

Legible Cities

Auckland 2 July 2013

applied_
wayfinding information design

... a technique that uses sensory cues in the environment to help people understand where they are and how to get around



WEST END
Oxford Street

← HYDE PARK
PADDINGTON
Grosvenor
Marble Arch

SOHO →
FITZROVIA
Bond Street
Oxford Circus

Walking Time Table

Paddington	22 min
Charing Cross	26 min
Leicester	27 min
King's Cross St Pancras	30 min
Oxford Circus	4 min
Green Park	10 min
Water Street	10 min
Piccadilly Circus	10 min
Victoria Court Road	10 min
Leicester Square	10 min
British Museum	21 min
Trafalgar Square	21 min
British Library	21 min
London Eye	34 min
	37 min

MARBLE ARCH
BOND STREET
HYDE PARK

MAYOR OF LONDON
City of Westminster
Transport for London



Challenges

Sustainable communities

Competitive business

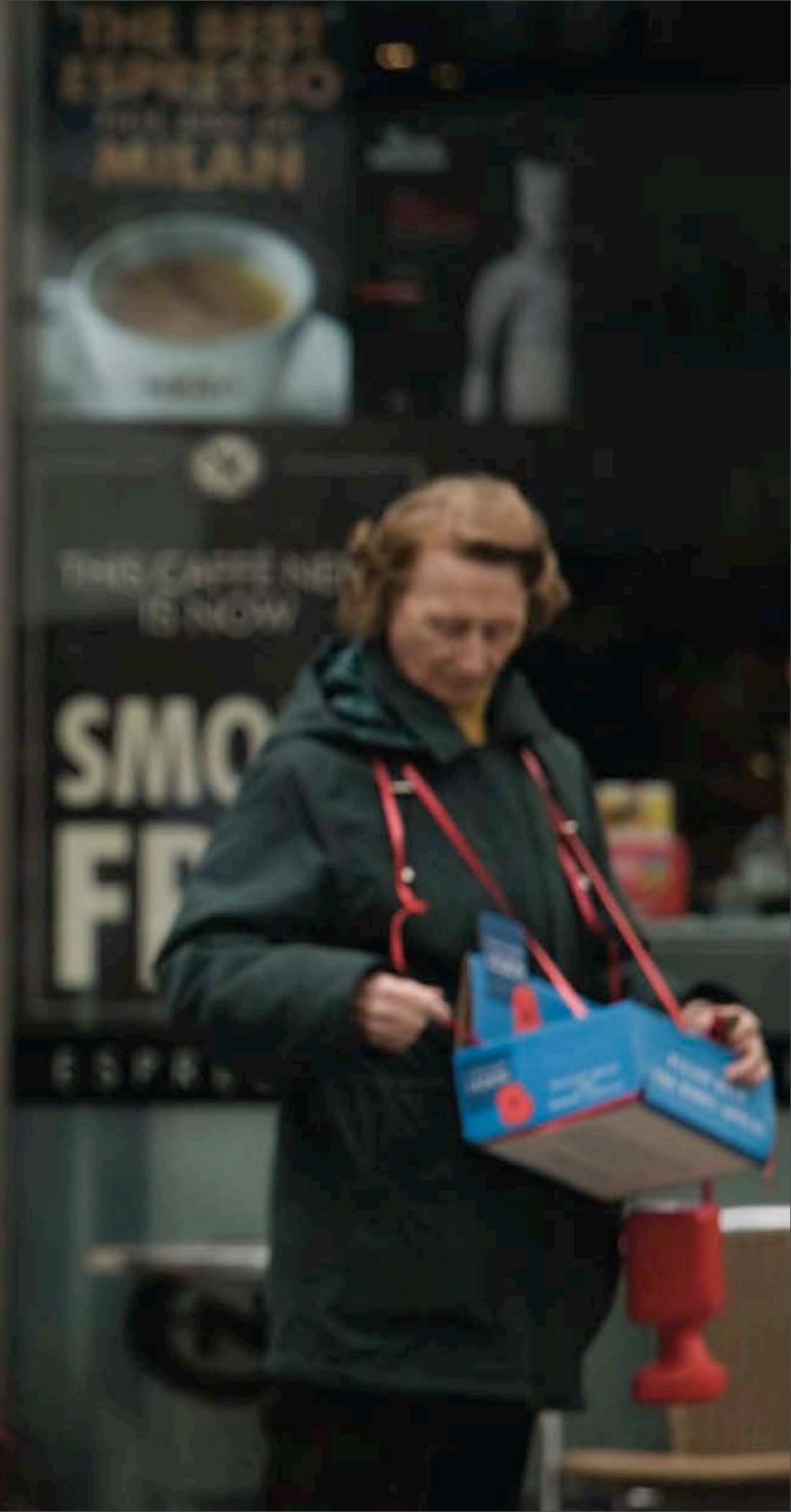
Cultural diversity

Regeneration









research

Lost in the Previous Week

9% of the 8.3m population of NYC, and over 12 million visitors per year have experienced being lost





