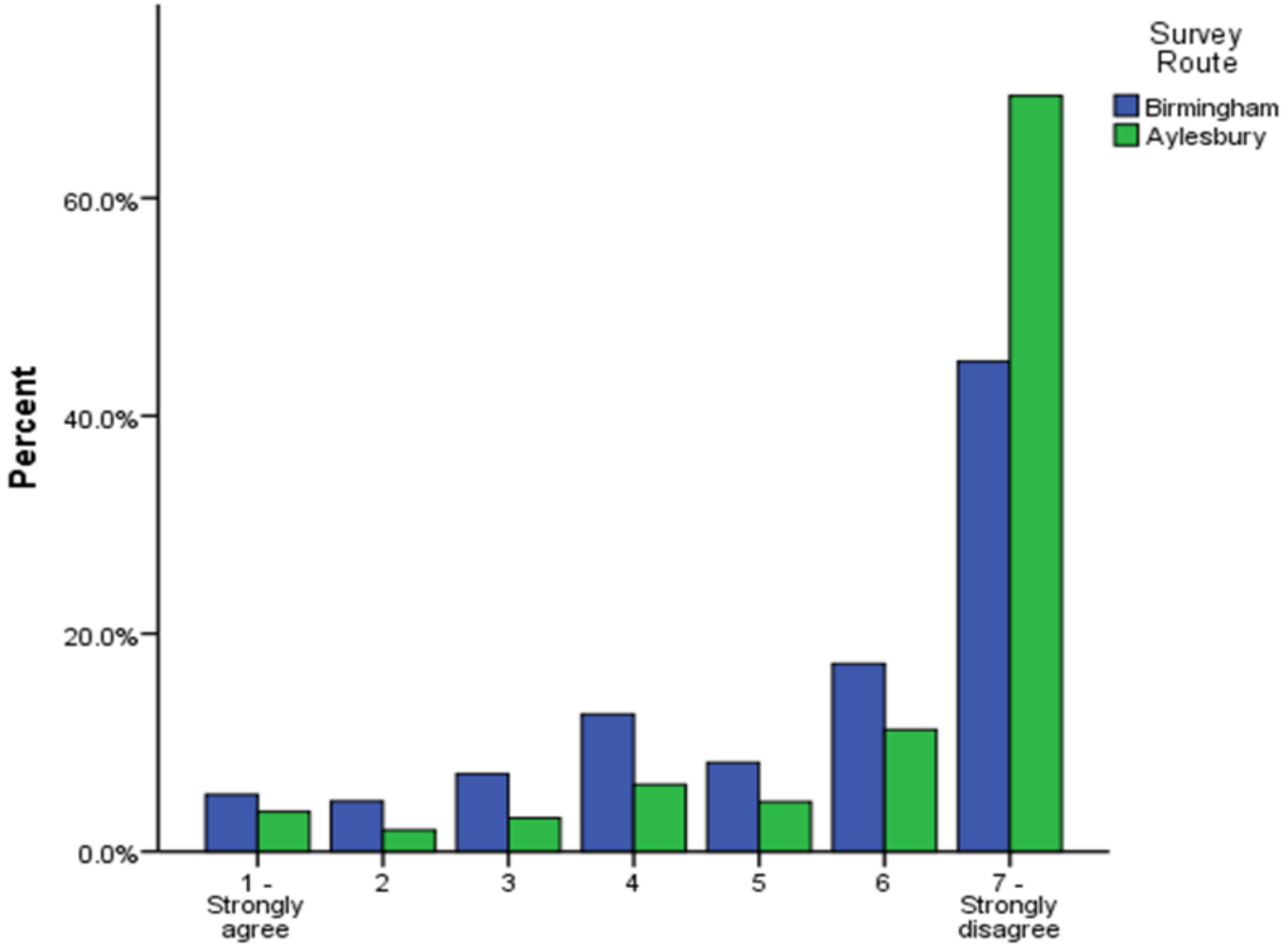
Worthwhile/wasted time



Modal choice – time use & WiFi



Modal choice – WiFi



Conclusions

- Important messages
- At least 25% of passengers see WiFi as "very important"
- Very few passengers view their time as wasted time
- WiFi is not a critical reason for travelling by train

- Challenges
- Technology trajectory – WiFi or 3G/4G (or even 5G)
- Similar numbers using mobile data as WiFi
  - Need to understand more about why (quali interviews)

- Opportunities
- Think beyond work and productivity
  - Shifting activity time for personal tasks
  - Social life on the move
  - Wellbeing

What next.....

Does 75/125 MB make a difference?

- Looking for changes in WiFi up take
- Significant changes in what people do
- Changes to worthwhile/waste time
- Satisfaction with the WiFi
- Modal choice

- Insights from qualitative work and other data

Questions?

Thank you to:
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