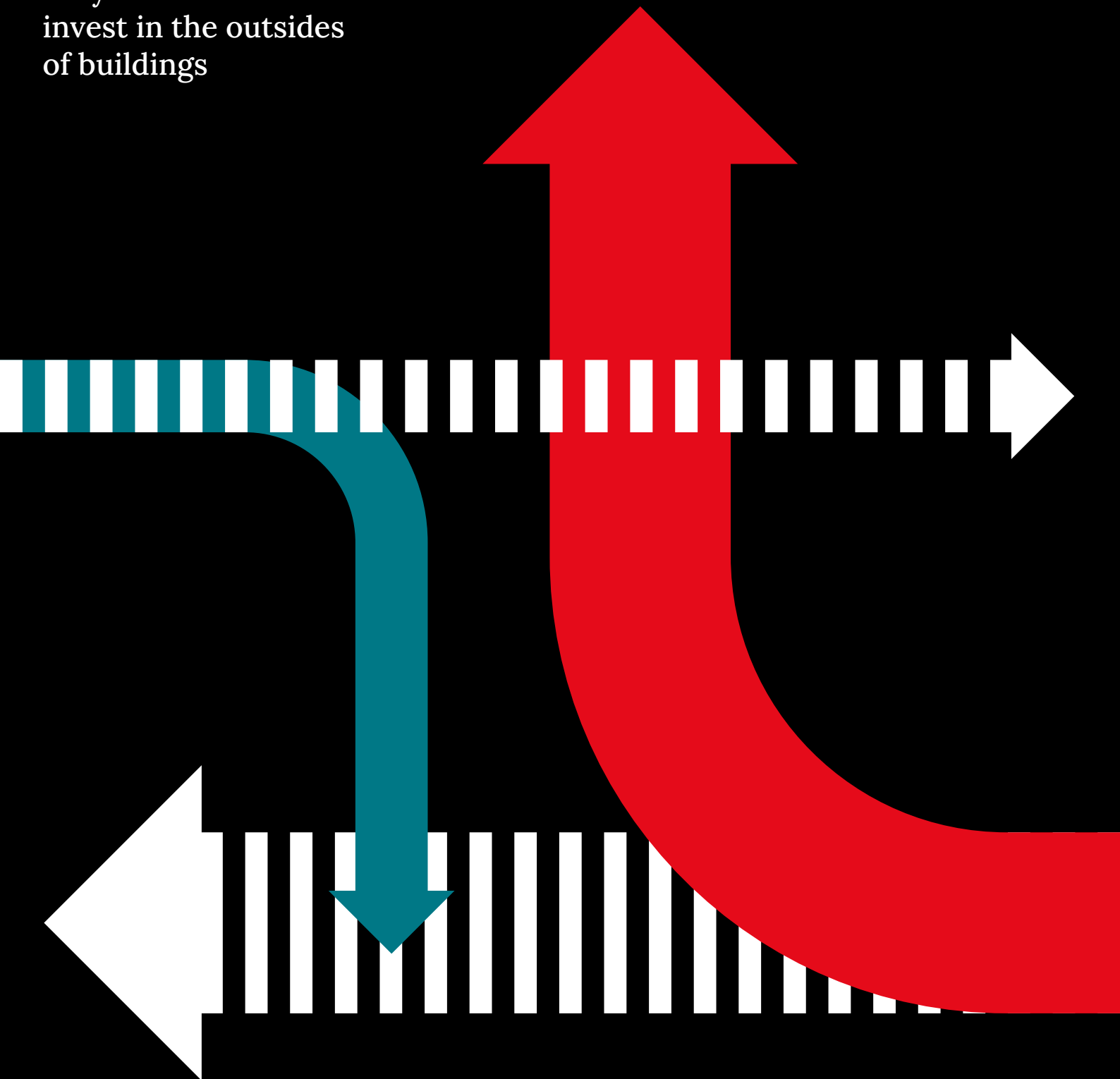


Passing By or Going In?

HUMANISE

Why we should
invest in the outsides
of buildings



by Space Syntax
March 2025



For every individual person that spends time inside an office or block of flats, there will be hundreds or even thousands of people that pass by the outside of that building every day.

[...]

The outside of that building will affect every single one of those people. It will contribute to how they feel.”

A FEW PEOPLE INSIDE

THOUSANDS
PASSING BY OUTSIDE



Thomas Heatherwick

Humanise: a maker's guide to building our world



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Section 1

Executive Summary



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Introduction

Humanise is a ten year global campaign calling for more joyful, engaging and human buildings and cities. Using a growing body of research which proves that the buildings around us affect our health and wellbeing, our economies, and the planet, the campaign is inspiring everyone to think about how buildings make us feel.

One of the central themes to this work is the proposition that more people experience a building from the outside, as a passer-by, than experience its interior.

Many elements will affect who interacts with a building and how. These include urban location, characteristics of place, building use, management, as well as other factors. The initial focus for this work is not to explain why these differences in interaction occur, but to begin to define the scale of these differences.



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Key Findings

In high streets, which are typically the busiest parts of towns and cities:

58-74%

of people are passers-by

26-42%

of people go inside a building

Of the buildings people go into:

17-39%

of these are shops

These proportions remain largely consistent on weekdays and weekends, although typically weekends are busier.

Of the people who go into a specific building:

11-16%

go into a specific building on weekdays

12-18%

go into a specific building on weekends

The proportion of passers-by is sensitive to location and mix of surrounding uses with differences visible between different areas.

In places which are dominated by employment uses, levels of people passing-by reflect travel patterns. These areas may not be high streets, but they can have similar numbers (5,000 people per hour or more) during rush hours.

A large, office headquarters in one of these areas recorded 13% of people coming in to it, similar to a large department store, although occurring at a different time of the day.



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There are also outlier cases, for example; there are parts of London where employment uses overlap with tourist attractions.

In these areas the number of people passing by on weekdays is very high.

This increases further on weekends when offices tend to be closed.

84%

94%

Specific buildings can also attract greater numbers of visitors. Some, such as large museums, can become destinations for people from a much wider area, and they record a larger proportion of people going into them:

37%

of people were observed to go into a cultural building on a weekday, almost double the proportion seen going into a large department store.

Measuring variation consistently across different areas is challenging. Percentage figures give a consistent comparison to illustrate the proportion of people in a street that pass by a building, however absolute numbers are useful to consider (see following page). Page 14 helps illustrate the difference between lower proportions of people going into buildings on a busy street, against higher proportions of people going into buildings on quiet streets.



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Daily observation figures can be extrapolated to give a total number of passers-by per year:

25.7m

Around 25.7m more people pass by buildings in Oxford Street, London than go inside them

11.6m

In Briggate, Leeds, there are around 11.6m more passers-by

3m

Just over 3m more people pass by in Church Street, Blackpool.

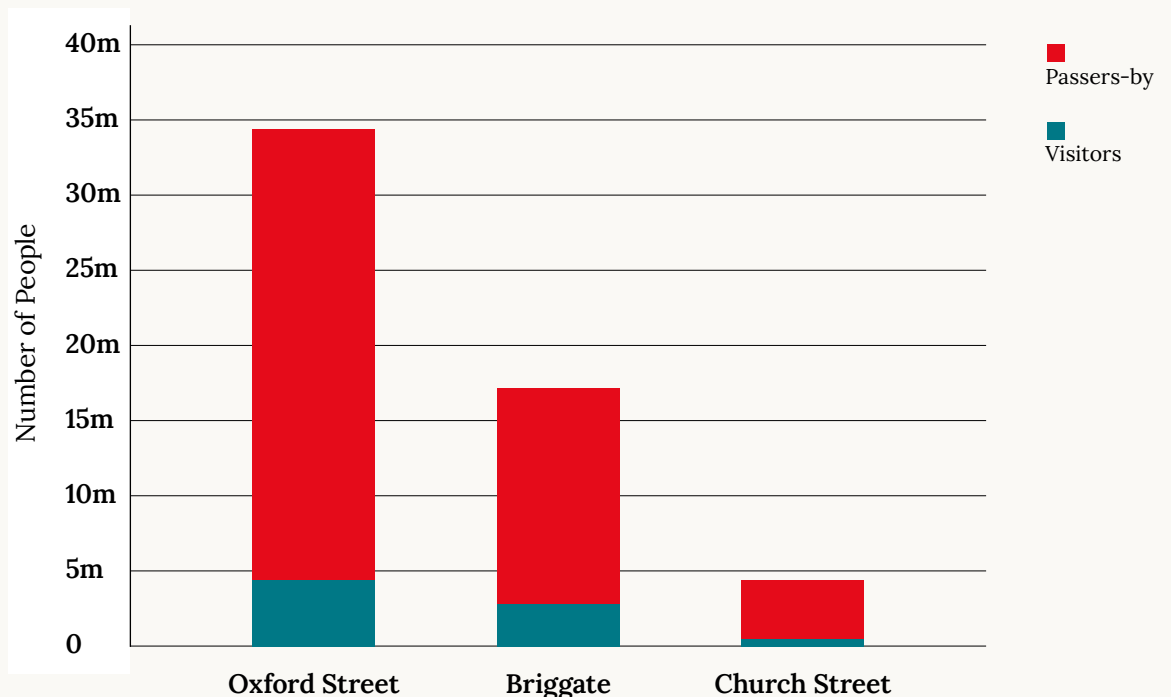
These figures were extrapolated from pedestrian gate counts carried out over five hours on one weekday afternoon and one weekend afternoon.

Open data available in Leeds was used to look at the distribution of footfall across a 24 hour period. A factor of 2.0 was applied to gate count data collected over five hours. This factor was then applied to data in London and Blackpool.

Data on visitors going into M&S, a large department store, was scaled according to the proportion of its opening hours represented in the observation period.

Total daily numbers were then multiplied to represent the number of weekdays and weekend days per year.

When checked against percentages, visitor figures are slightly lower than those calculated from observation periods – this is because the shops observed were only open for a proportion of the 24 hour period.





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Briggate, Leeds

● 11.6m Passers-by
● 3.5m Visitors

Church Street, Blackpool

● 3m Passers-by
● 0.5m Visitors

Oxford Street, London

● 25.7m Passers-by
● 4.5m Visitors



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Street-based Data

These diagrams illustrate what proportion of people pass buildings in high streets, while also showing which types of use people are going into.

Across the high streets studied, the proportions remain fairly consistent across weekday and weekend days.

Historic data (shown by grey text) shows two outlier cases.

The employment/tourist hybrid shows very few people going into buildings at weekends when people tend not to work in offices and when there are more tourists present.

The mixed-use area shows more people staying in the area (instead of passing through) at weekends, and this reflects the presence of a market on Saturdays.

Key

Weekday – All locations

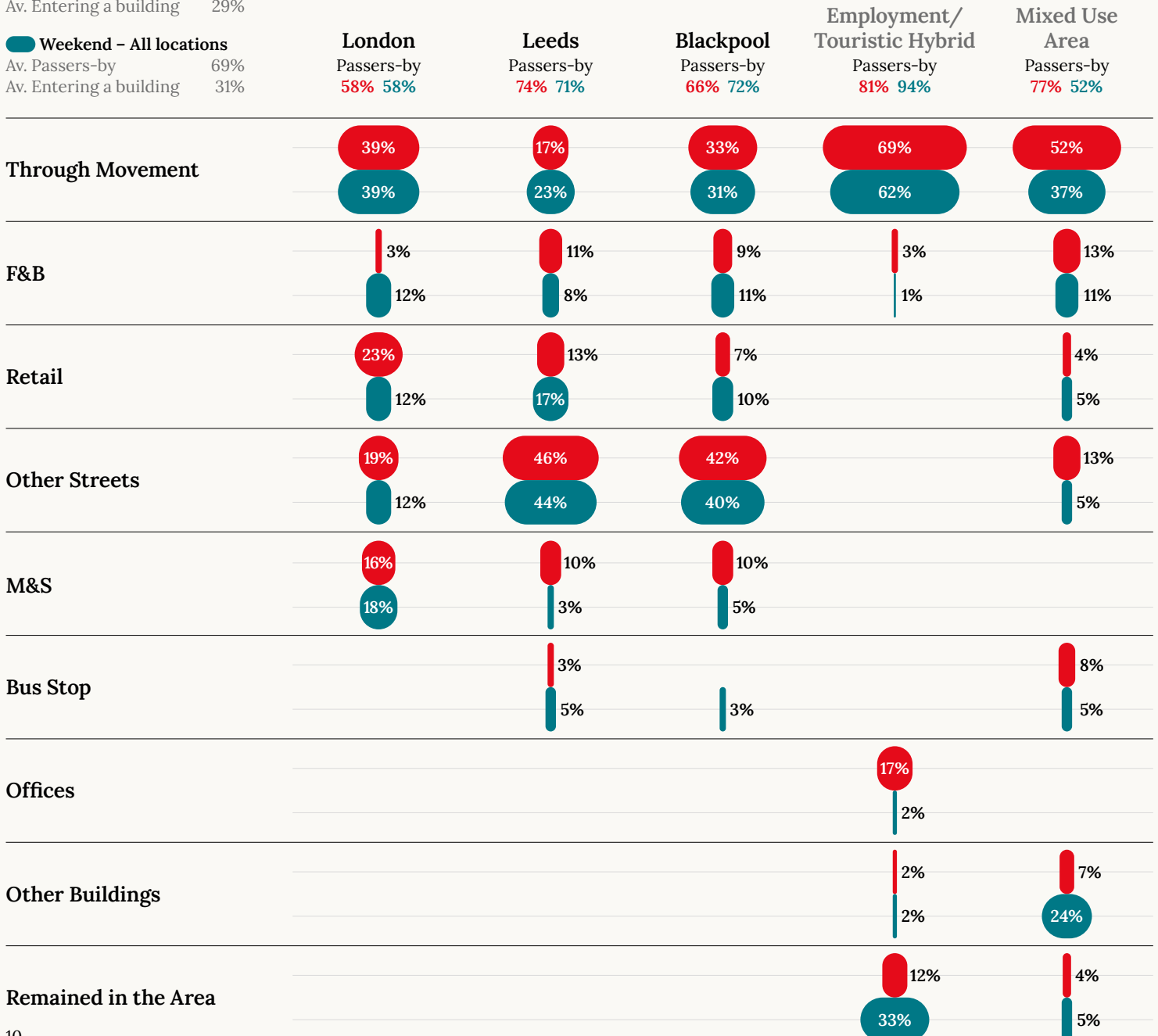
Av. Passers-by 71%

Av. Entering a building 29%

Weekend – All locations

Av. Passers-by 69%

Av. Entering a building 31%





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In areas which are dominated by employment uses there can be differences:

- *These areas may be as busy as high streets, but their peak times occur in the morning and later in the afternoon/early evening.*
- *There is potential for the numbers of people passing by in these areas to increase further. National Travel Survey data¹ shows that post-Covid, 11% of people work from home three or more days per week (compared to 3% in 2019). As people move back to the office it is likely that there will be more people in these parts of cities.*

Some specific buildings, such as large museums can attract a higher proportion of visitors:

- *A maximum of 45% of people were recorded entering one of these buildings during its peak.*
- *This averages down to 24%-37% across the day, still higher than most individual buildings observed on high streets.*

These patterns vary by week/weekend day, and especially by school holidays.