The city's intersections often offer no clues to help the pedestrian discern uptown from downtown, or east from west.





STREET NAMING

Queens can particularly confound a pedestrian trying to find an address on 30th Road, as there also exists 30th Avenue and 30th Drive. Looking for 30th Street? That's in another neighborhood of Queens.

Many streets in New York have multiple names as a result of historic and/or commemorative status. For example there are four ways to describe the Manhattan avenue that lies between 5th and 7th. Below Central Park it is Avenue of the Americas and 6th Avenue, above the park it is both Lenox Avenue and Malcolm X Boulevard.



BREAKDOWN OF GRID STRUCTURE

Many visitors and residents pride themselves on making quick sense of the street grid in Manhattan. However even the most seasoned New Yorkers find themselves bewildered when they come to the intersection of West 4th Street and West 11th Street in the West Village.



Londons problems







Shopping

VPL583

Charring Cross
Road
→

via King's Cross

HT 95

Charring Cross
Road
→

Charring Cross
Road
→





Leicester Sq

Picadilly
Hyde Park



WASTE COLLECTION
Windsor Rd, Sunday
10:00am - 12:00pm

RESIDENTIAL RECYCLING

E
O
N

PANTON
STREET SW1



Next

Right Turn

Way
out



Transport for London



NO

VICTORIA

LINE

1111

1111

1111

1111

1111





GREEN PLACE

GREENWICH PENINSULA
BUSINESS CENTRE →

WORK AND LEARN
CENTRE ↘

Greenwich
Peninsula

Greenwich
Peninsula





P

48 Hours

(2880 mins)

At All Times



Parks Note Book

Pick up the kids
after school



Pick up milk, on
the way home



**Pick up after
the dogs**



**City of Langley
Bylaw #2515**

Attention Dog Guardians

Pick up after your
dogs. Thank you

Attention Dogs

Grrrrr, bark, woof.
Good dog..

