

Pedestrian data workshop

Workgroup 1 Flow and presence

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Why count walking?

Because walking counts!

The methods must suit the purpose.

Two main purposes

- A. Monitoring and management
- B. Site-specific projects

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Purpose A

Monitoring and management

1. Persuade on importance of walking
2. Showing what works, monitoring policy impacts
3. Prioritise interventions
4. Benchmarking between cities
5. Monitoring trends in walking

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B - Project management and design (site specific)

1. Importance of walking at specific places
2. Design and operation of routes (capacity, signals, etc)
3. Micro simulation modelling (eg Oxford Circus -Youtube)
4. Assess use and attraction of space
5. Economic appraisal of sites (footfall, especially retail)
6. Evaluation of physical interventions (before and after)
7. Evaluation of non-physical interventions (eg info)

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Fit method to purpose

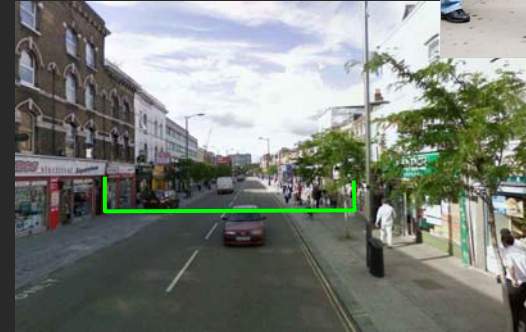
1. Where should we count?
2. Who and what should we count?
3. When should we count?
4. How should we count?

How important are standard procedures?

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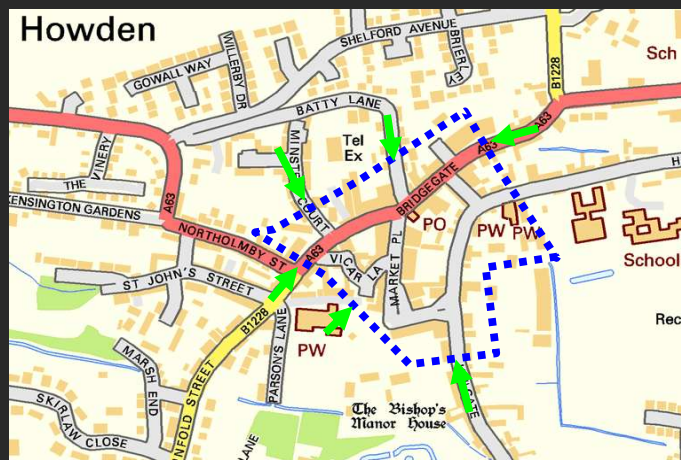
Categories of counting

1. Cross section of street



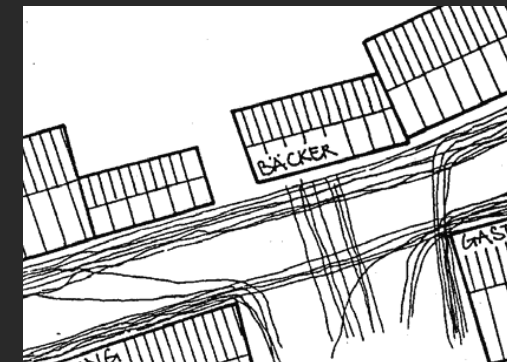
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2. Area cordon



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3. Flow tracking
(routes taken by pedestrians)



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4. Presence: represents perception of the street

Presence versus Flow

	Presence	Flow
Vehicles	17	27
Pedestrians	36	13



When presence is measured, the ped/veh relationship is reversed

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Flow - the number of people crossing a "line" in a specified period

Some advantages

- Easy to count
- Comparison with vehicle flow

Some limitations

- Does not portray pedestrian activity other than "A to B" walking
- Does not address people total flow (including people in vehicles)

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Presence - the number of people within a specified space

Some advantages

- Relates to perception of activity (vitality etc.)
- Comparison with vehicle presence
- Includes pedestrian activity other than walking "A to B"

Some limitations

- Requires photography (still or video)
- Difficult with high pedestrian density

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Who should we count?