Key

Weekday Historical Data

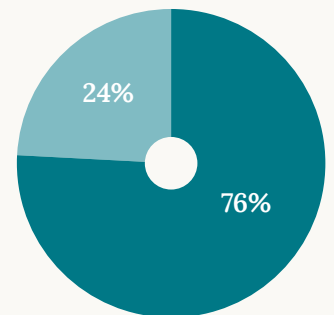
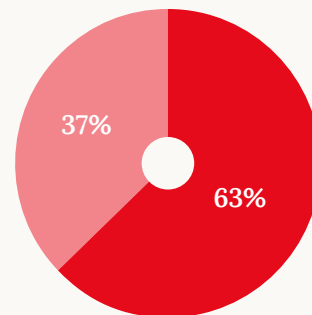
| | |
|-------------------------|-----|
| Av. Passers-by | 77% |
| Av. Entering a building | 23% |

Weekend Historical Data

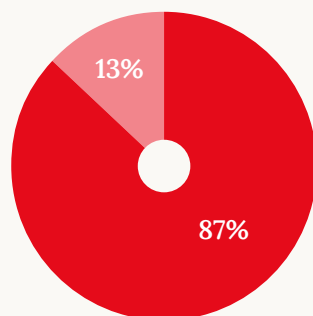
| | |
|-------------------------|-----|
| Av. Passers-by | 77% |
| Av. Entering a building | 23% |

- Entering
- Passers By

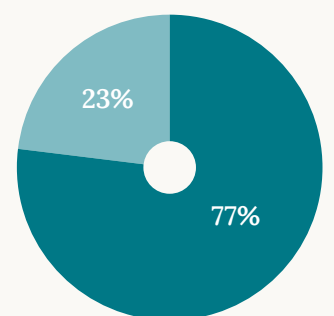
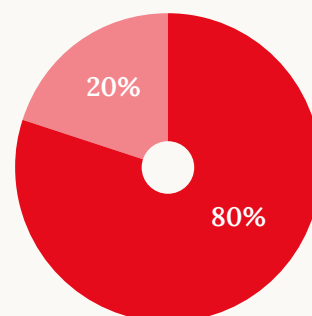
Culture Focussed Area



Employment Focussed Area



Shopping & Leisure Focussed Area





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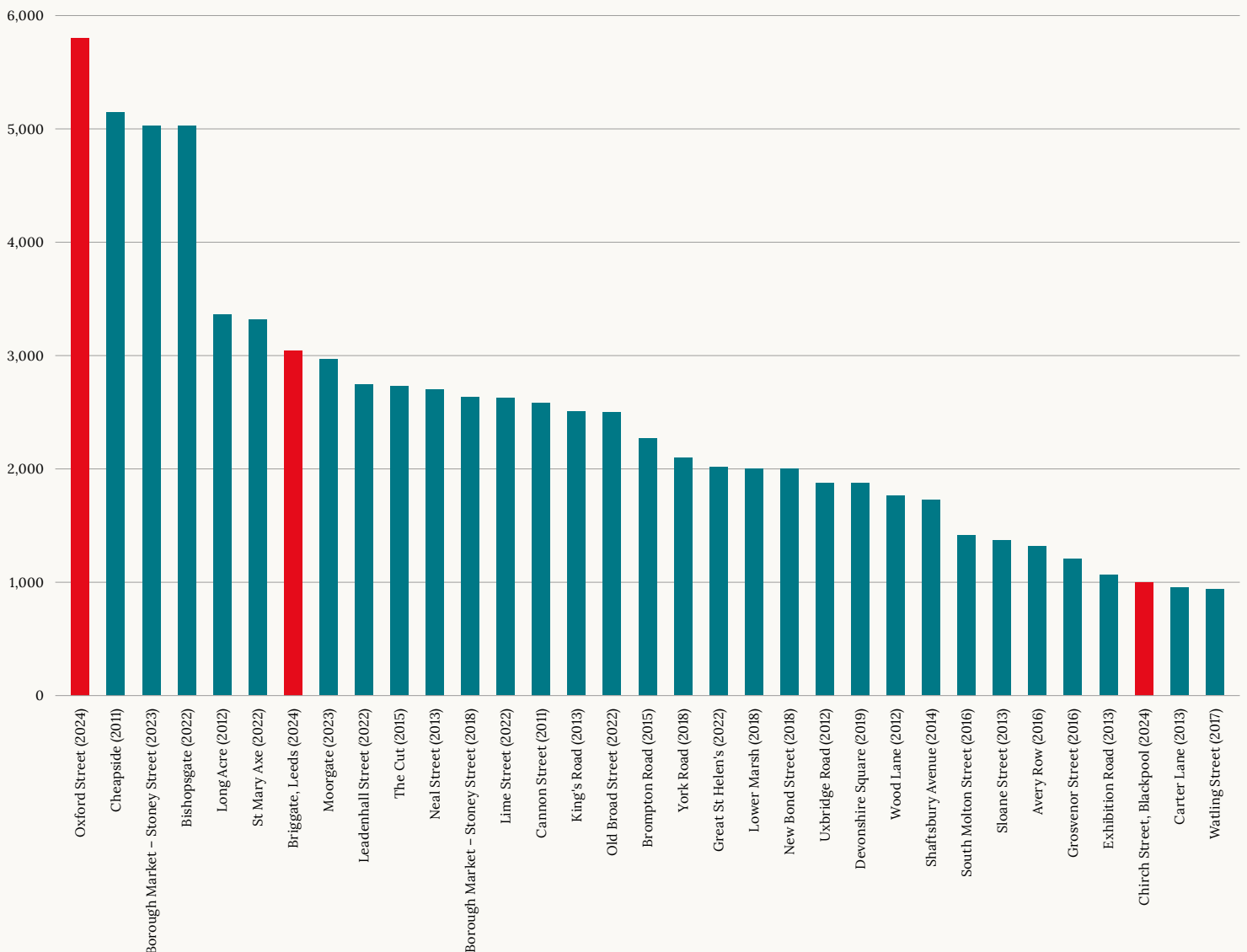
5. Methodology

The graph shows the levels of movement for different streets in London, on a weekday between 12:00 and 14:00. Study areas are shown in red.

Oxford Street has the highest pedestrian movement rates, Briggate is within the medium to high range and Church Street in Blackpool is on the lower range.

This sample set only includes London streets. Extending the datasets to cover Leeds and Blackpool would provide a wider range, and could, for example, result in streets such as Church Street shifting to be one of the busier streets in its local context.

This data helps compare proportions across different streets. For example, a high number of people (37%) going into a building on Exhibition Road is a high proportion, but is a relatively low absolute number of people when compared to 13% of people entering a building on Oxford Street.





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Key

Weekday Case Studies

Av. Passers-by 87%

Av. Entering a building 13%

Weekend Case Studies

Av. Passers-by 88%

Av. Entering a building 12%

Entering M&S

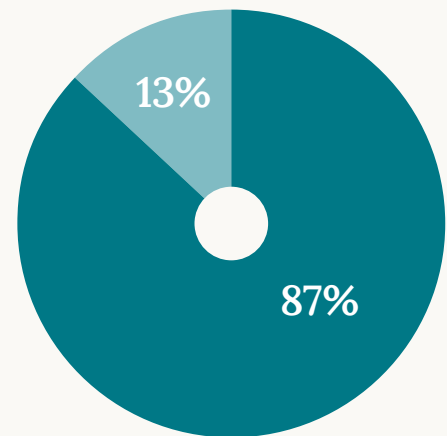
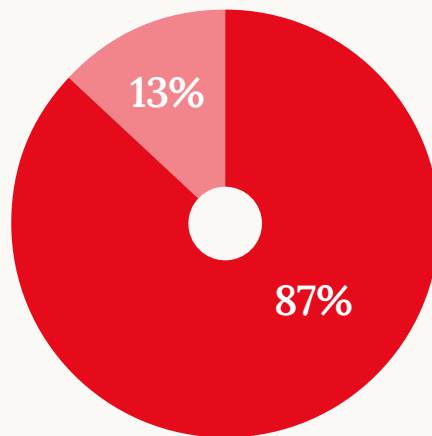
Passers By

Building-based data

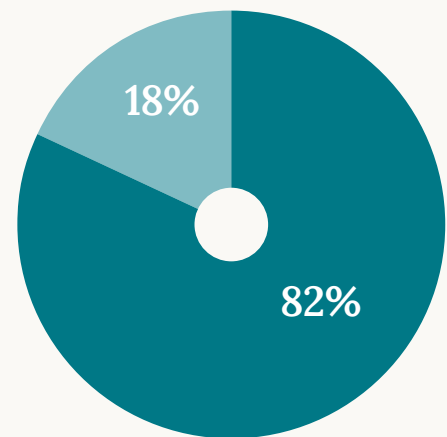
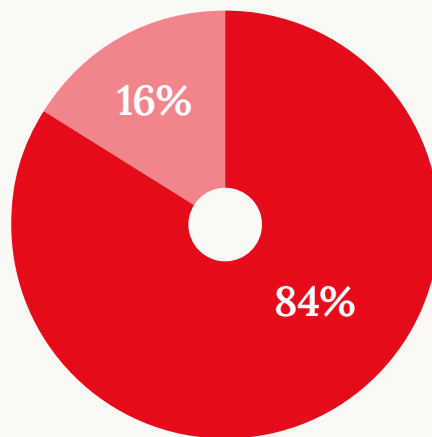
Focusing on the proportion of people going into individual buildings helps to add detail.

Proportions passing each building in each location range from 82%-89%. In all locations, these proportions remain very consistent across weekdays and weekend days, varying by a maximum of 2%.

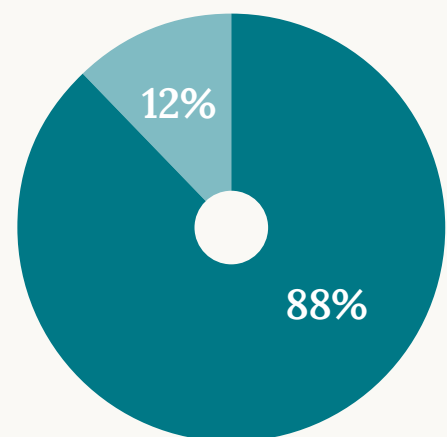
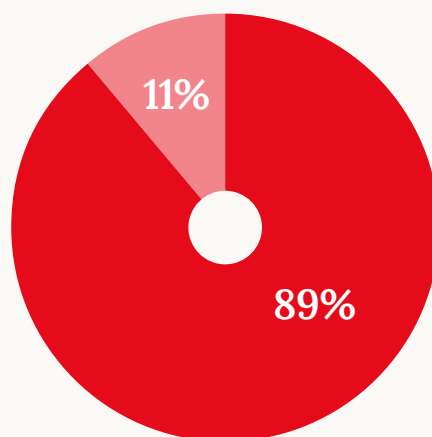
Oxford Street, London



Briggate, Leeds



Church Street, Blackpool





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Daily Pedestrian Movement

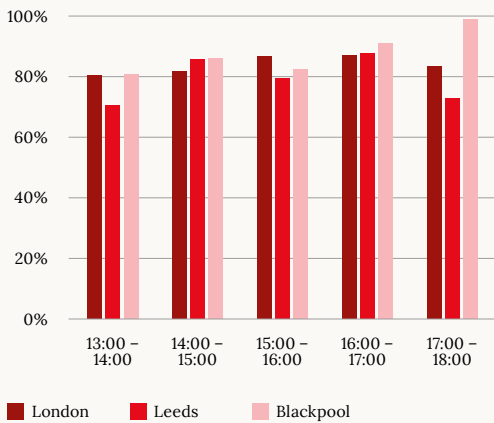
Across the course of a day, these proportions also remain fairly consistent.

There are times when proportions change, such as towards the end of the day. These may reflect the influence of surrounding land uses such as people travelling home from work, going out to socialize, or differences in store closing times.

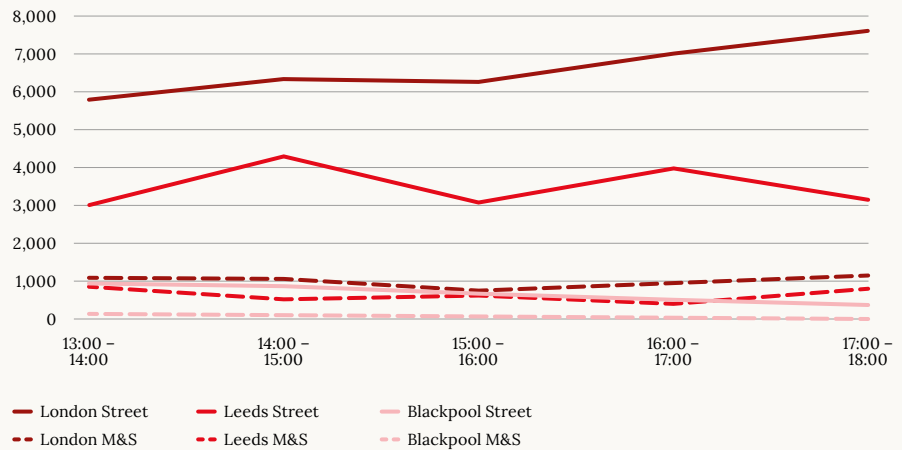
Comparing the actual numbers of people shows differences between location. The number of people in Blackpool is significantly lower than other high streets, with more people going into the M&S on Oxford Street on a weekday than are in Church Street at the same time of day.

Weekday

Ratio of passers-by relative to pedestrians entering the M&S building

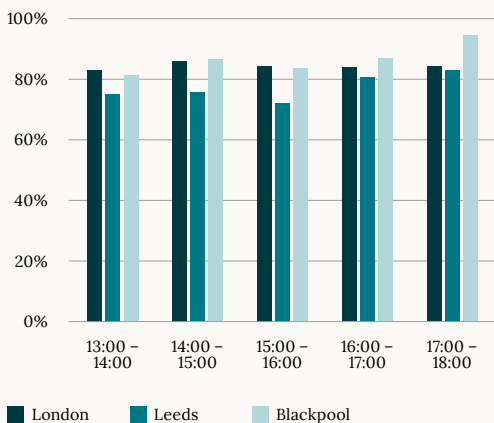


Hourly movement observed on high streets of London, Leeds and Blackpool and the hourly rate of people entering M&S in each of these high streets.

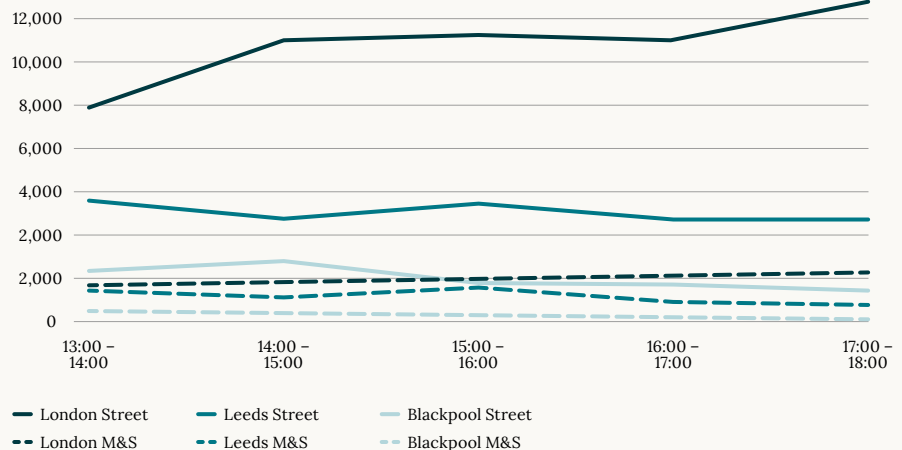


Weekend

Ratio of passers-by relative to pedestrians entering the M&S building



Hourly movement observed on high streets of London, Leeds and Blackpool and the hourly rate of people entering M&S in each of these high streets.





Section 2

Site Comparison – Study Locations



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Buildings

The number of people going into a specific building could be affected by many factors such as its use, size, or frontage.

To try to control for the differences in attractiveness between retailers it was decided to study the number of people going inside the same shop.

As one of the only retailers found in each city, in comparable locations, M&S was chosen. While there are still variations in size, façade design etc, this approach controls for differences in retail offer.



1
Oxford Street
London

2
Briggate
Leeds

3
Church Street
Blackpool



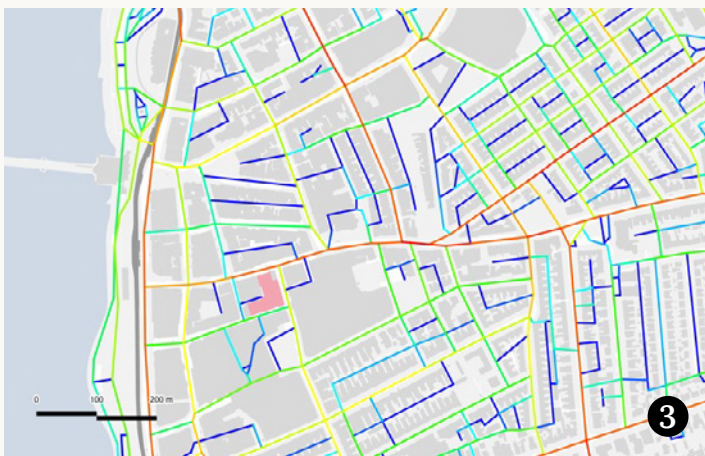
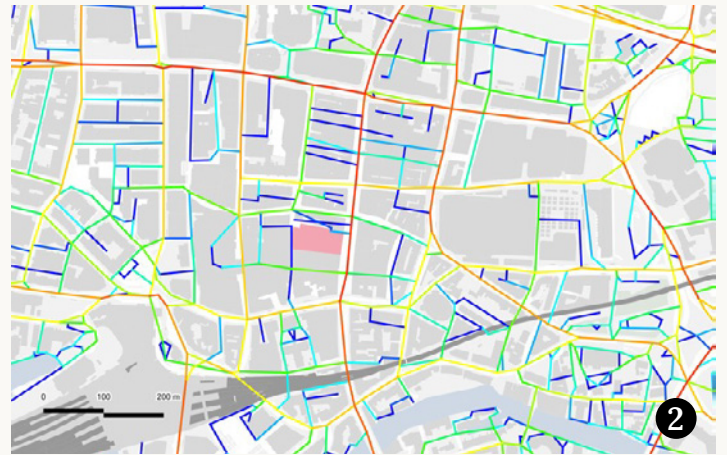
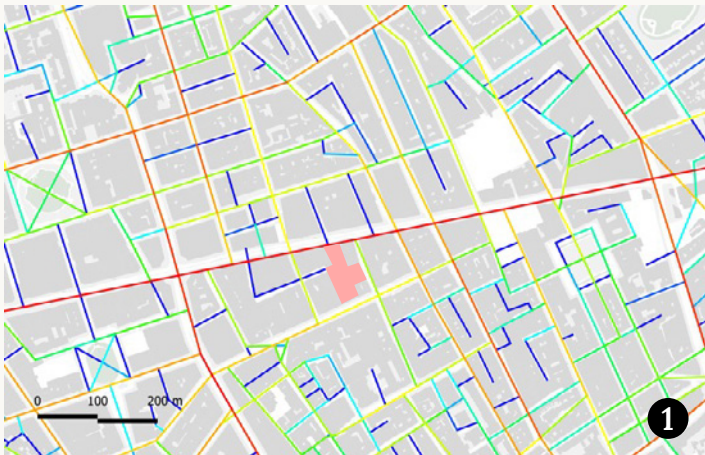
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Streets

Local Route Heirarchy

Route hierarchy highlights those routes that are mostly used to get from all destinations to all others. In this case, it show how likely each street is to be used for local trips of up to 2,000m, or 25min. Typically this scale of analysis will help identify high streets.

In all three cases, the study area is located in similar streets. This means that Oxford Street, Briggate and Church Street are likely to have some of the highest rates of pedestrian movement within their respective cities.