**City of Langley
Bylaw #2515**



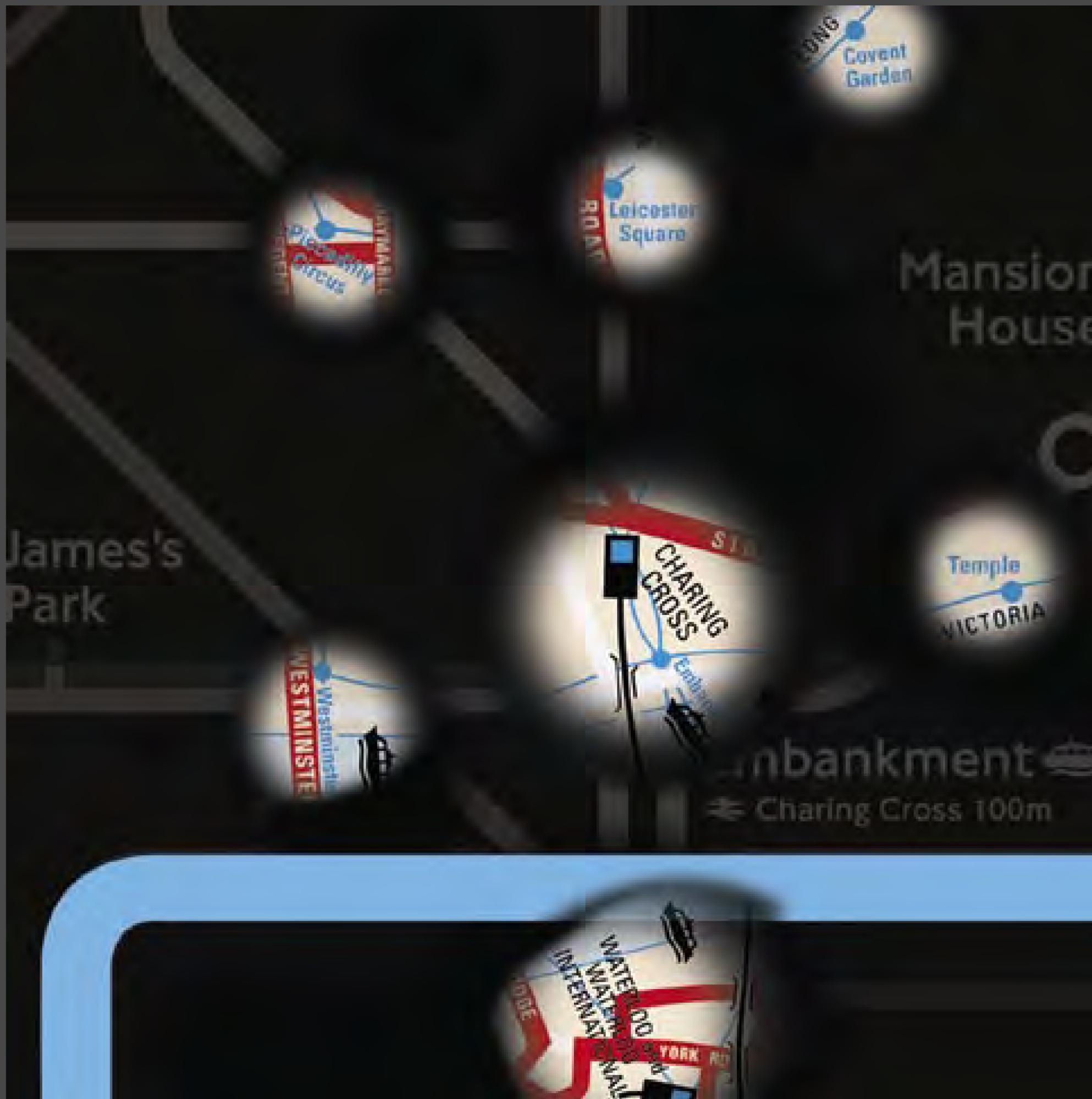
Waterloo
International rail services
now depart from
King's Cross St. Pancras