Should we standardise the definition of pedestrian?

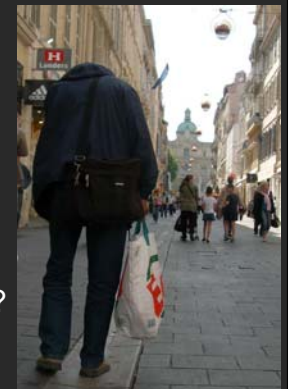
Include:

- People on foot
- Children carried or in buggies
- Children on scooters
- People on mobility scooters
- People pushing a bike or trolley

But what about

- People on roller skates? Roller shoes? Skateboards? Segways?

Headless men?



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When should we count?

1. Permanently (automatic)
(For variations and trends)
2. Periodically
How often? Every 2 years? 5 years? 10 years?
3. Project specific
Before and after - timing is crucial, especially before

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Trends and benchmarking

1. Over time (longitudinal) **methods must be consistent**. Large sample of sites necessary
(to allow for wastage/drop-out)
2. Comparison between cities requires **comparable methods**.
What should these consist of?

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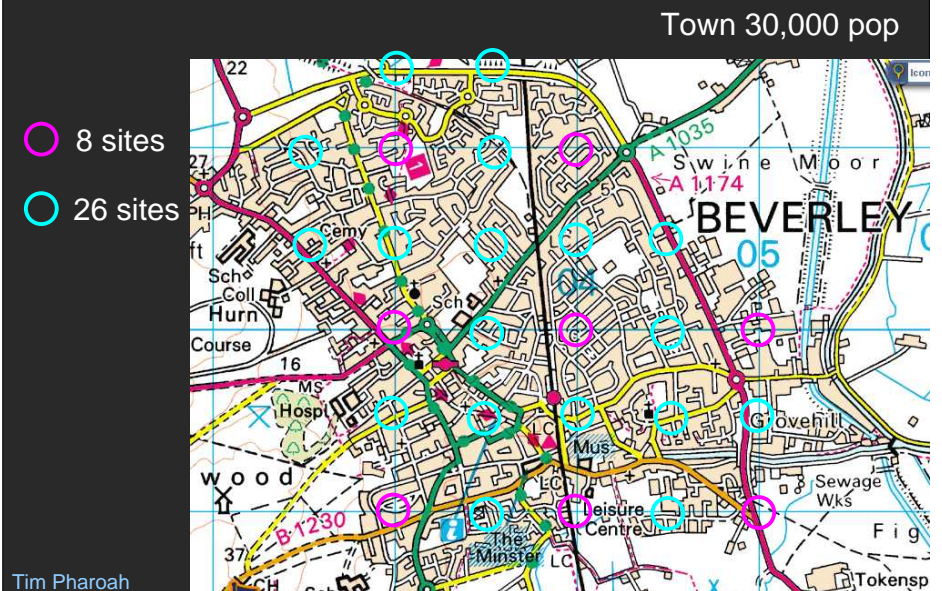
City sample of sites?

Standard sampling method examples:

- Grid intersections
- Random address generator
- Standard site portfolio (e.g. principal shopping street, local centre, primary and secondary schools, arterial routes, residential streets).