1
Oxford Street
London

2
Briggate
Leeds

3
Church Street
Blackpool



M&S Department Store

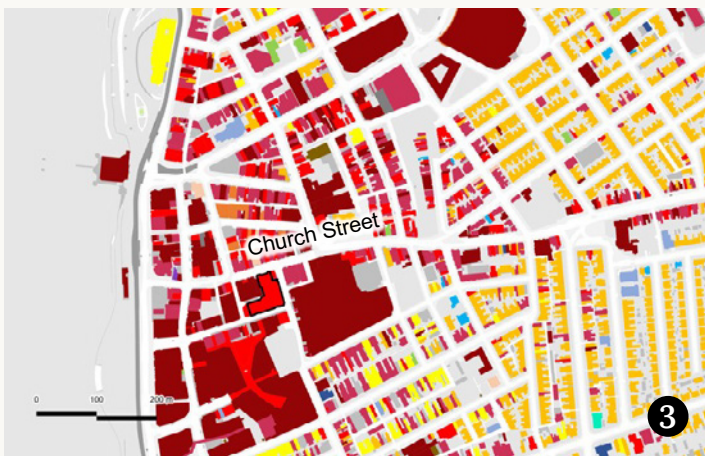


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Land Use Profile

Land use profiling is key to understand pedestrian movement. The location of land use depends on how well-connected the street network is. Mixed-use areas are likely to be found on highly accessible routes. This mix between accessibility and specific land use profile is what makes high streets so active.

Oxford Street, Briggate and Church Street have a highly mixed set of active land uses, which increases pedestrian activity. In the case of Church Street, it's possible to see how the area to the east becomes mostly residential.



- 1 Oxford Street London
- 2 Briggate Leeds
- 3 Church Street Blackpool

Land Use Categories

| | |
|---|---|
| ■ Retail | ■ Culture |
| ■ Service | ■ Religion |
| ■ Office | ■ Industry |
| ■ Mixed use | ■ Military |
| ■ Residential | ■ Emergency |
| ■ Hotel | ■ Storage |
| ■ Education | ■ Utility |
| ■ Health | ■ Agricultural |
| ■ Leisure | ■ Water |
| ■ Community | ■ Open space |
| ■ Commercial | ■ Transport |



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Walkability Index

Walkability is measured as the number of different land uses available in a radius of a five minute walk from each building.

A highly accessible network at local scale and a highly mixed land use profile combined, creates a highly walkable urban form.

All three case studies perform well in terms of walkability, bringing a wide range of uses within close proximity to each other. Oxford Street and Briggate perform the highest in their full extension, while Church Street is strong at the point where M&S is located.



- 1 Oxford Street
London
 - 2 Briggate
Leeds
 - 3 Church Street
Blackpool
- M&S Department Store

Walkability
The sum of the ratios between the number of land uses of a specified category within 15min walking divided by the distance to the closest one of these land uses.





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Public Realm and Frontage

Further information has been collected on the characteristics of the public realm and building frontage at each survey site.

The three streets are similar in terms of the role they play in the city, being highly accessible and all high streets.

One of the identified differences is Oxford Street as a multi-modal street and Church Street and Briggate as pedestrianised routes.

Oxford Street is also denser in terms of building height.

| Street & Public Realm | Street type | Public Transport | Mode | Street Width | Pavement Width | Planting | Lighting | Furniture | Av. Building Height |
|--------------------------|-------------|---------------------------|----------------|--------------|-------------------|--------------|----------------------------------|---------------------------------------|---------------------|
| Oxford Street, London | High street | Bus, underground | Multi-mode | 22.5m | 6m + 6m | Street trees | Street lighting on pavement edge | Bus stops, bins | GF +3/4 storeys |
| Briggate, Leeds | High street | Bus in immediate vicinity | Pedestrianised | 22m | Full street width | – | Street lighting on each side | Benches, bollards, bins, cycle racks | GF+ 2/3 storeys |
| Church Street, Blackpool | High street | Bus in immediate vicinity | Pedestrianised | 15.5m | Full street width | – | Street lighting on each side | Benches, bins, public telephone booth | GF + 2/3 storeys |

| Building Interface | Access type ¹ | Purpose ² | Frontages | Entrances | Height |
|--------------------------|--------------------------|----------------------|---------------------|---|----------------|
| Oxford Street, London | Unrestricted | By Chance | Transparent, Active | 2 Entrances, Department Store + Food Hall | GF + 3 storeys |
| Briggate, Leeds | Unrestricted | By Chance | Transparent, Active | 1 Entrance, Department Store | GF + 2 storeys |
| Church Street, Blackpool | Unrestricted | By Chance | Transparent, Active | 1 entrance, Department Store | GF + 2 storeys |

Notes

1. Access type is related to the type of internal management of the building. In this case, M&S is a privately owned building where access is public, but access could be denied under certain circumstances
2. Purpose relates to why and under what circumstances people decide to enter the building. By chance means that it's not a planned visit and is dependable if a person sees the building and decides to enter momentarily. Other possible scenarios would be pre-defined (i.e. school or workplace) or default (Residential).



Section 3

Pedestrian
Observations



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Methodology

Space Syntax designed and carried out a survey of pedestrian movement in three major high streets and in three comparable buildings (M&S department store).

The three locations where the study was carried out were:

- *Oxford Street, London*
- *Briggate, Leeds*
- *Church Street, Blackpool*

Date and time

Surveys were carried out to TfL standards for high streets, across two days:

- *Thursday 7th March 2024 between 13:00 and 18:00 and;*
- *Saturday 9th March 2024 between 13:00 and 18:00.*

Method

1. Building-based data – gate counts

a) Street gate counts

Gate counts are carried out by drawing an imaginary line perpendicular to the road centre line. The people passing through the imaginary line were counted for 5 minutes every 30 minutes between 13:00 and 18:00. These counts were then translated into pedestrian per hour (pph).

b) Building counts

The people entering the M&S building were counted for 5 minutes every 30 minutes between 13:00 and 18:00. These counts were then translated into pedestrian per hour (pph).

2. Street-based data – pedestrian traces

The survey was carried out using pedestrian traces. Pedestrians are observed from the indicated origin point, with their path recorded, or traced, until they have left the survey boundary or remained inside it for more than 2 minutes. Observers also record the number of stops, duration of each stop, and the type of building (land-use) that the pedestrian entered.

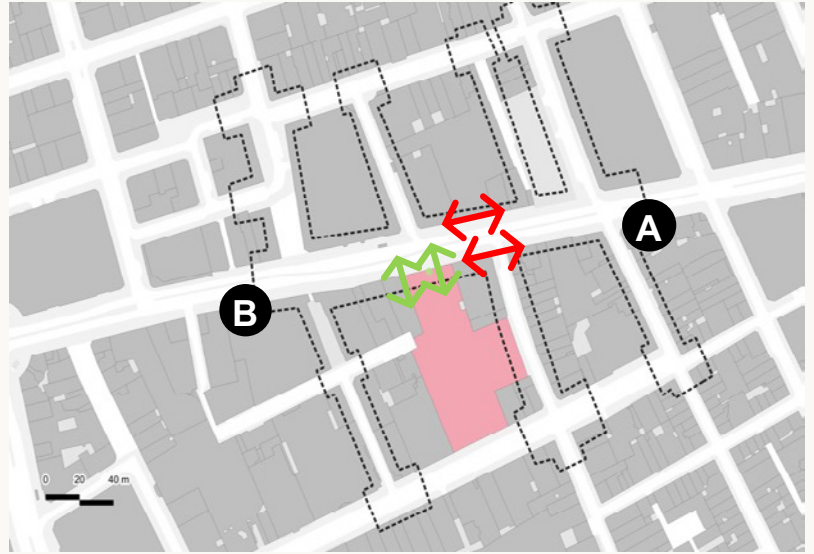
In Blackpool and Leeds, traces were carried out for 30 minutes every hour between 13:00 and 18:00, both days. In London, traces were carried out for 20 minutes every hour between 13:00 and 18:00, both days.



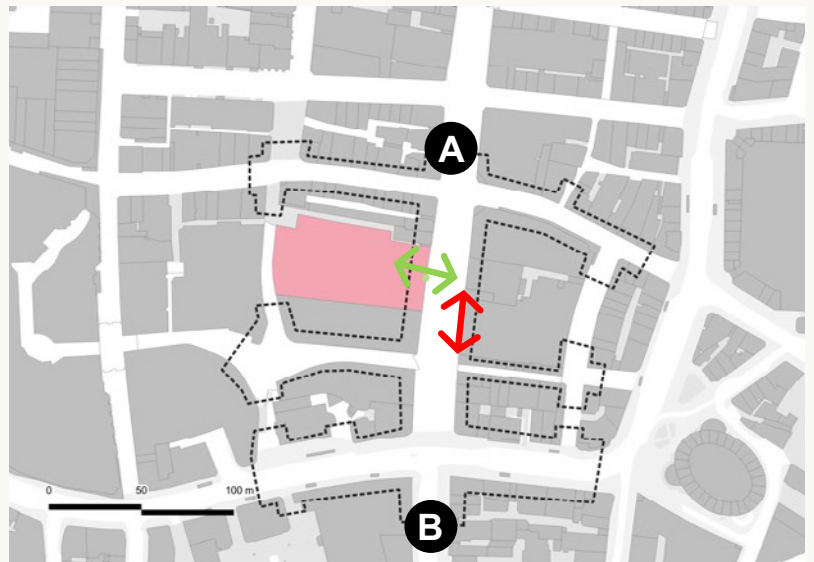
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Oxford Street, London

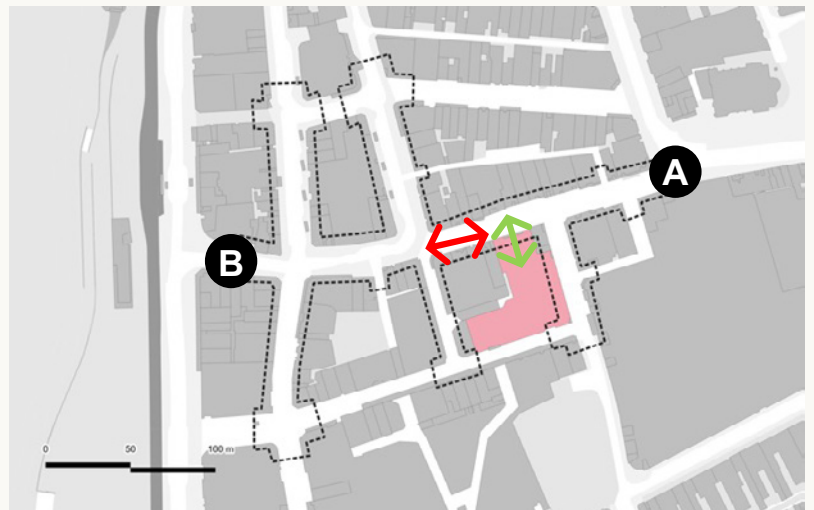
In Oxford Street, both sides of the pavement were counted separately. The two entrances to M&S were also counted separately. The traces origins were located on the southern pavement of Oxford Street.



Briggate, Leeds



Church Street, Blackpool



- A** Traces Origin A
- B** Traces Origin B
- Street Gate Count
- Building Gate Count
M&S Entrance
- Pedestrian Traces Boundary
- Pedestrian Traces Boundary



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Oxford Street, London

Weekday Gate Count Data and Pedestrian Behaviour

The ratio of passers-by compared to those going into the M&S building on Oxford Street, on a weekday, was lowest during lunch time. On this period:

5,808

5,808 pph passed on Oxford Street between 13:00 and 14:00 (both sides of the pavement)

1,078

1,078 pph entered M&S between 13:00 and 14:00 (both entrances of M&S)

81%

This means that the lowest observed ratio of passers-by, on a weekday, was 81%

87%

The average ratio was 87%

65%

If we look at the ratio as the percentage of people passing on the southern pavement (the same pavement as M&S) and going into M&S, the ratio decreases to 65%.



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13:00 - 14:00 pph

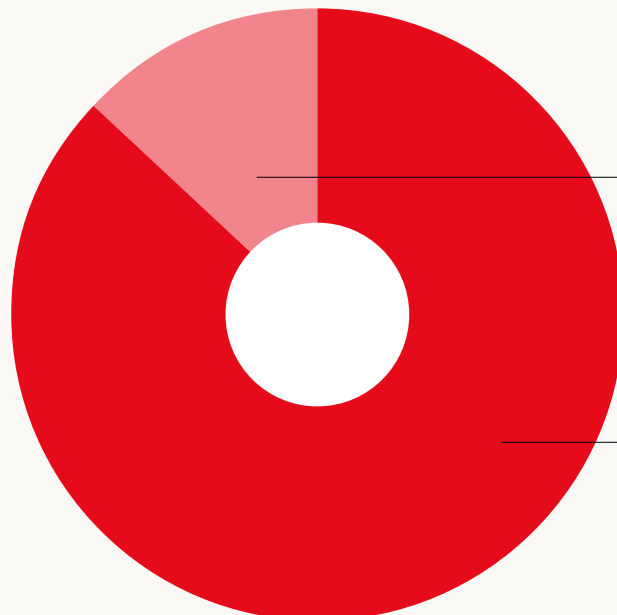
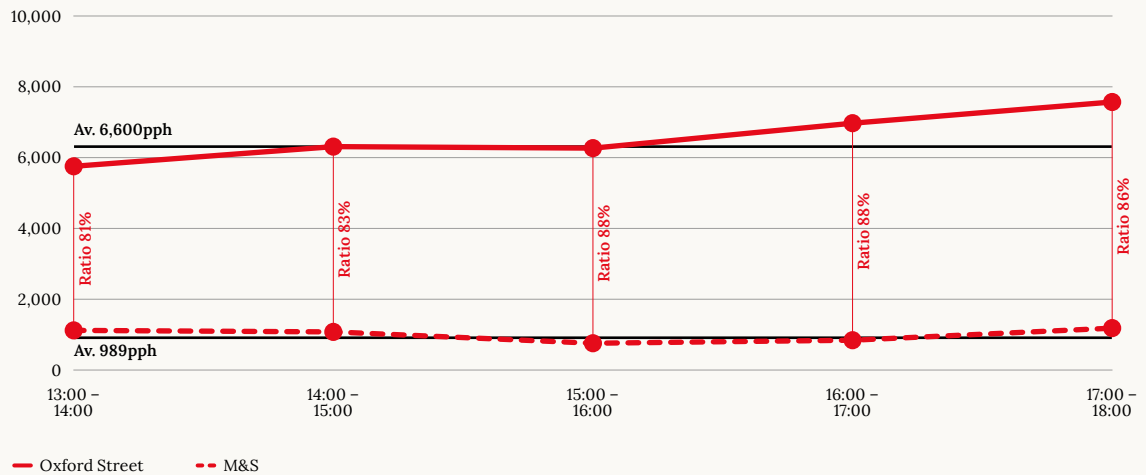
Pedestrian Counts

Data collected on 07 March 2024

Pedestrian Movements

People per Hour

- ↔ 1,000+
- ↔ 750-1,000
- ↔ 500-750
- ↔ 250-500
- ↔ 100-250
- ↔ 0-100



Average split between passers-by and people entering the M&S building between 13:00 and 18:00

13%
Entering M&S

87%
Passing By



- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Weekday Traces Data and Pedestrian Behaviour

From all observed traces:

58%

58% of pedestrians remained on the street and didn't go into any buildings during the two minutes they were traced

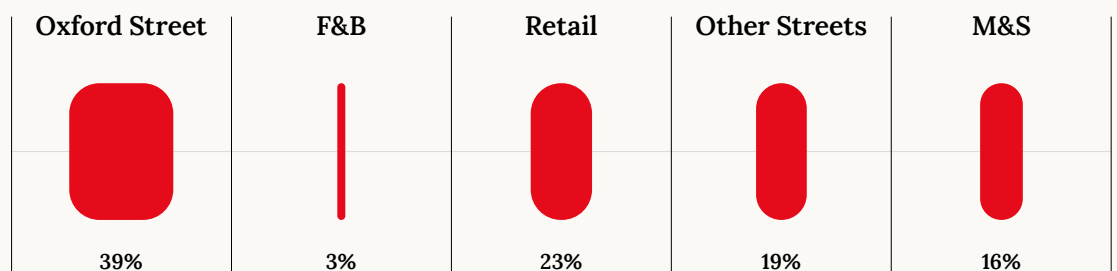
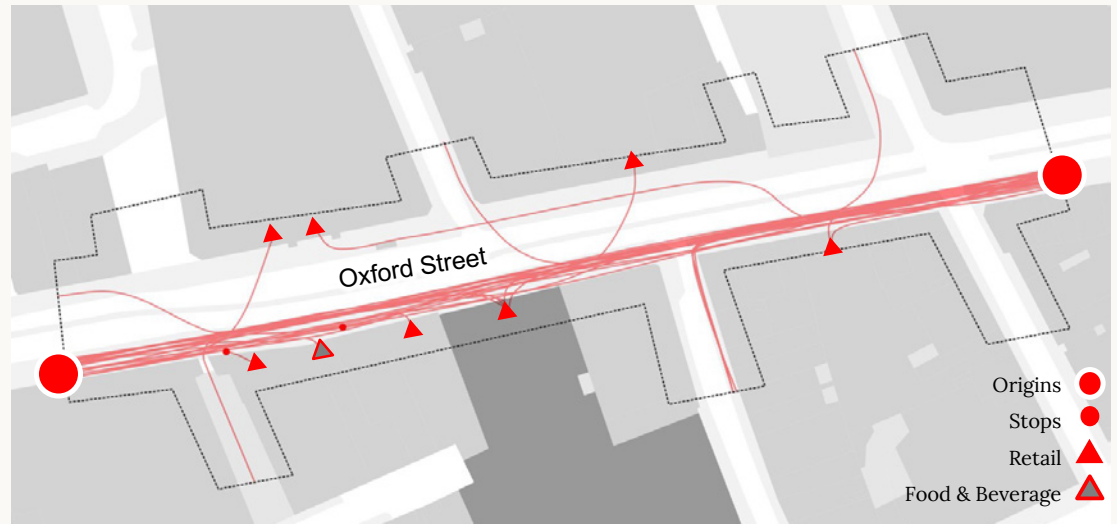
42%