East London line
for major line ex
work to become
the London Ove









LONG
Covent
Garden

Leicester
Square

Piccadilly
Circus

Mansion
House

James's
Park

Temple
VICTORIA

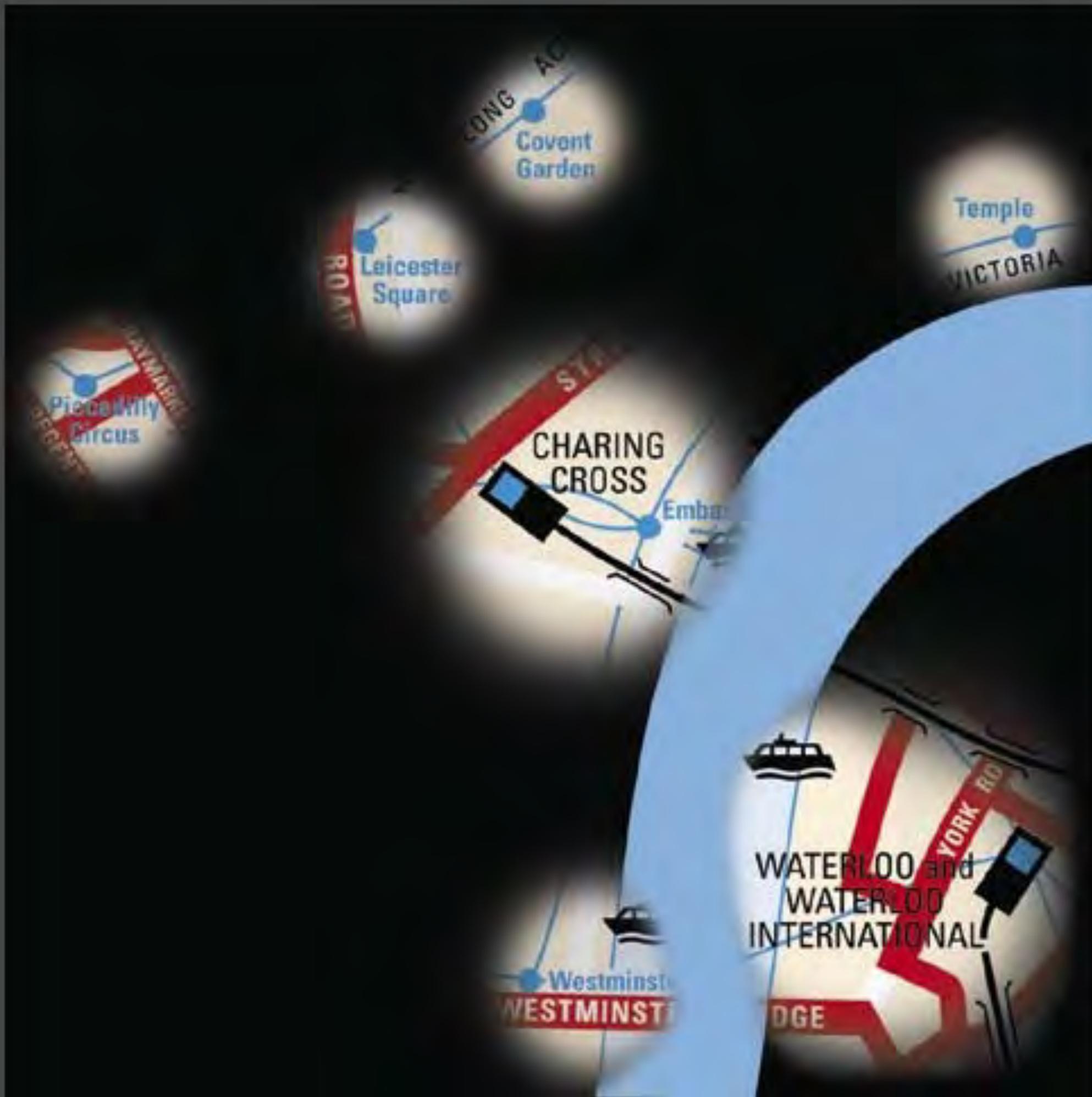
CHARING
CROSS

WESTMINSTER

Charing Cross 100m

WATERLOO
