

## Validating pedestrian counts from Wi-Fi sensors to aid in quantifying the ambient population

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# Defining the ambient population



The number of people



Defined geography



Given point in time



Excluding place of residence



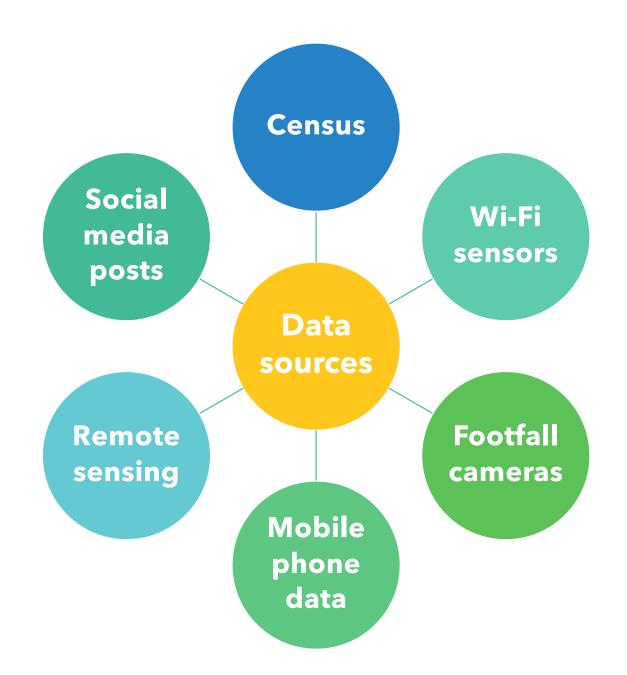
Excluding those on transport

### Traditional methods

Temporal fluctuations in proportional footfall count by camera locations in Otley, West Yorkshire



## Potential data sources



#### Limitations of the data

Geo-privacy of mobile phone and social media data

Unknown accuracy of devices due to private sector

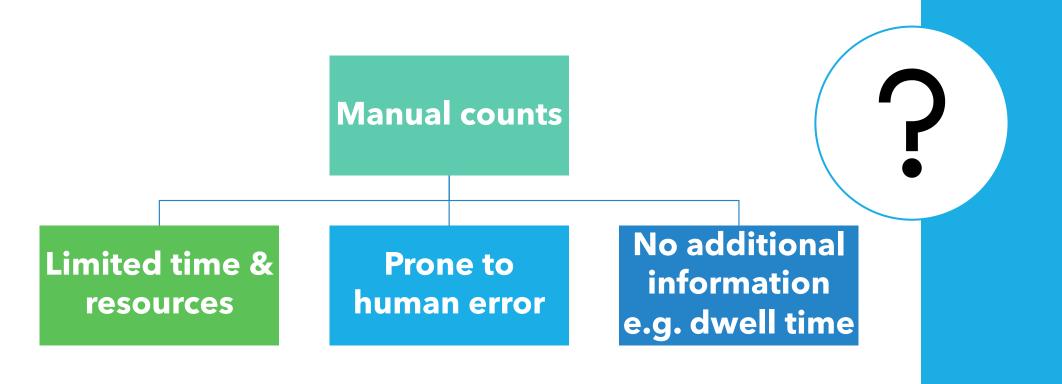
Resource location

**Validation** 

Limited resources

Influence of passers-by

#### How can we validate footfall counts?



#### Points for discussion

Are manual counts the most appropriate source of data for validating footfall counts?

- Minimizing human error
- Validating busy periods

#### Average footfall for all sensors by hour during a week