42% of pedestrians went into a building, either on Oxford Street or surrounding streets

16%

16% entered M&S

Pedestrian Traces
Data collected on 24.03.07





1. Executive Summary
2. Site Comparison – Study Locations
3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
4. Historic Data
5. Methodology

Weekend Gate Count Data and pedestrian behaviour

The ratio between passers-by and pedestrians going into the M&S building on Oxford Street, on a weekend day, was highest during lunch time. During this period:

8,160

8,160 pph passed by on Oxford Street between 13:00 and 14:00 (both sides of the pavement)

1,332

1,332 pph entered M&S between 13:00 and 14:00 (both entrances of M&S)

84%

This means that the lowest observed ratio of passers-by, on a weekend day, was 84%

87%

The average ratio was 87%

74%

If we look at the ratio as the percentage of people passing on the southern pavement (the same pavement as M&S) and going into M&S, the ratio decreases to 74%



- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology



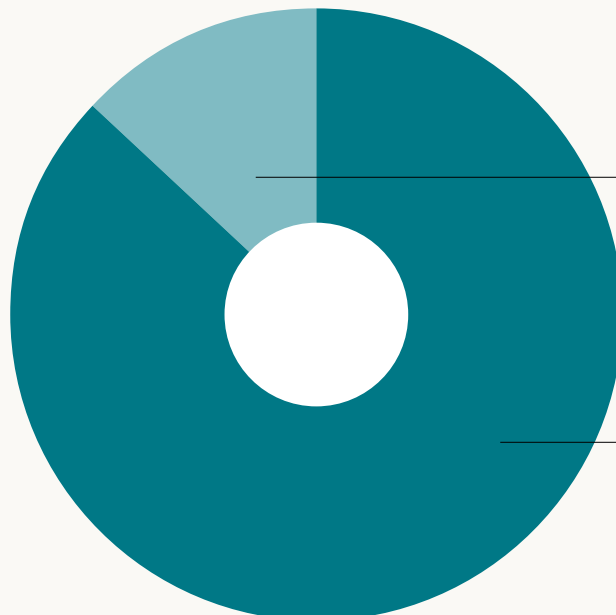
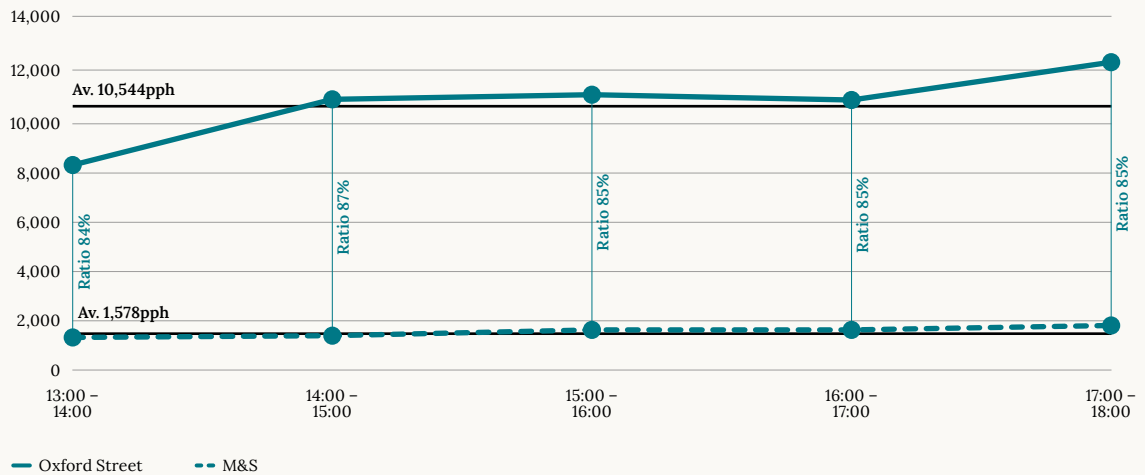
13:00 - 14:00 pph

Pedestrian Counts

Data collected on 09 March 2024

Pedestrian Movements

People per Hour



Average split between passers-by and people entering the M&S building between 13:00 and 18:00

13%
Entering M&S

87%
Passing By



- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Weekend Traces Data and Pedestrian Behaviour

From all observed traces:

58%

58% of pedestrians remained on the street and didn't go into any buildings during the two minutes they were traced

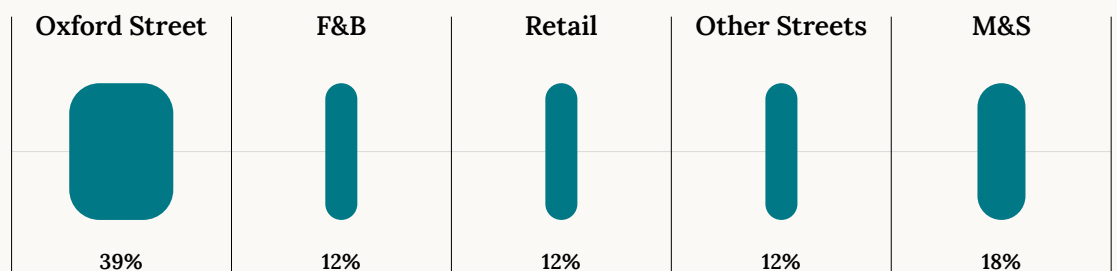
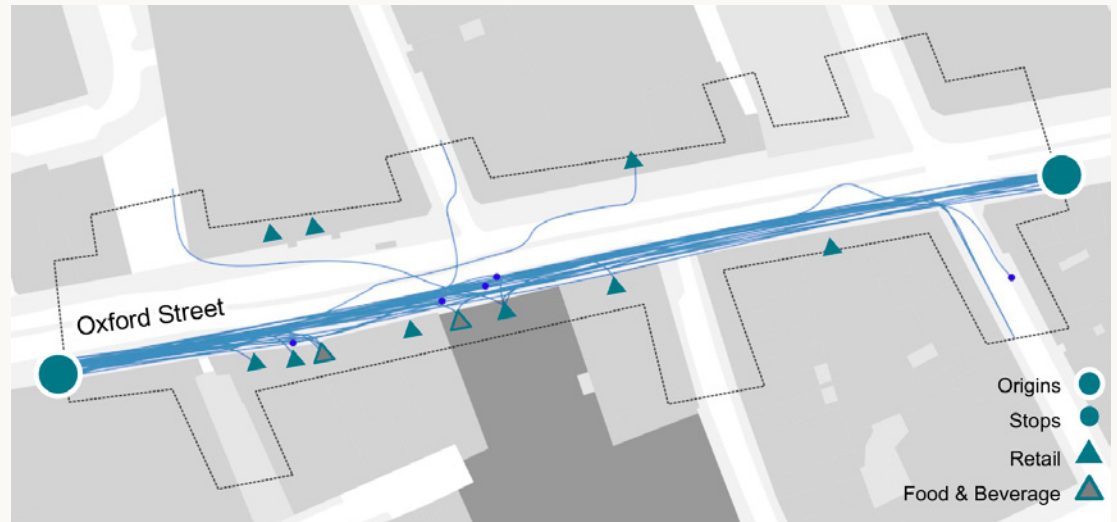
42%

42% of pedestrians went into a building, either on Oxford Street or surrounding streets

18%

18% entered M&S

Pedestrian Traces
Data collected on 24.03.09





- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Annual Summary

Annual pedestrian behaviour

The daily observed movement was extrapolated to annual figures.

1. Daily movement

The recorded pedestrian flow was multiplied by two to account for a daily figure. This was done based on data* showing that the total pedestrian flow (at M&S) between 1pm and 6pm (the window in which pedestrian movement was collected for this study), represents 50% of the total pedestrian flow within 24 hours.

2. Weekly movement

The daily pedestrian footfall figure was then multiplied by two (weekend day) or five (weekday). This extrapolates the daily figure into a weekly count.

3. Annual movement

Finally, to reach an annual figure, the weekly count was multiplied by the 52 weeks of the year.

30.3m

In Oxford Street, there are 30.3 million people passing by

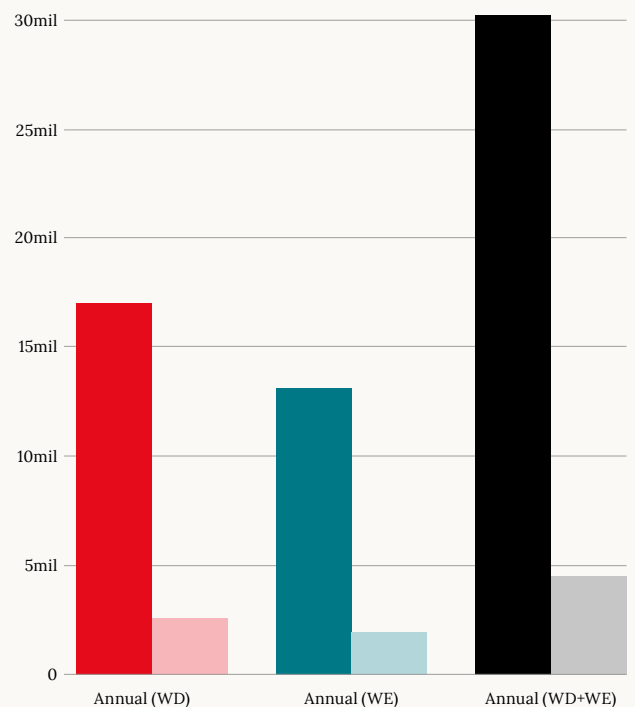
4.5m

From these, 4.5 million will enter M&S

13%

This indicates that 13% of passers-by will go inside M&S in Oxford Street

| Oxford Street - Weekday | | |
|------------------------------|-------------|------------|
| Daily | Weekly | Annual |
| 66,036 | 330,180 | 17,169,360 |
| M&S - Weekday | | |
| Daily | Weekly | Annual |
| 9,891 | 49,454 | 2,571,605 |
| Oxford Street - Weekend | | |
| Daily | All Weekend | Annual |
| 126,533 | 253,066 | 13,159,411 |
| M&S - Weekend | | |
| Daily | All Weekend | Annual |
| 18,936 | 37,872 | 1,969,344 |
| Annual - Weekday and Weekend | | |
| Oxford Street | 30,328,771 | |
| M&S | 4,540,949 | |





1. Executive Summary
2. Site Comparison – Study Locations
3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
4. Historic Data
5. Methodology

Briggate, Leeds

Weekday Gate Count Data and Pedestrian Behaviour

The ratio between passers-by and pedestrians going into the M&S building on Briggate, on a weekday, was highest between 13:00 and 14:00. During this period:

3,036

3,036 pph passed by on Briggate between 13:00 and 14:00

870

870 pph entered M&S between 13:00 and 14:00

71%

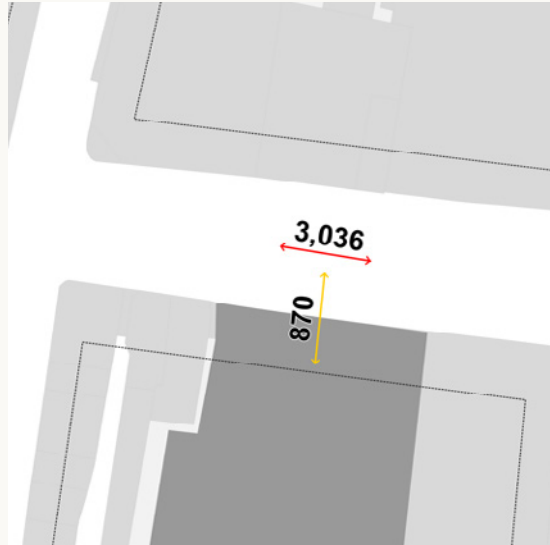
This means that the lowest observed ratio of passers-by, on a weekday, was 71%

84%

The average ratio was 84%.



- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology



13:00 - 14:00 pph

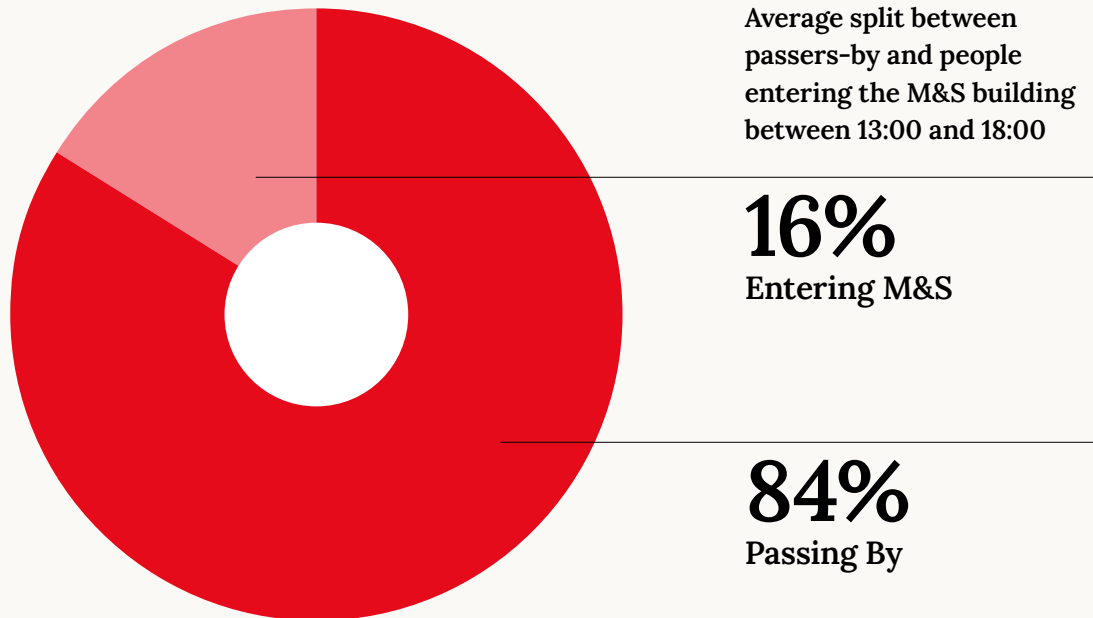
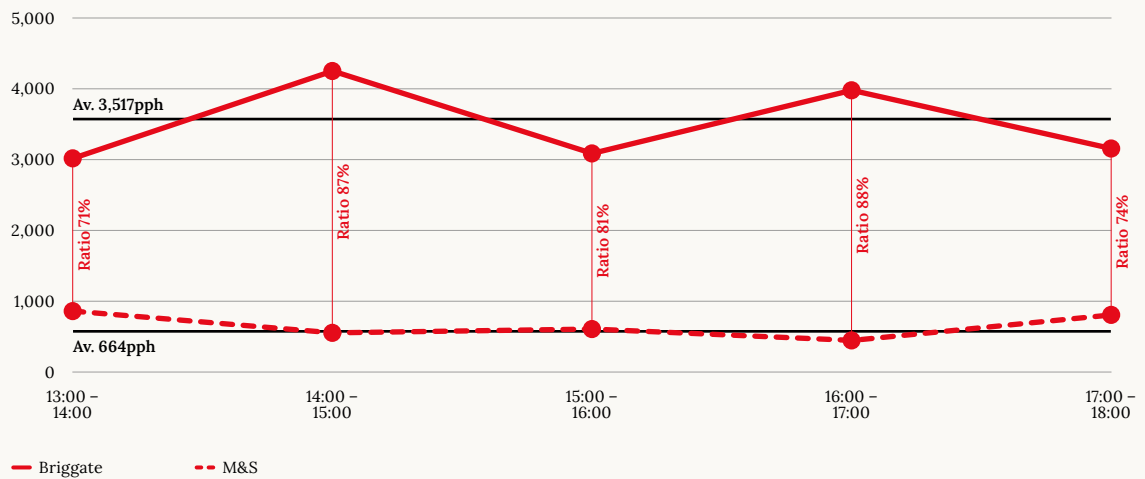
Pedestrian Counts

Data collected on 07 March 2024

Pedestrian Movements

People per Hour

- 1,000+
- 750-1,000
- 500-750
- 250-500
- 100-250
- 0-100





- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Weekday Traces Data and Pedestrian Behaviour

From all observed traces:

66%

66% of pedestrians remained on the street and didn't go into any buildings during the two minutes they were traced