INTERNATIONAL
STATION







Jellicoe St



Victor Park

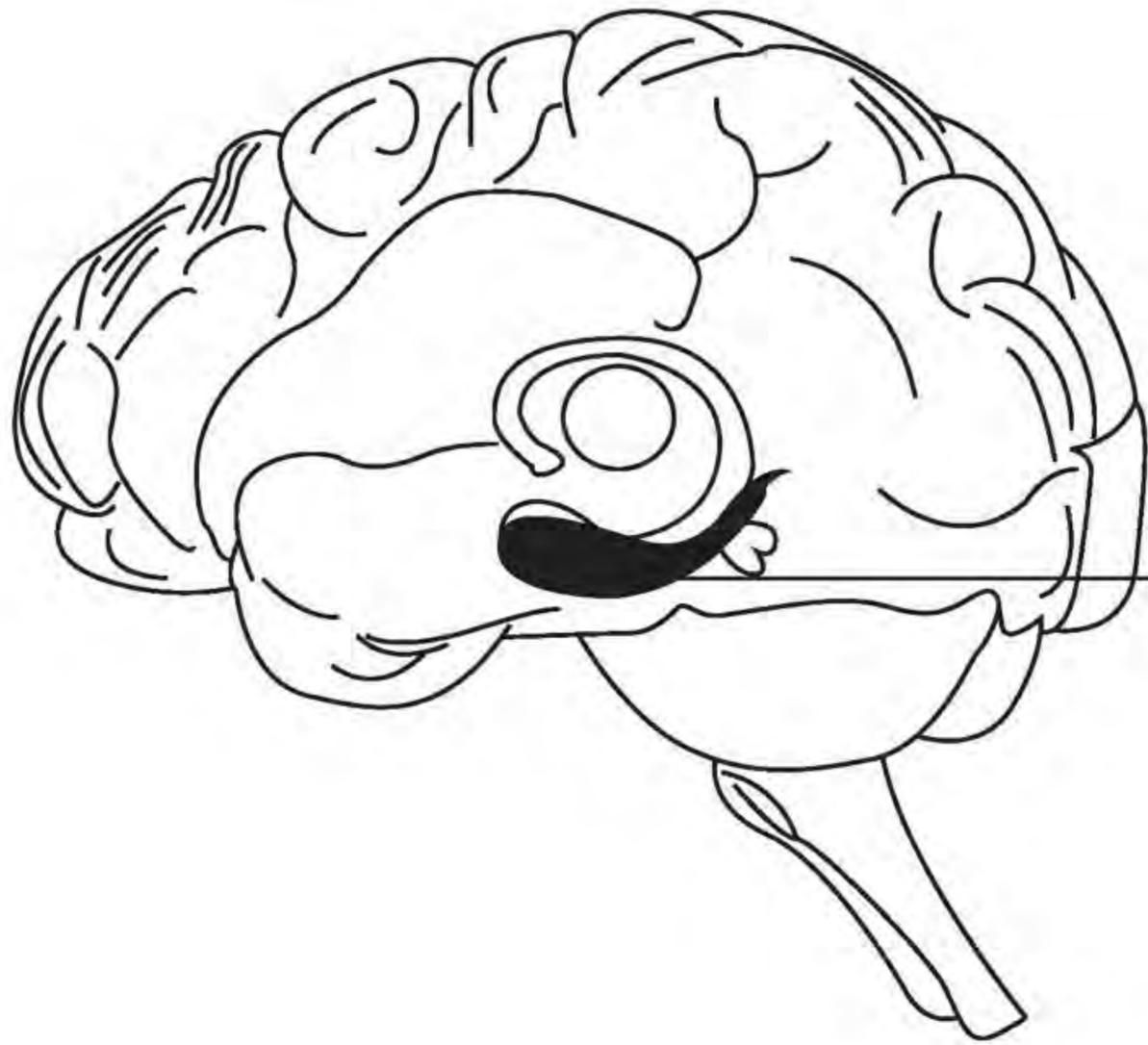


AND

Elliott Street carpark



Mental Mapping



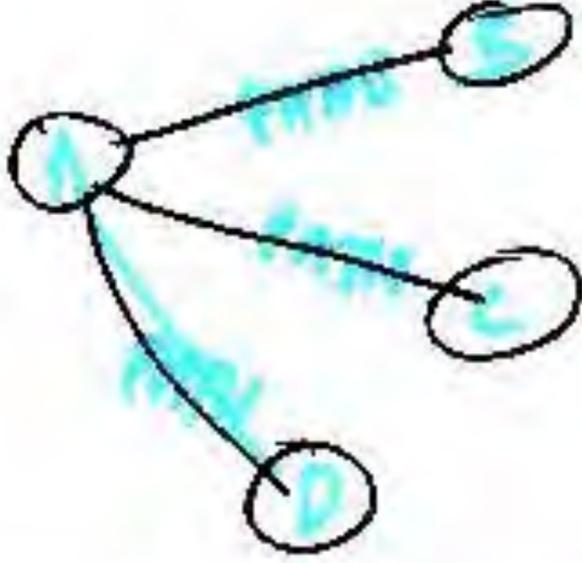
Hippocampus:
The area of the brain associated with mapping; where we might find 'place cells'.