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Example of site sampling



Some other important decisions are needed

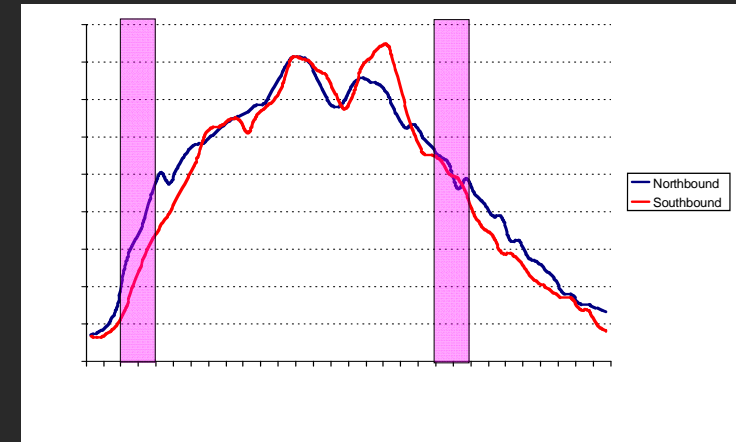
1. Manual or automatic counting?
2. Simultaneous counting or rotate sites?
3. Which period(s) of the day?
4. If all day, how long is a day?
5. Which day(s) of the week?
6. Which month(s) of the year?
7. Socio-demographic make-up of pedestrians?
(manual counts and interviews required)
8. Is variation between periods a difficulty, or is it the main story?

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Revealing the true story is important

E.g. High Street

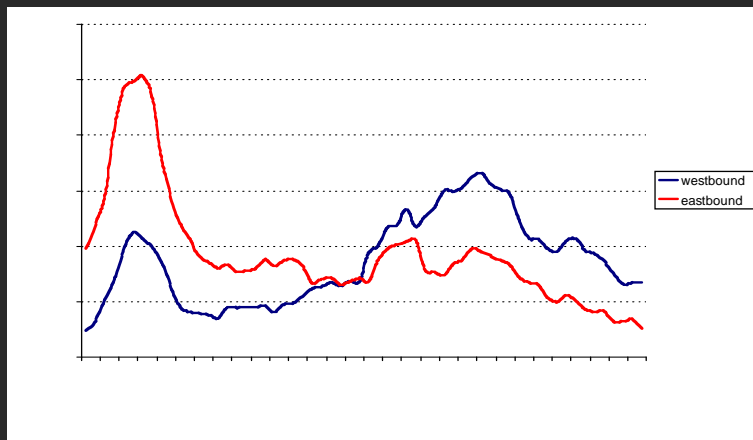
Peak hour count would miss the main point



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E.g. Near a station

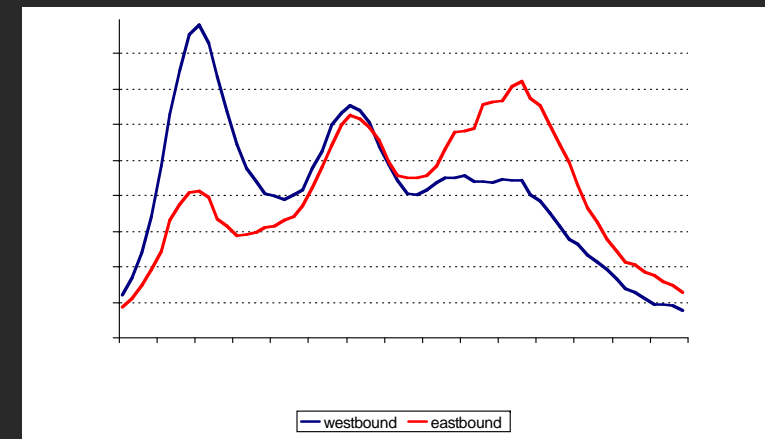
Heavily peaked flows, highly directional



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E.g. Central location with offices

Busy peaks and lunchtime, but little evening activity



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Seasonal and weather variations

Average flows little use for planning at the seaside!

Summer



Winter!



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Some points for discussion

Standardisation for consistency and comparability

- How important are standard procedures, and why?
- Should definitions be standardised?

Are these the most important to standardise:

- Evaluation, before and after?
- Benchmarking between cities?
- Trends (time series counts)?

How will standards be adopted?

(Guidelines? Charter? Voluntary?)

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Never underestimate the difficulties of counting!

QuickTime™ and a
YUV420 codec decompressor
are needed to see this picture.

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