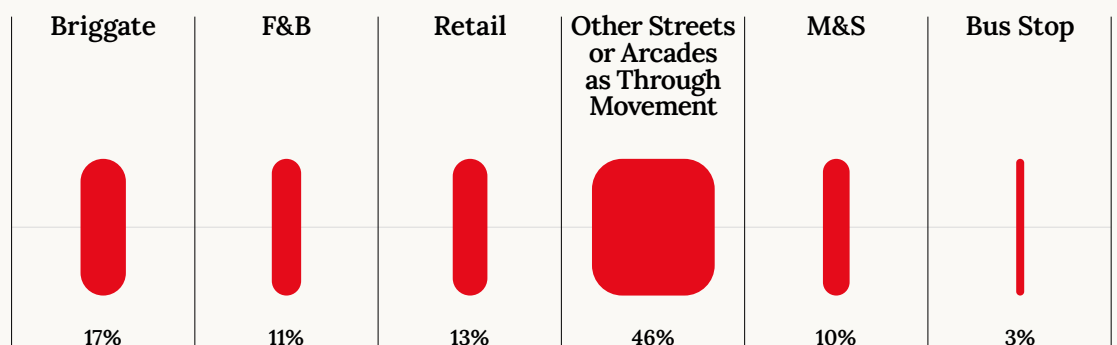
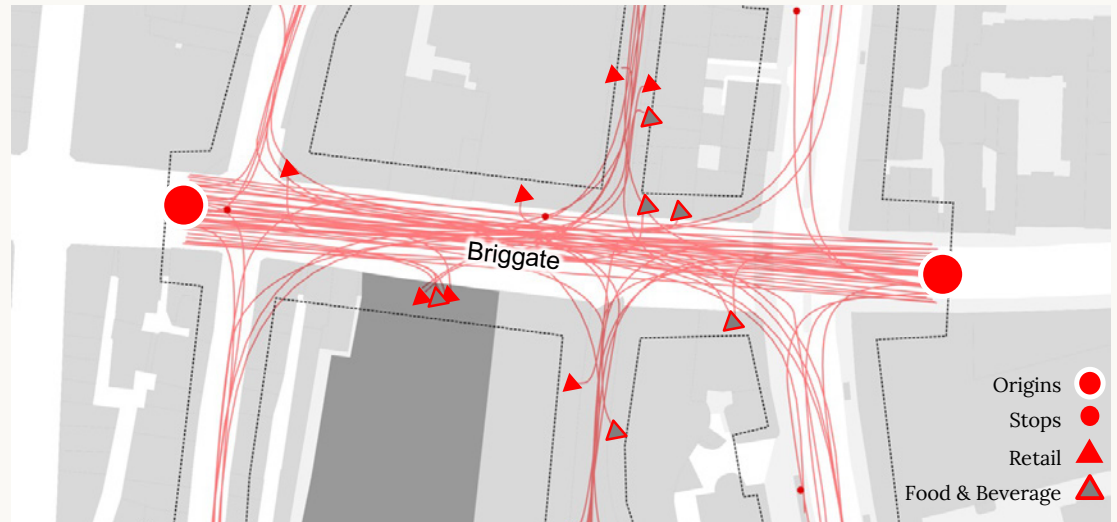
34%

34% of pedestrians went into a building, either on Briggate or surrounding streets

10%

10% entered M&S

Pedestrian Traces
Data collected on 24.03.09





1. Executive Summary
2. Site Comparison – Study Locations
3. Pedestrian Observations Methodology
Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
4. Historic Data
5. Methodology

Weekend Gate Count Data and pedestrian behaviour

The ratio between passers-by and pedestrians going into the M&S building on Briggate, on a weekend day, was highest between 15:00 and 16:00. During this period:

4,446

4,446 pph passed on Briggate between 15:00 and 16:00

1,218

1,218 pph entered M&S between 15:00 and 16:00

73%

This means that the lowest observed ratio of passers-by, on a weekend, was 73%

82%

The average ratio was 82%



- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology



13:00 - 14:00 pph

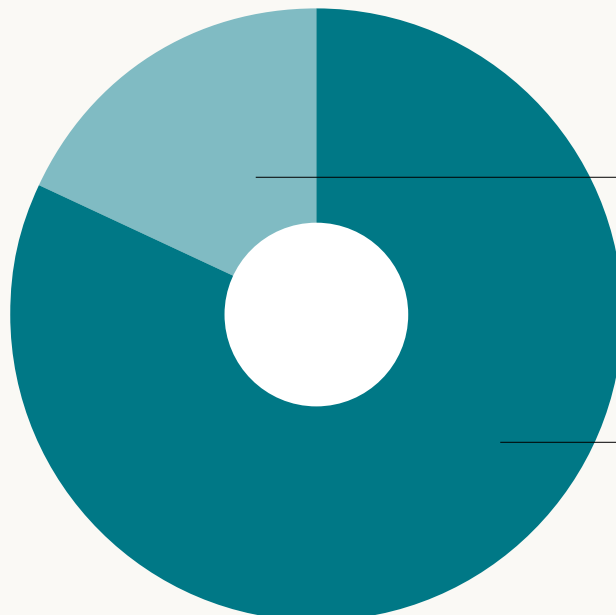
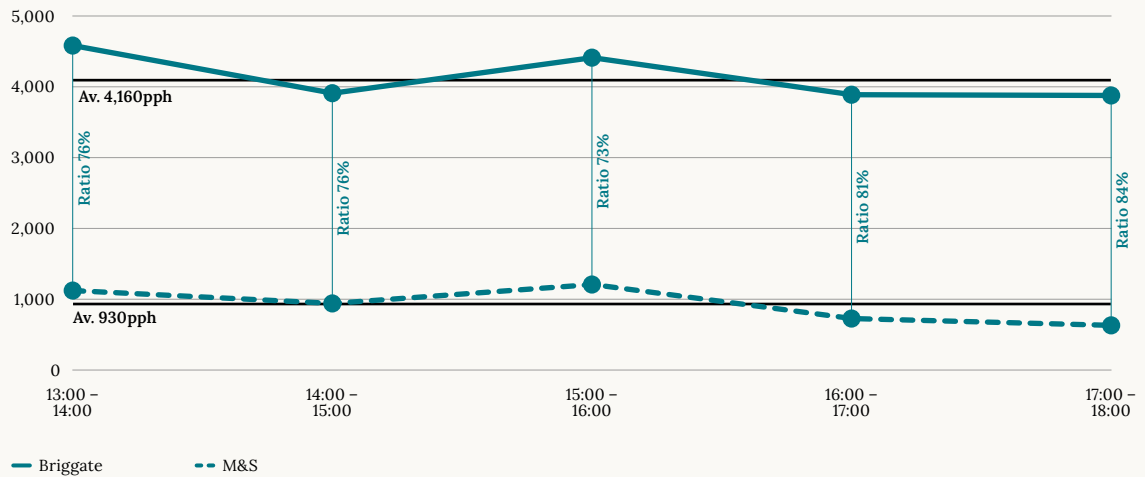
Pedestrian Counts

Data collected on 09 March 2024

Pedestrian Movements

People per Hour

- 1,000+
- 750-1,000
- 500-750
- 250-500
- 100-250
- 0-100



Average split between passers-by and people entering the M&S building between 13:00 and 18:00

18%
Entering M&S

82%
Passing By



- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Weekend Traces Data and Pedestrian Behaviour

From all observed traces:

72%

72% of pedestrians remained on the street and didn't go into any buildings during the two minutes they were traced

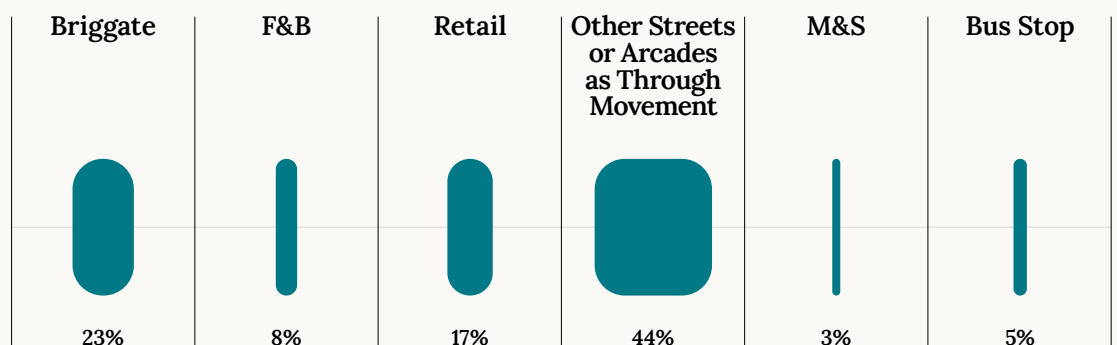
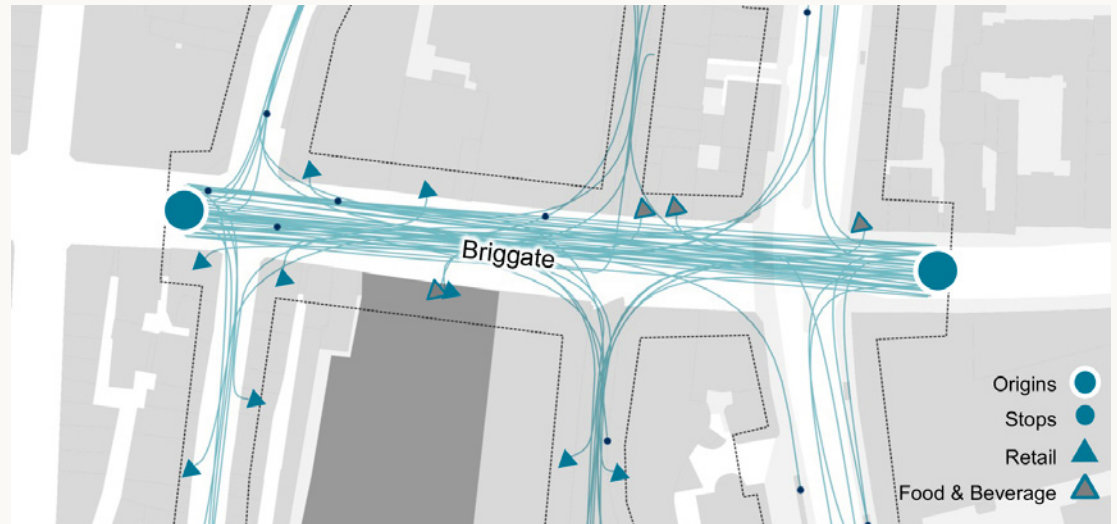
28%

28% of pedestrians went into a building, either on Briggate or surrounding streets

3%

3% entered M&S

Pedestrian Traces
Data collected on 24.03.09





- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Annual Summary

Annual pedestrian behaviour

The daily observed movement was extrapolated to annual figures.

1. Daily movement

The recorded pedestrian flow was multiplied by two to account for a daily figure. This was done based on data* showing that the total pedestrian flow (at M&S) between 1pm and 6pm (the window in which pedestrian movement was collected for this study), represents 50% of the total pedestrian flow within 24 hours.

2. Weekly movement

The daily pedestrian footfall figure was then multiplied by two (weekend day) or five (weekday). This extrapolates the daily figure into a weekly count.

3. Annual movement

Finally, to reach an annual figure, the weekly count was multiplied by the 52 weeks of the year.

14.3m

In Briggate, there are 14.3 million people passing by

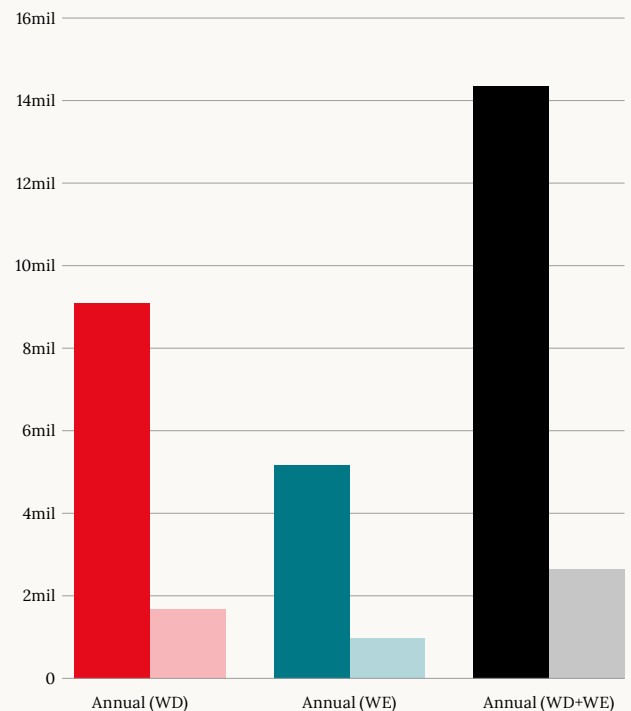
2.7m

From these, 2.7 million will enter M&S

16%

This indicates that 16% of passers-by go inside M&S in Briggate

| Briggate - Weekday | | |
|------------------------------|-------------|-----------|
| Daily | Weekly | Annual |
| 35,172 | 175,860 | 9,144,720 |
| M&S - Weekday | | |
| Daily | Weekly | Annual |
| 6,636 | 33,180 | 1,725,360 |
| Briggate - Weekend | | |
| Daily | All Weekend | Annual |
| 49,925 | 99,850 | 5,192,179 |
| M&S - Weekend | | |
| Daily | All Weekend | Annual |
| 9,300 | 18,600 | 967,200 |
| Annual - Weekday and Weekend | | |
| Briggate | 14,336,899 | |
| M&S | 2,692,560 | |





- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Church Street, Blackpool

Weekday Gate Count Data and Pedestrian Behaviour

The ratio of between passers-by and pedestrians going into the M&S building on Church Street, on a weekday, was highest between 13:00 and 14:00. During this period:

978

978 pph passed on Church Street between 13:00 and 14:00

174

174 pph entered M&S between 13:00 and 14:00

82%

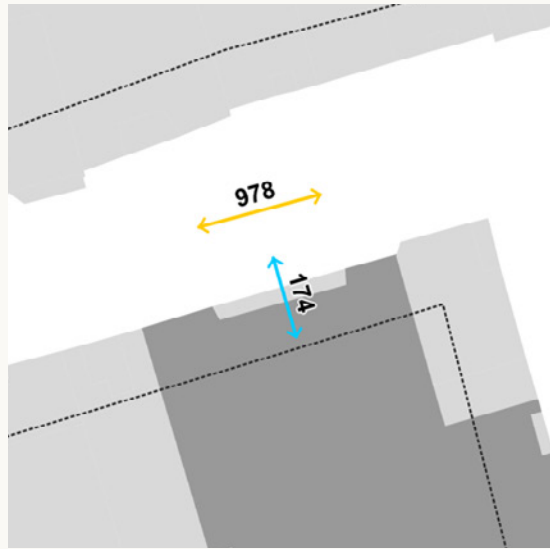
This means that the lowest observed ratio of passers-by, on a weekday, was 82%

89%

The average ratio was 89%



- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology



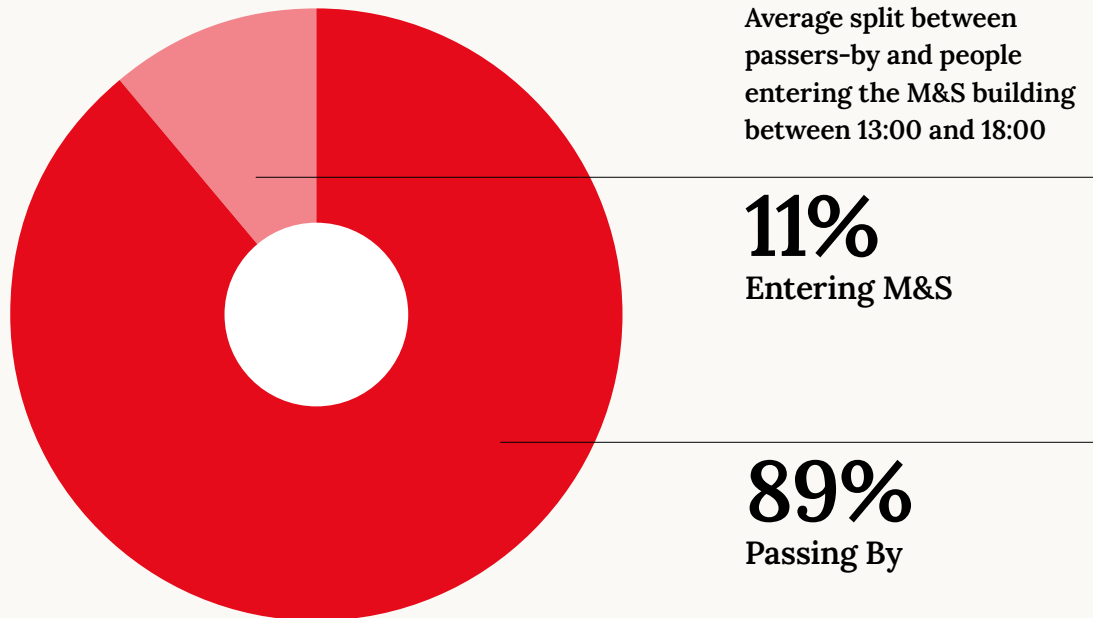
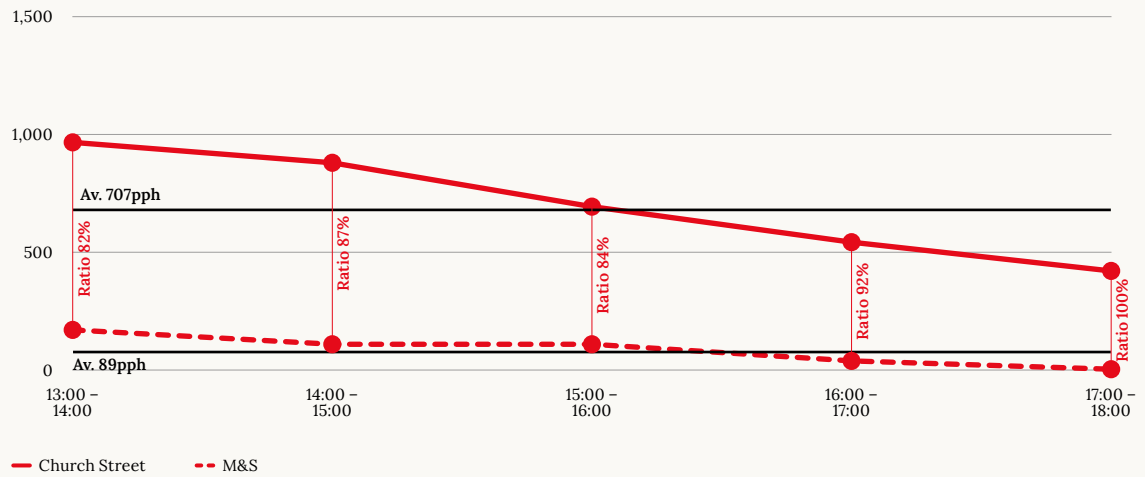
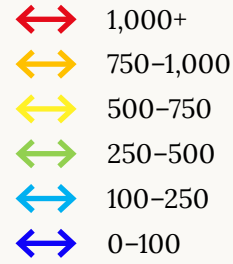
13:00 - 14:00 pph