1



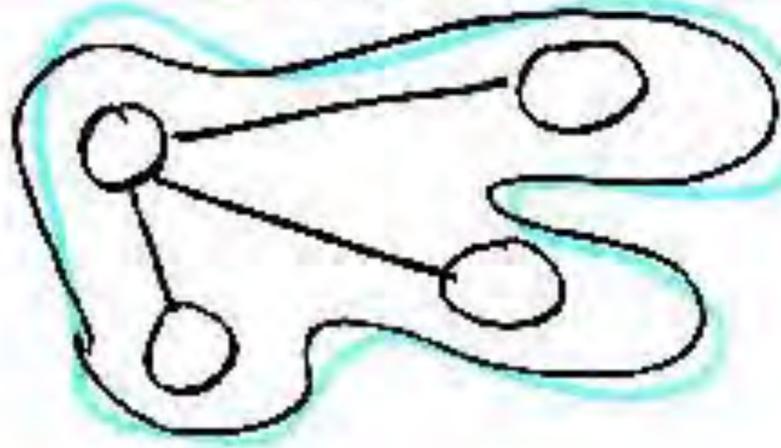
beginner

2



intermediate

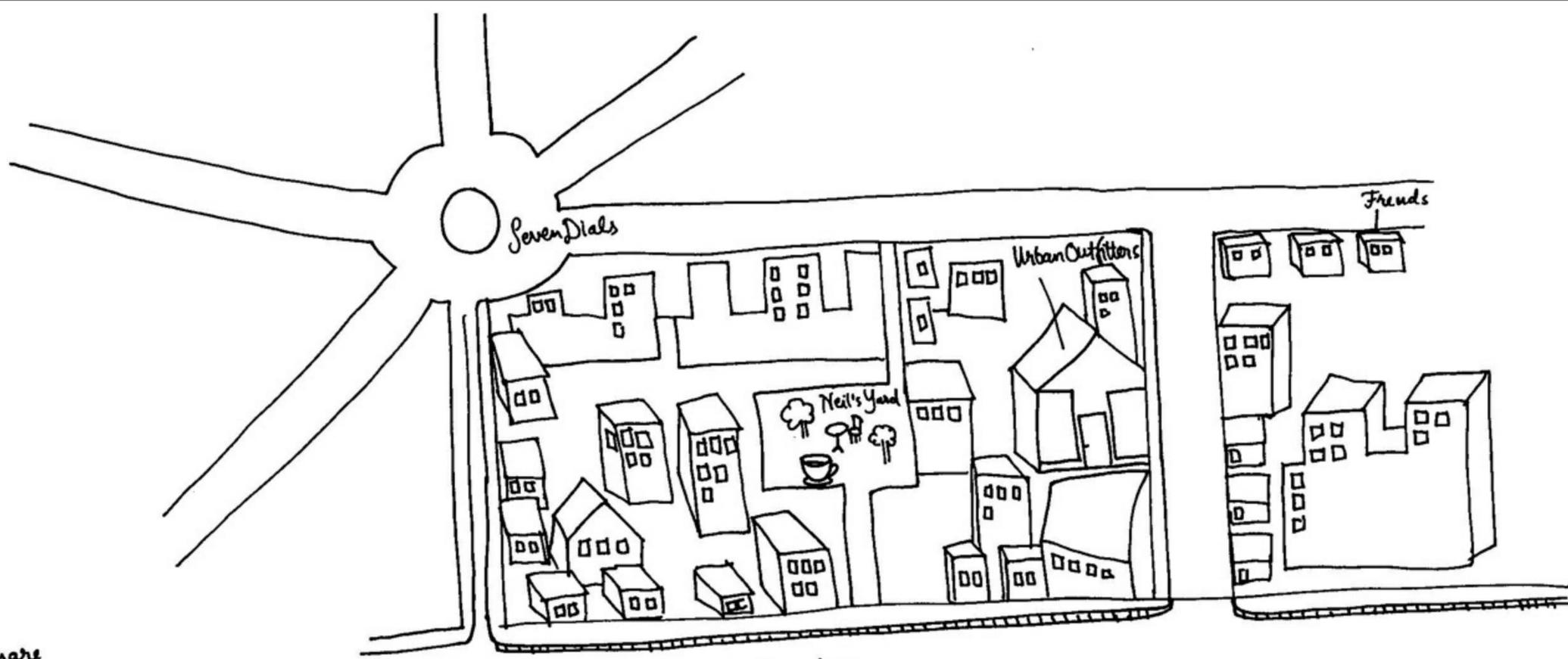
3



"Distinct" expert.