Pedestrian Counts

Data collected on 07 March 2024

Pedestrian Movements

People per Hour





- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations
 - Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Weekday Traces Data and Pedestrian Behaviour

From all observed traces:

74%

74% of pedestrians remained on the street and didn't go into any buildings during the two minutes they were traced

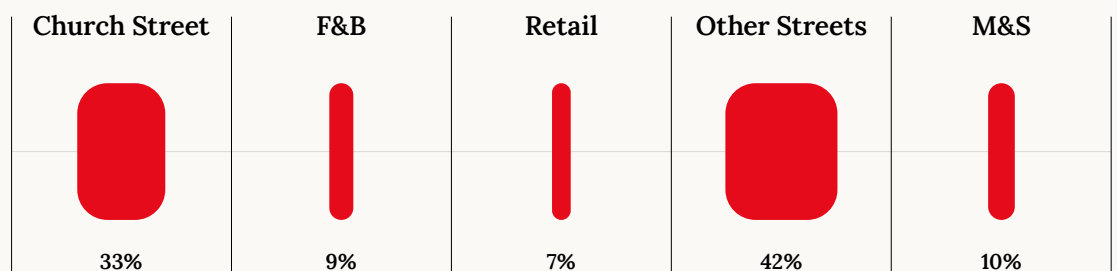
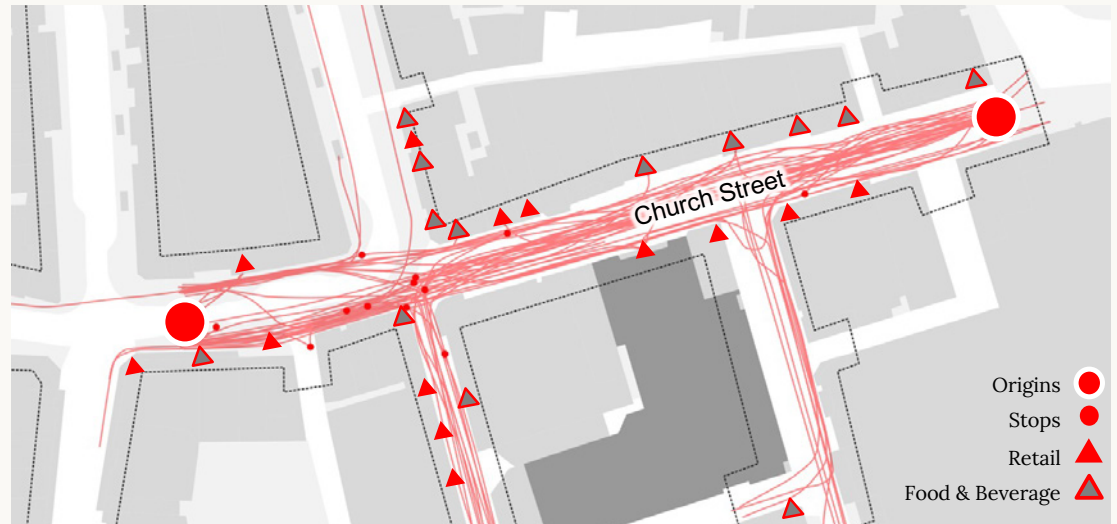
26%

26% of pedestrians went into a building, either on Church Street or surrounding streets

10%

10% entered M&S

Pedestrian Traces
Data collected on 24.03.09





1. Executive Summary
2. Site Comparison – Study Locations
3. **Pedestrian Observations**
Methodology
Oxford Street, London
Briggate, Leeds
• Church Street, Blackpool
4. Historic Data
5. Methodology

Weekend Gate Count Data and pedestrian behaviour

The ratio of between passers-by and pedestrians going into the M&S building on Church Street, on a weekend day, was highest between 16:00 and 17:00. During this period:

1,902

1,902 pph passed on Church Street between 16:00 and 17:00

348

348 pph entered M&S between 13:00 and 14:00

82%

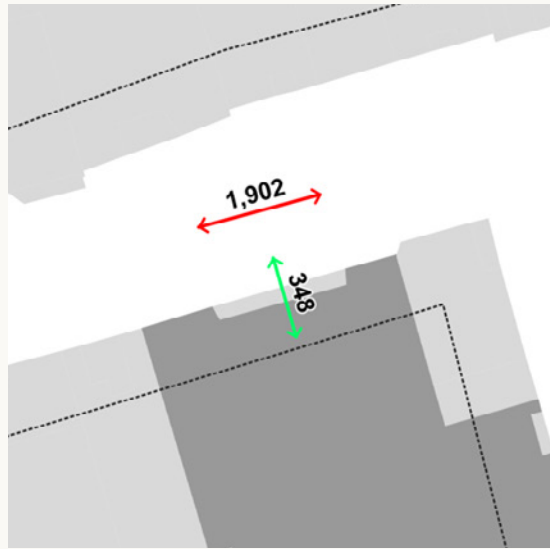
This means that the lowest observed ratio of passers-by, on a weekend, was 82%

87%

The average ratio was 87%



- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology



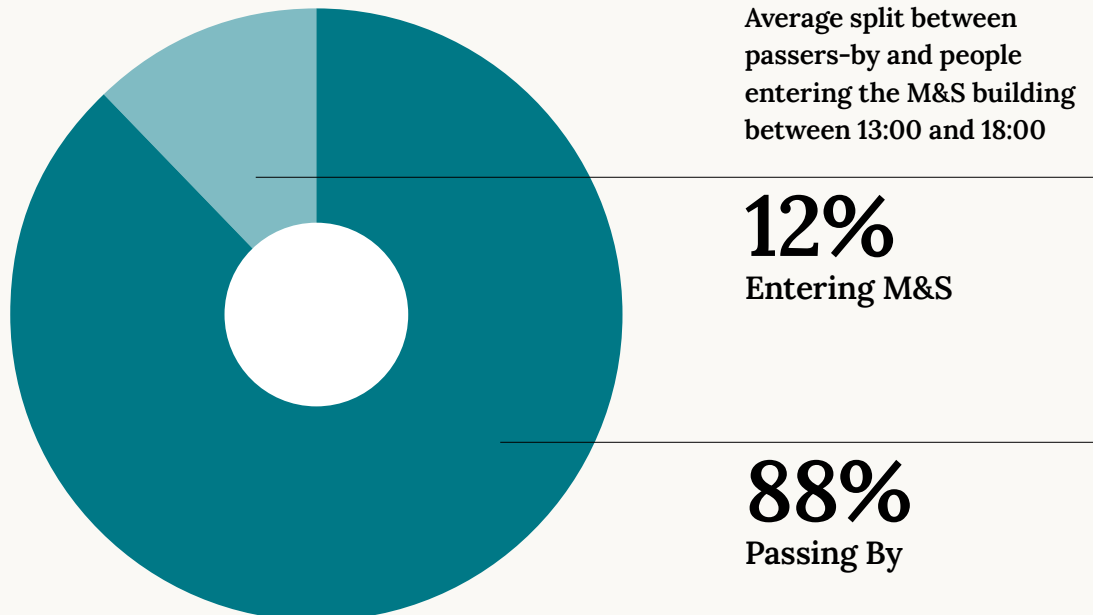
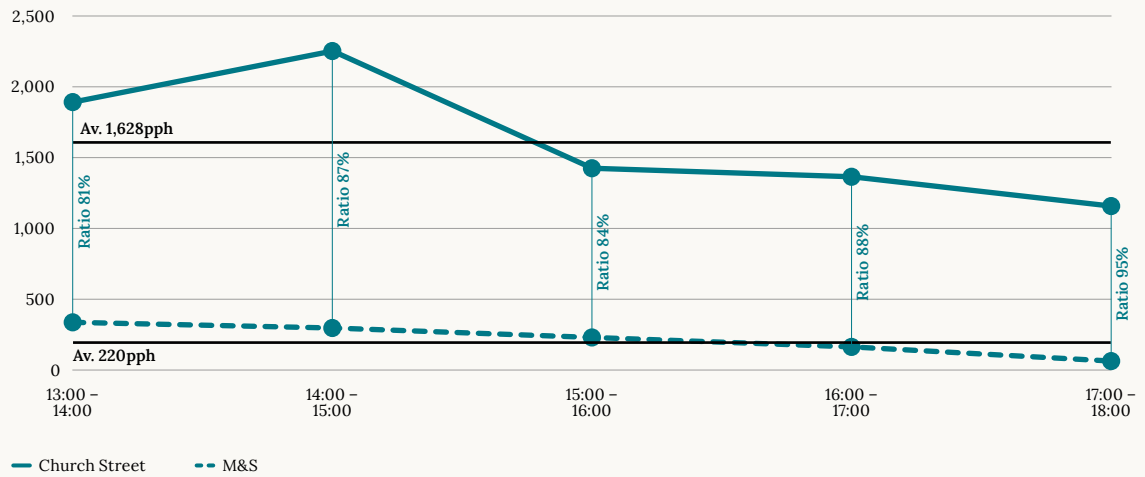
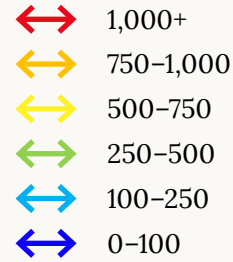
16:00 – 17:00 pph

Pedestrian Counts

Data collected on 09 March 2024

Pedestrian Movements

People per Hour





- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Weekend Traces Data and Pedestrian Behaviour

From all observed traces:

71%

71% of pedestrians remained on the street and didn't go into any buildings during the two minutes they were traced

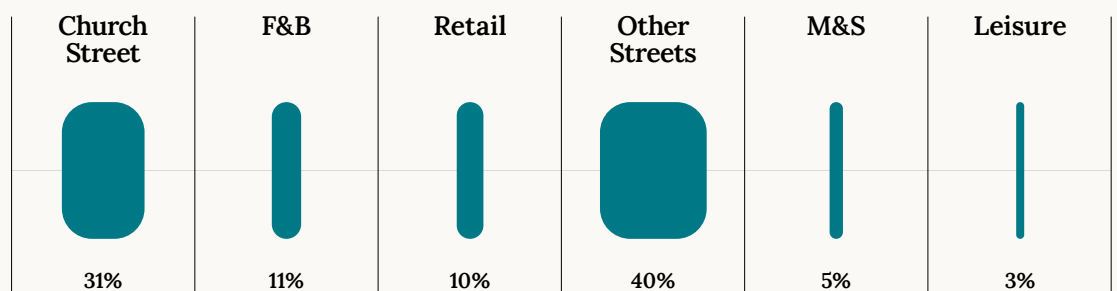
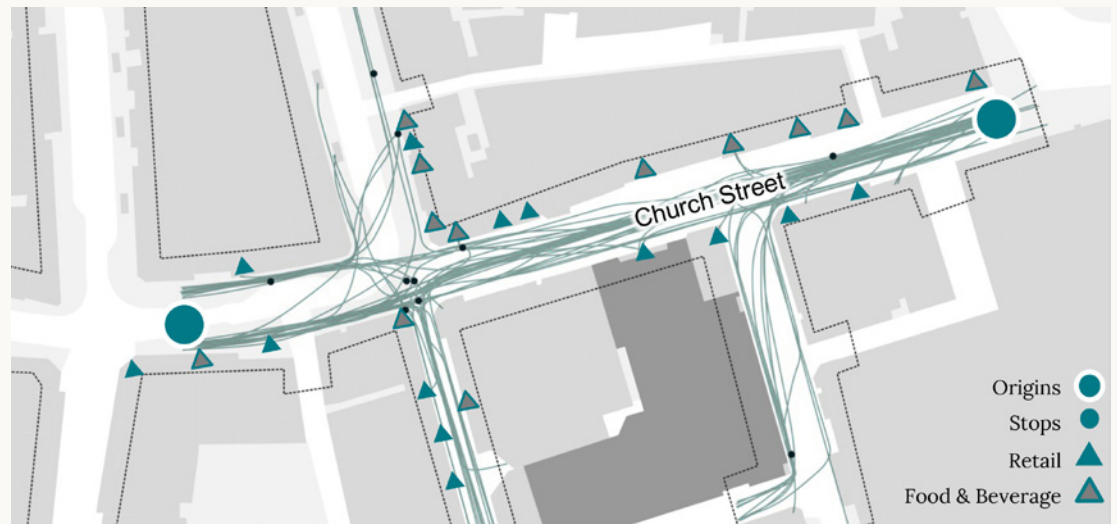
29%

29% of pedestrians went into a building, either on Church Street or surrounding streets

5%

5% entered M&S

Pedestrian Traces Data collected on 24.03.09





- 1. Executive Summary
- 2. Site Comparison - Study Locations
- 3. Pedestrian Observations Methodology
 - Oxford Street, London
 - Briggate, Leeds
 - Church Street, Blackpool
- 4. Historic Data
- 5. Methodology

Annual Summary

Annual pedestrian behaviour

The daily observed movement was extrapolated to annual figures.

1. Daily movement

The recorded pedestrian flow was multiplied by two to account for a daily figure. This was done based on data* showing that the total pedestrian flow (at M&S) between 1pm and 6pm (the window in which pedestrian movement was collected for this study), represents 50% of the total pedestrian flow within 24 hours.

2. Weekly movement

The daily pedestrian footfall figure was then multiplied by two (weekend day) or five (weekday). This extrapolates the daily figure into a weekly count.

3. Annual movement

Finally, to reach an annual figure, the weekly count was multiplied by the 52 weeks of the year.

3.5m

In Church Street, there are 3.5 million people passing by

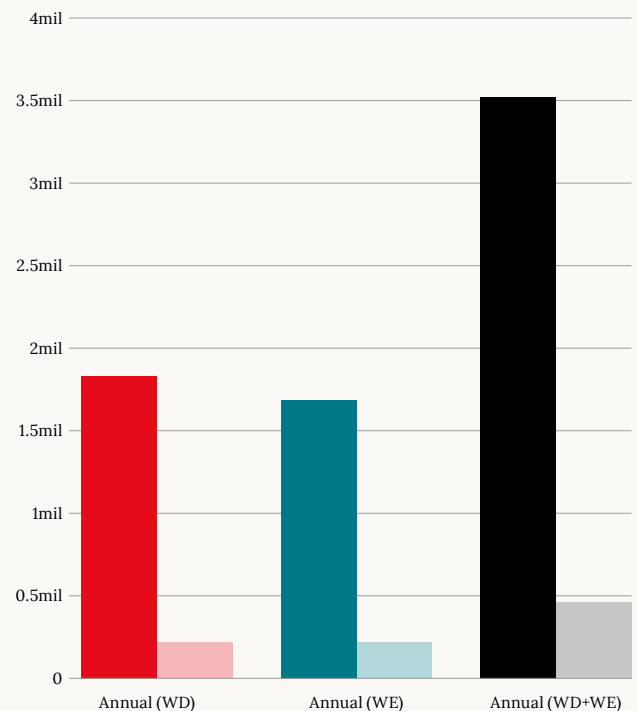
459k

From these, 459,000 will enter M&S

12%

This indicates that 12% of passers-by go inside M&S in Blackpool

| Church Street - Weekday | | |
|------------------------------|-------------|-----------|
| Daily | Weekly | Annual |
| 7,068 | 35,340 | 1,837,680 |
| M&S - Weekday | | |
| Daily | Weekly | Annual |
| 888 | 4,440 | 230,880 |
| Church Street - Weekend | | |
| Daily | All Weekend | Annual |
| 16,284 | 32,568 | 1,693,536 |
| M&S - Weekend | | |
| Daily | All Weekend | Annual |
| 2,196 | 4,392 | 228,384 |
| Annual - Weekday and Weekend | | |
| Church Street | 3,531,216 | |
| M&S | 459,264 | |





Section 4

Historic Data



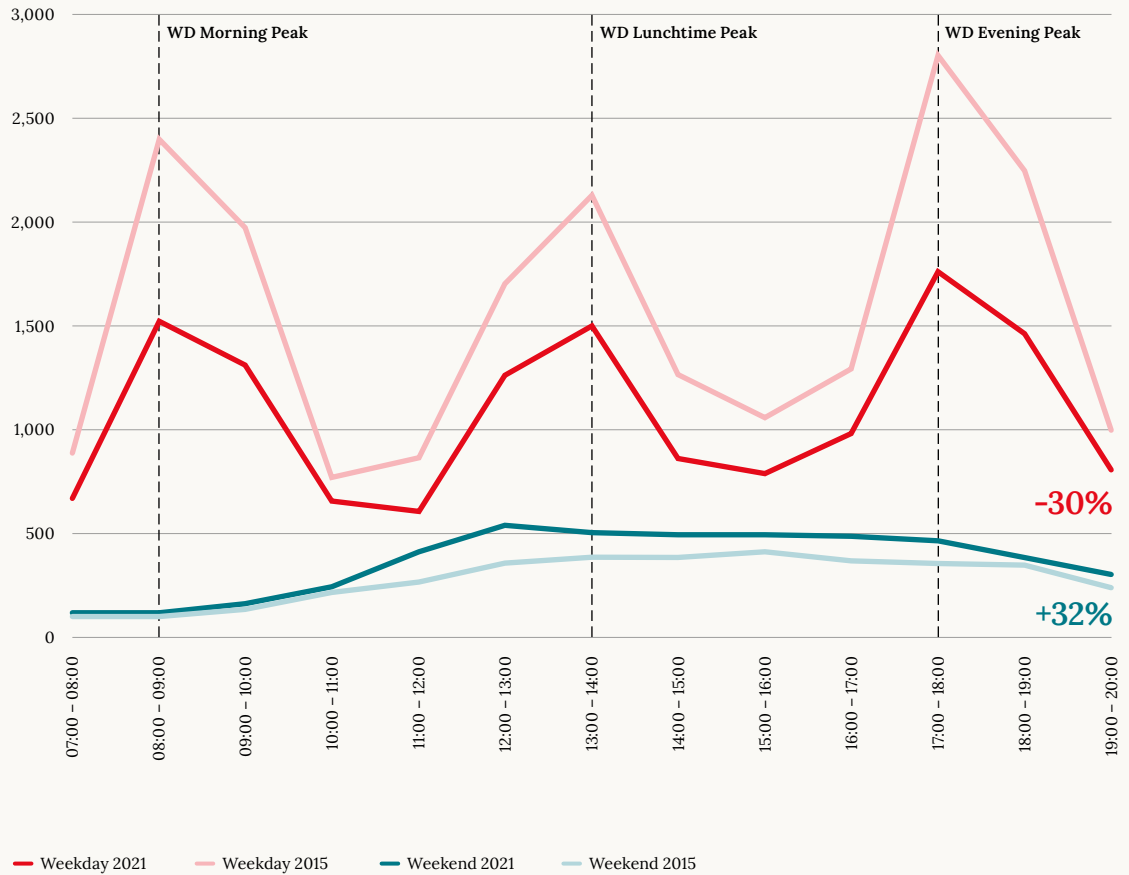
- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations
- 4. **Historic Data**
 - Employment Focussed Area
 - Culture Focussed Area
 - Waterfront Employment / Tourist Hybrid
 - Mixed Use Area
 - Shopping and Leisure Focussed Area
- 5. Methodology

Employment Focused Area

Historic data from the Space Syntax database was used to understand the split between passers-by and those going into an office building within an employment focused area.

A practical case from 2021 and 2015 was used as an example of the movement profile of an employment area. This is characterised by pronounced peaks at commuting hours (morning and evening peaks) and a third peak during lunch time.

The graph below shows this ‘M’ movement profile during the week and a much flatter line, with significantly lower levels of movement, during the weekend. This is mostly since movement is generated by employment location, which tend to be closed during the weekend.





- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations
- 4. **Historic Data**
 - Employment Focussed Area
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 - Waterfront Employment / Tourist Hybrid
 - Mixed Use Area
 - Shopping and Leisure Focussed Area
- 5. Methodology

The movement also compares the levels of movement before and after the pandemic. It is possible to see that pedestrian movement during the week is 32% lower on a post-pandemic reality, while, during the weekend, pedestrian movement has increased 32% in employment areas, signaling that these are becoming more mixed-use.

The historic data was collected in October 2023 and March 2024.

Overall, it was observed that:

- On the busiest hour (08:00–09:00), there were 10,164 pph walking on the streets surrounding the office building;
- During this period, 1,626 pph went into the office building, making the rate of passers by 86%;
- During the second observed hour (09:00–10:00), the total movement was 7,183 pph and 990 pph went into the office building, increasing the rate of passers-by to 88%.
- Over the 2-hour period, the total movement was 17,347 people and of these, 2,616 went into the building. The overall rate of passers-by was 87% compared to 13% entering the office building.

Total population

10,164

PPH, 08:00–09:00

7,183

PPH, 09:00–10:00

87%

Passers By

13%

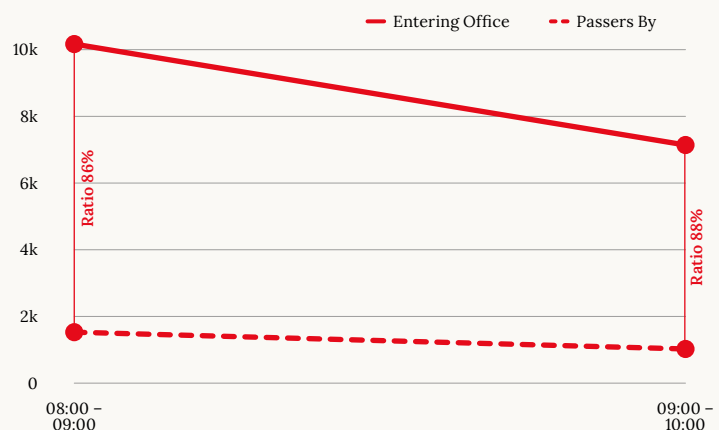
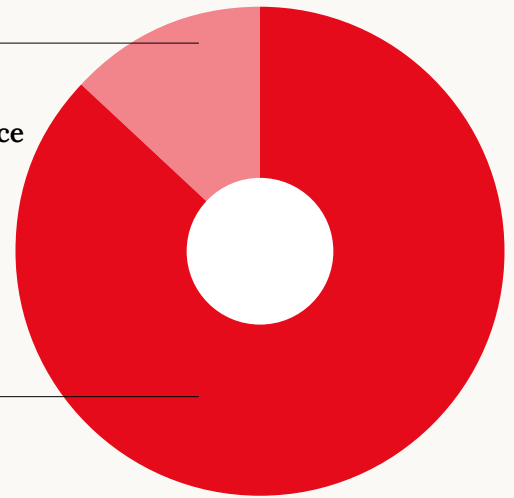
2,616

Entering Office

87%

17,347

Passers By





- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations
- 4. **Historic Data**
 - Employment Focussed Area
 - Culture Focussed Area
 - Waterfront Employment / Tourist Hybrid
 - Mixed Use Area
 - Shopping and Leisure Focussed Area
- 5. Methodology

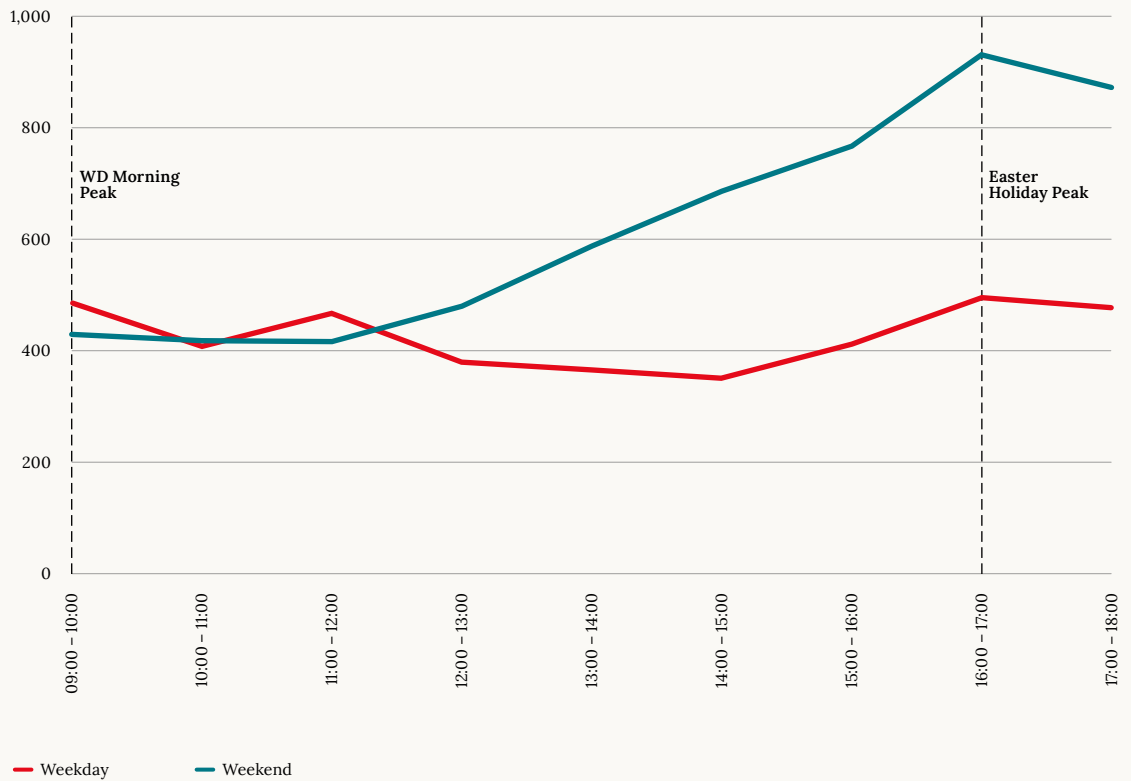
Culture Focused Area

The historic data collated was retrieved from gate counts collected in April 2013 in a cultural area and accounts for:

- Pedestrian movement immediately outside a museum in London
- Movement recorded entering the museum
- Two different entrances, facing two different streets
- The figures are displayed as averages for a weekday and the Easter holiday (weekend)

On the weekday, there was a total movement of 3,997 pph on a weekday. Between both streets an average of 65% of pedestrians were considered passers-by.

Pedestrian movement pattern of a culture-focused area in London





- 1. Executive Summary
- 2. Site Comparison – Study Locations
- 3. Pedestrian Observations
- 4. **Historic Data**
 - Employment Focussed Area
 - Culture Focussed Area
 - Waterfront Employment / Tourist Hybrid
 - Mixed Use Area
 - Shopping and Leisure Focussed Area
- 5. Methodology

In this period, there was a total of 1,077 pph entering through the main entrance, compared to 1,341 pph passing through the street. The rate of passers-by was 55%. Regarding the side entrance, there was a total of 391 pph entering through this access, compared to 1,188 pph passing through the street. The rate of passers-by was 75%.

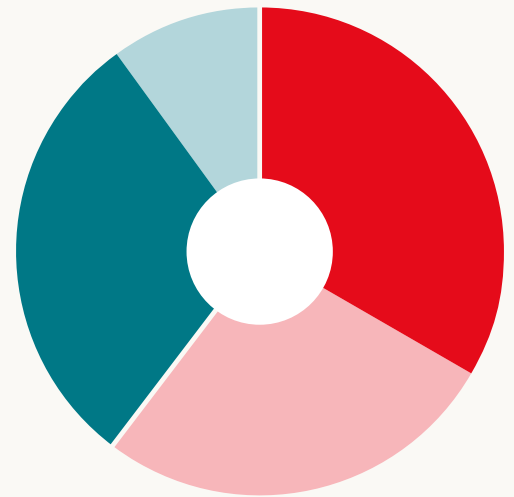
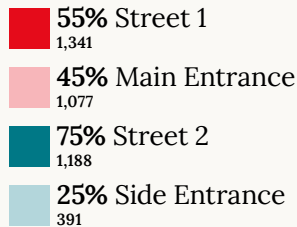
During the Easter holiday, pedestrian movement was higher, with a total movement of 4,862 pph. Between both streets an average of 76% of pedestrians were considered passers-by.

In this period, there was a total of 725 pph entering through the main entrance, compared to 2,063 pph passing through the street. The rate of passers-by was 74%. Regarding the side entrance, there was a total of 443 pph entering through this access, compared to 1,631 pph passing through the street. The rate of passers-by was 79%.

Weekday

Total population
3,997_{pph}

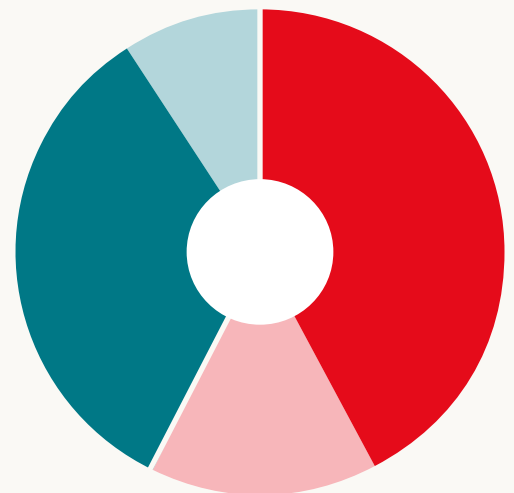
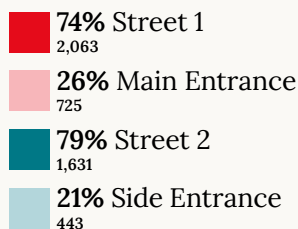
Passers By
65%



Easter Holiday

Total population
4,862_{pph}

Passers By
76%





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Waterfront Employment / Tourist Hybrid

Employment areas are characterised by the ‘W’ movement profile over the day, usually having three peaks. In this case, the lunch and evening peaks have significantly higher movement. The pattern of the morning peak might be explained by the post-pandemic reality of getting into work, with a less pronounced rush-hour. The high levels of pedestrian movement at lunch and in the evening can be explained with the overlap with leisure activities in the area. Over the weekend, movement is 25% higher overall and the pattern follows a typical touristic / leisure-oriented area with movement gradually increasing towards the evening and a sharp decline after that.

Pedestrian movement pattern of a waterfront / tourist hybrid in London





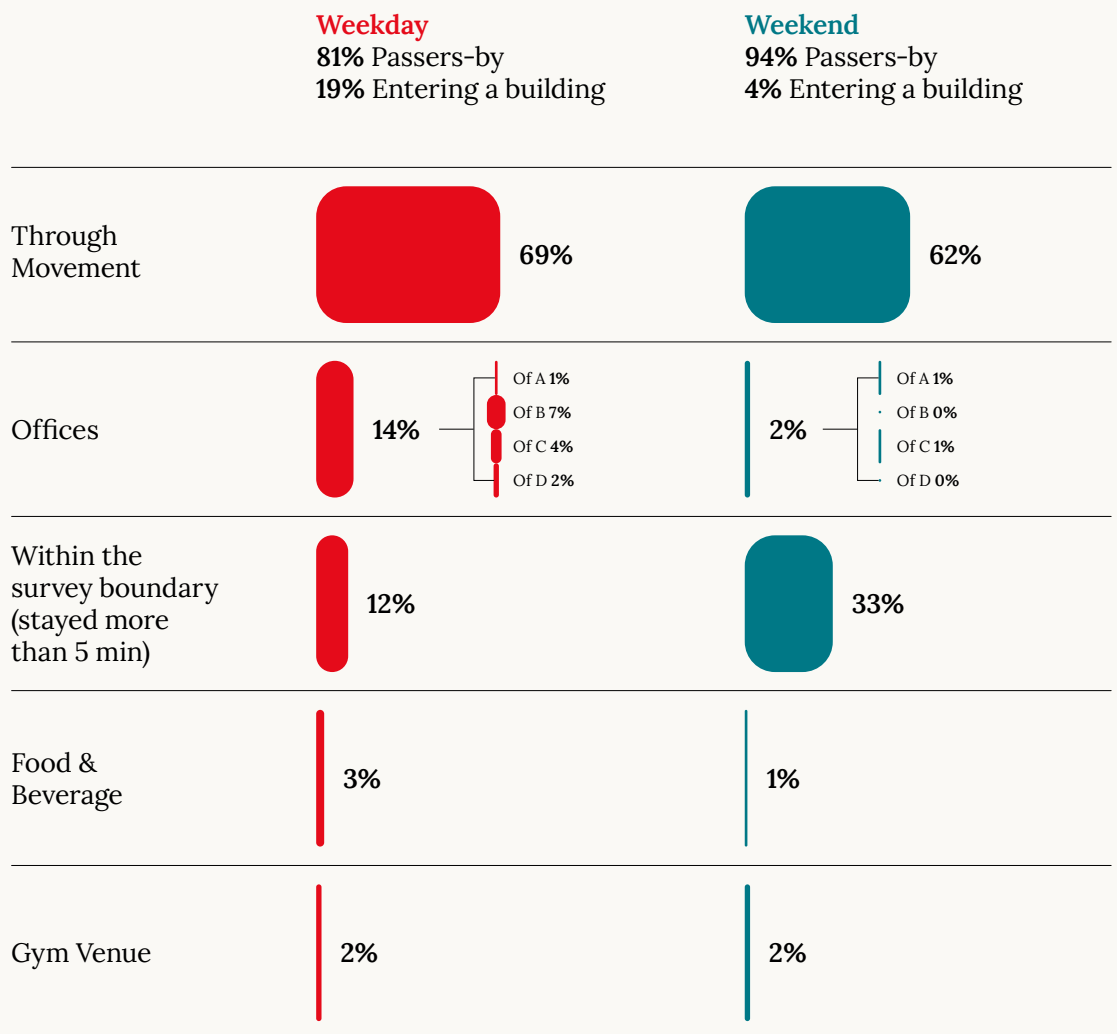
- 1. Executive Summary
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The historic data collated in this case was retrieved from traces collected in September 2023 in a location by the River Thames. The area has high rates of employment and is a destination for leisure. The river works as a natural attractor of movement.

On the weekday, movement in the area reflects a split of 69% of pedestrians going through and 12% remaining within the area. A total of 19% went into a building. On a weekday, the ratio of passers-by is therefore 81%.

During the weekend, the same split between through movement plus people remaining in the area, and pedestrians going into a building is 96% and 4% respectively.

The increase of passers-by over the weekend can be explained by the 12% reduction of people going into an office building and the 2% reduction of people entering a food and beverage building.