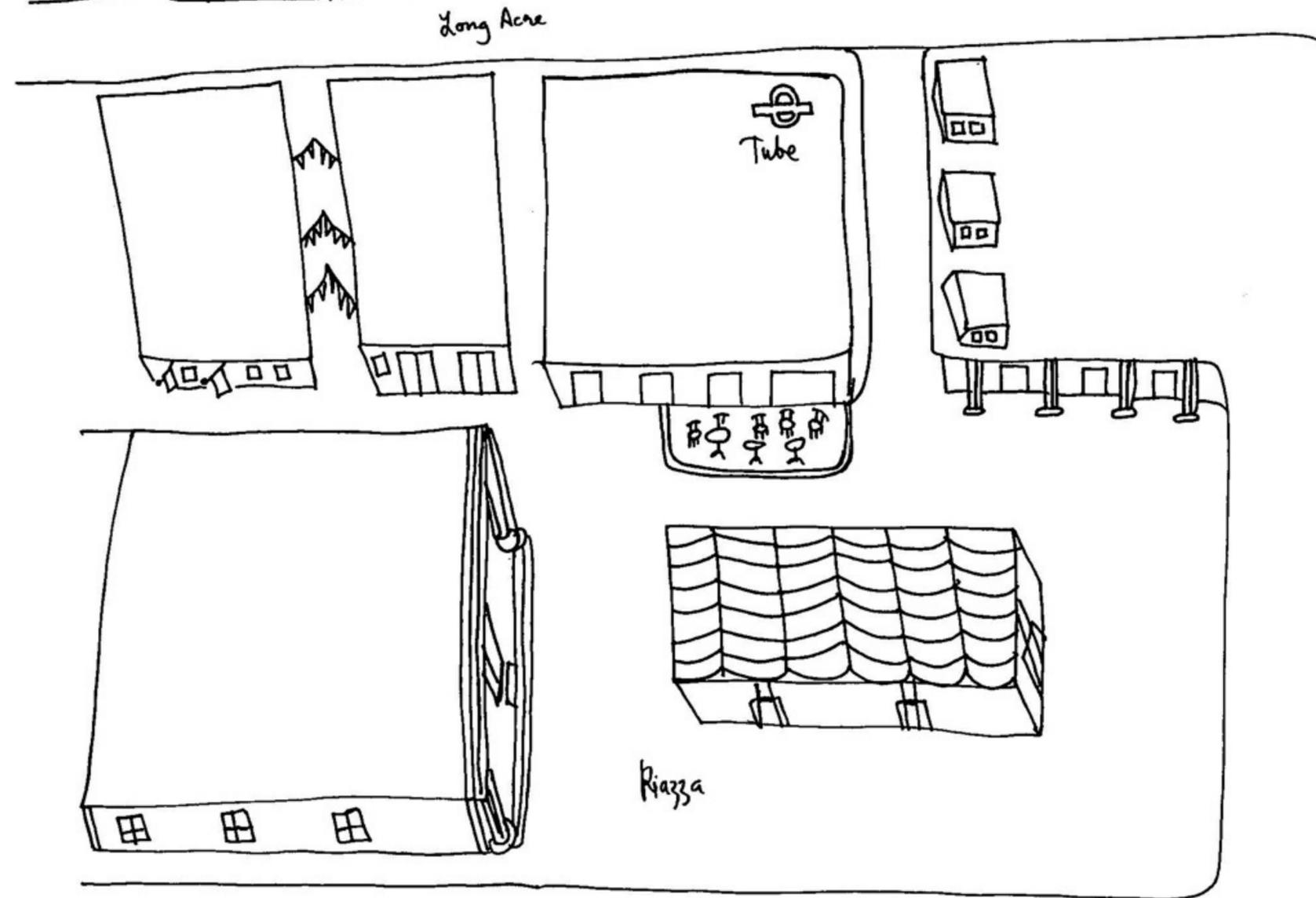
"PATH INTEGRATION"
- mental map





Holborn
⊕

Leicester Square
⊕



Seven Dials

Friends

Urban Outfitters