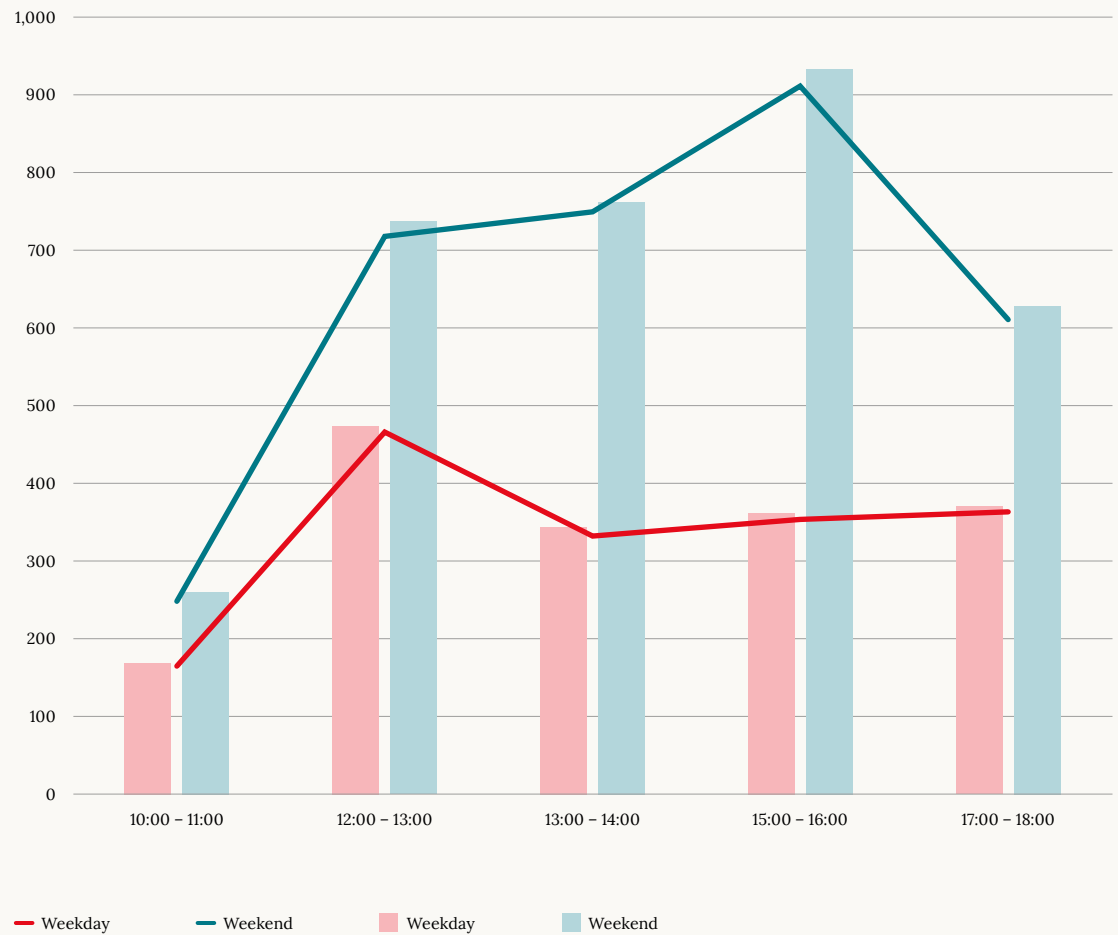


- 1. Executive Summary
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 - Waterfront Employment / Tourist Hybrid
 - **Mixed Use Area**
 - Shopping and Leisure Focussed Area
- 5. Methodology

Mixed Use Area

The historic data collated in this case was retrieved from traces collected in April 2022 in a high street in west London. The area has high mix of different land uses and is a shopping and cultural destination.

Pedestrian movement pattern of a shopping focused area in central London





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 - Employment Focussed Area
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 - Mixed Use Area
 - Shopping and Leisure Focussed Area
- 5. Methodology

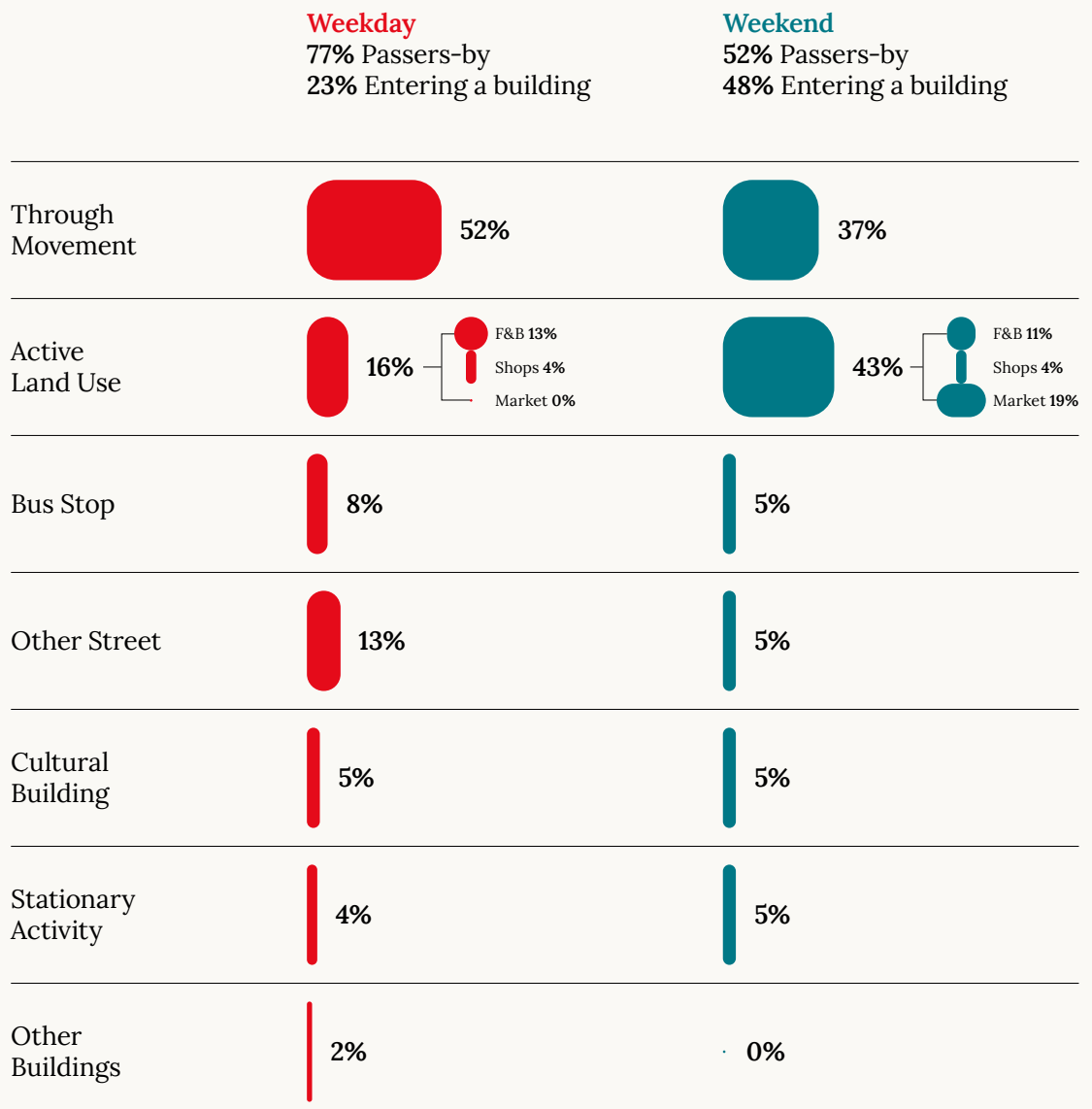
On the weekday, movement in the area reflects a split of 52% of pedestrians going through the surveyed street, 13% going through the surveyed street and changing direction to another street, 4% remaining within the area and, finally, 8% going to a bus stop. This means that a total of 77% remained on the street and can be considered passers-by.

Between going to active land uses (16%), cultural buildings (5%), and other buildings (2%), the total ratio of people entering a building was 23%.

During the weekend, 37% of people traced passed through the surveyed street and 5% went into a different street. The people going to a bus stop represented 5% of all traces and those remaining in the public space, 5%. The total ratio of people considered passers-by is 52%.

Those entering buildings were split as 43% going into active land uses and 5% going into cultural buildings. This makes a total of 48% of people entering a building.

The decrease of passers-by on the weekend is related to a significant increase of people going into active land uses, namely a market located in the area.





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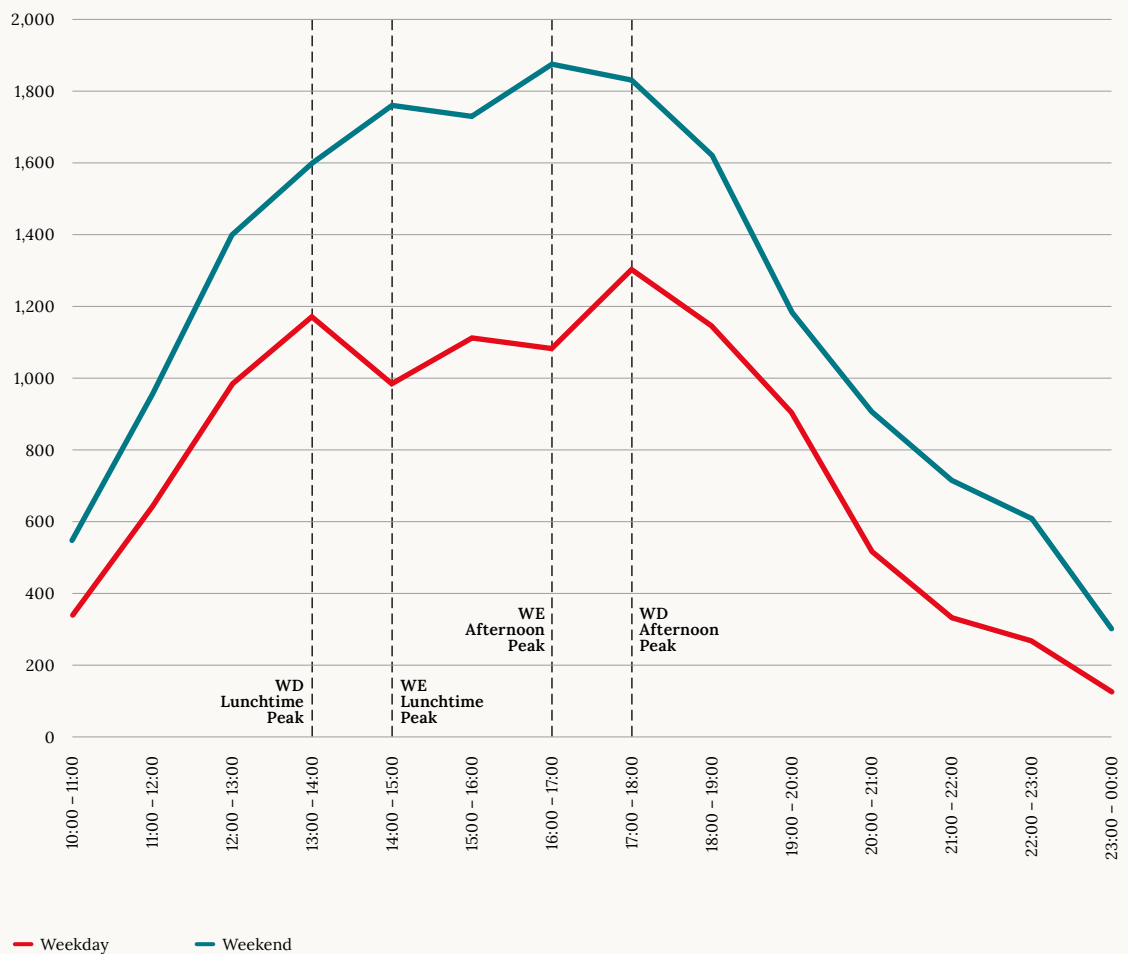
Shopping and Leisure Focussed Area

Shopping and leisure areas in central locations are usually busier on weekends than during the week. In this specific example, pedestrian movement increased 56% during the weekend.

The weekend movement displayed a typical pattern for a shopping and leisure area with a gradual increase from late morning followed by a late lunchtime peak between 14:00 and 15:00 and a higher afternoon peak between 16:00 and 17:00, and ending with a decrease later in the evening.

On a weekday, earlier peaks are observed with a pronounced decrease in movement between peaks.

Pedestrian movement pattern of a shopping focused area in central London





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5. Methodology

Historic data from a shopping focused area was collated to analyse the behaviour of pedestrians regarding the ratio between passers-by and those who enter the building, in this case, a market.

The type of data is gate counts and considers:

- *Pedestrians passing on the each of the streets where there is at least one entrance to the building*
- *Pedestrians coming in and out of each of the entrances of the building.*
- *Different data was collected from two different years:*
 - *2016: street and building entrance pedestrian counts*
 - *2008: the split between pedestrian entering and exiting the building.*

The studied market is a touristic hotspot located in central London and is a stand-alone building with four separate entrances facing different directions. Each entrance was surveyed and from the observed movement, only the movement of people entering the building was taken into account.

The results reflect the movement averages over one weekday and one weekend day for every location.

On average, there are 74% of passers-by on a weekday compared to 70% on the weekend. Movement is significantly higher in all entrances of the market during the weekend. The percentage of passers-by is between 66% and 85%. Each location has a consistent ratio over weekday and weekend, with minor differences.

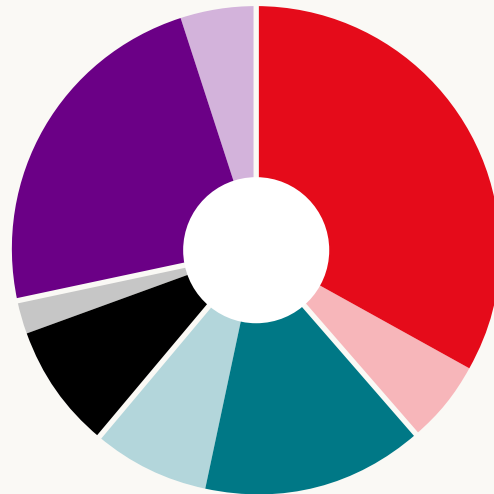


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Weekday

Total Population
11,444_{pph}

Passers-by
80%



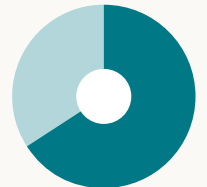
| | |
|--|--|
| ■ 85% North Street | ■ 15% North Market |
| ■ 66% West Street | ■ 34% West Market |
| ■ 79% East Street | ■ 21% East Market |
| ■ 83% South Street | ■ 17% South Market |

North



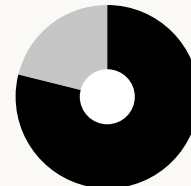
| | |
|--|-------|
| ■ North Street | 4,765 |
| ■ North Market | 828 |
| Passers-by | 85% |
| Total PPH | 5,593 |

West



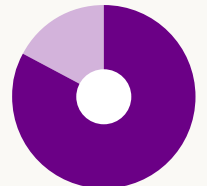
| | |
|--|-------|
| ■ West Street | 2,117 |
| ■ West Market | 1,100 |
| Passers-by | 66% |
| Total PPH | 3,217 |

East



| | |
|--|-------|
| ■ East Street | 1,194 |
| ■ East Market | 323 |
| Passers-by | 79% |
| Total PPH | 1,517 |

South

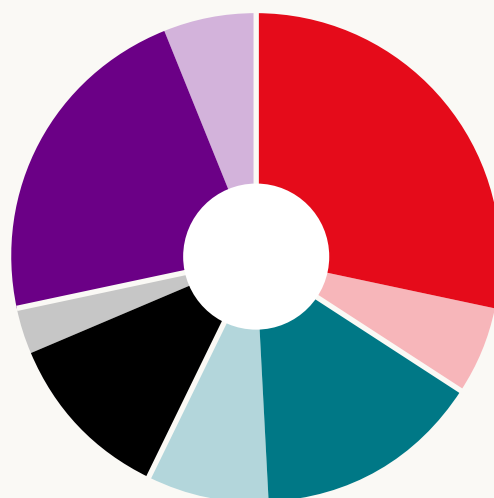


| | |
|--|-------|
| ■ South Street | 3,368 |
| ■ South Market | 689 |
| Passers-by | 83% |
| Total PPH | 4,057 |

Weekend

Total Population
18,920_{pph}

Passers-by
77%



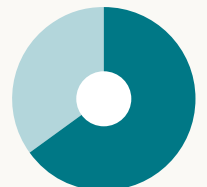
| | |
|--|--|
| ■ 83% North Street | ■ 17% North Market |
| ■ 65% West Street | ■ 35% West Market |
| ■ 79% East Street | ■ 21% East Market |
| ■ 79% South Street | ■ 21% South Market |

North



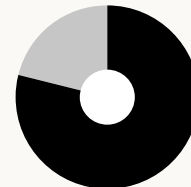
| | |
|--|-------|
| ■ North Street | 6,993 |
| ■ North Market | 1,419 |
| Passers-by | 83% |
| Total PPH | 8,412 |

West



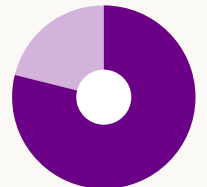
| | |
|--|-------|
| ■ West Street | 3,693 |
| ■ West Market | 1,979 |
| Passers-by | 65% |
| Total PPH | 5,672 |

East



| | |
|--|-------|
| ■ East Street | 2,767 |
| ■ East Market | 751 |
| Passers-by | 79% |
| Total PPH | 3,518 |

South



| | |
|--|-------|
| ■ South Street | 5,467 |
| ■ South Market | 1,456 |
| Passers-by | 79% |
| Total PPH | 6,923 |



1. Executive Summary
2. Site Comparison – Study Locations
3. Pedestrian Observations
4. Historic Data
5. **Methodology**

Methodology

Approach

A combination of data sources were used for this study:

- *Pedestrian observation surveys were carried out in three cities in 2024.*
- *Historic data was extracted from Space Syntax's database.*

Two types of pedestrian observation were carried out:

- *Street-based surveys studied how people moved through a wider street, capturing which buildings they chose to go inside.*
- *Building-based surveys studied how many people chose to go inside specific buildings.*

Surveys were carried out across a weekday and a weekend day, following Transport for London (TfL) data collection standards for high streets.

To ensure that street-based survey locations were as consistent as possible, additional analyses were used to select streets with similar levels of spatial connectivity, mixes and intensities of land uses. Building-based surveys observed the same national department store chain in these locations in each city.

Space Syntax has been observing patterns of use, and modelling urban characteristics, for over three decades, developing in depth knowledge of the way the built environment informs daily activities.

Team

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Data collected and study carried out in 2024