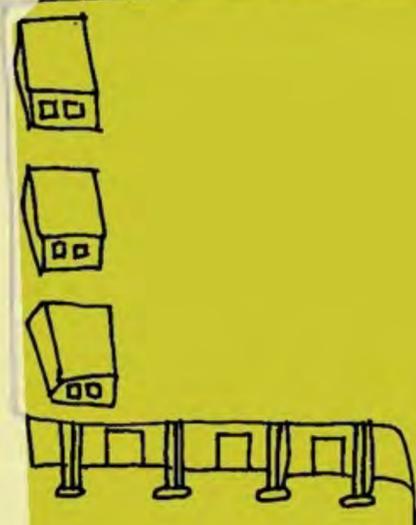
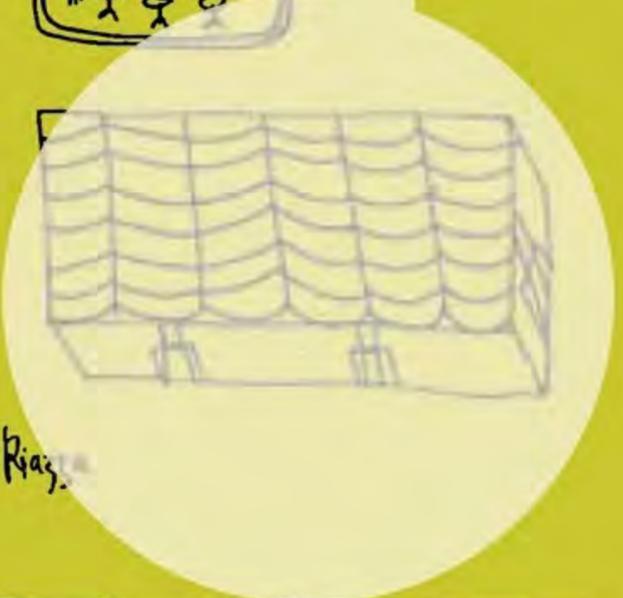
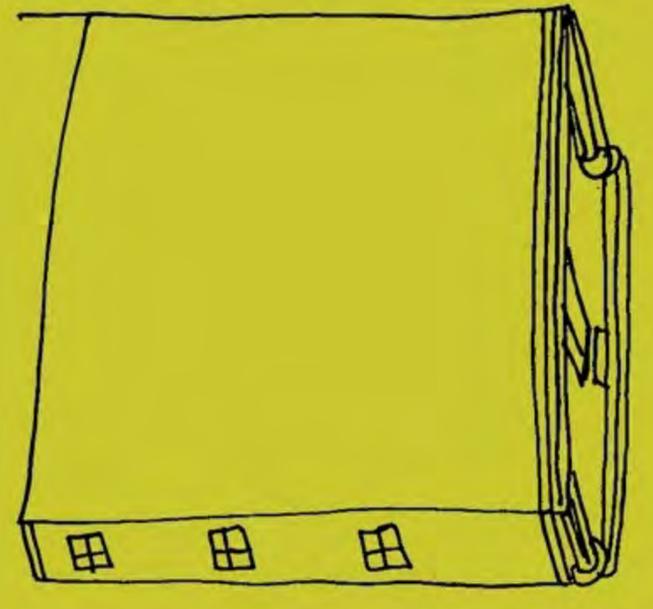
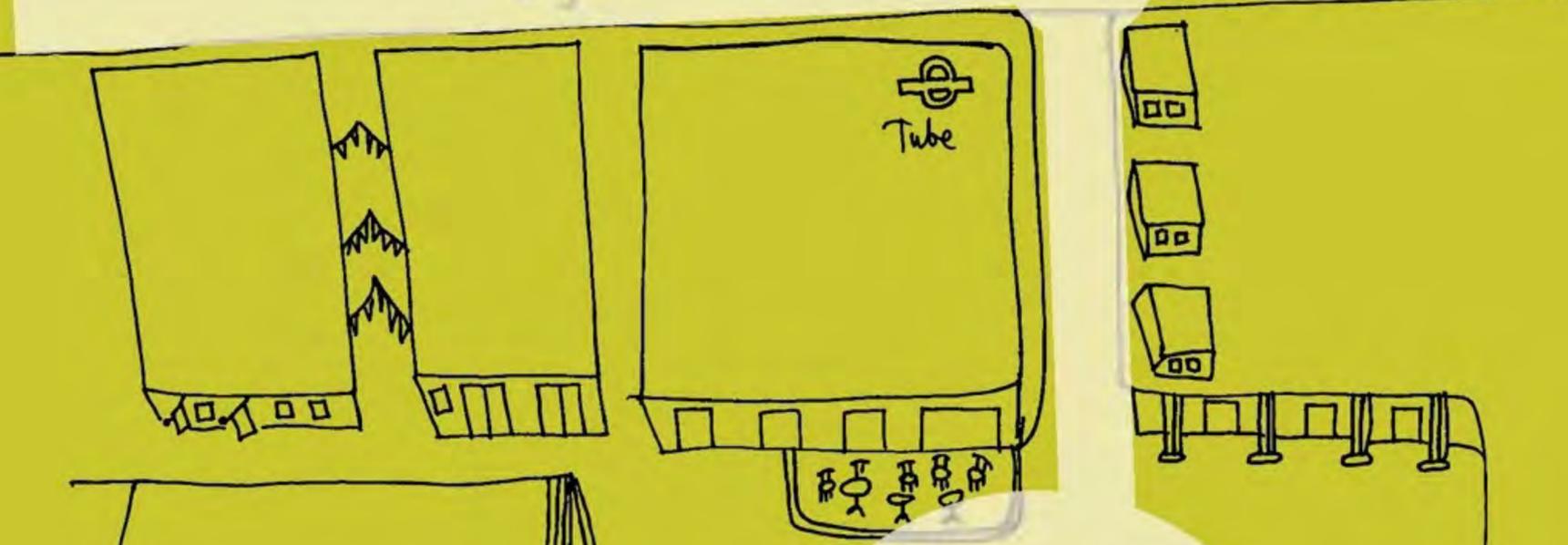
Neil's Yard

Holborn

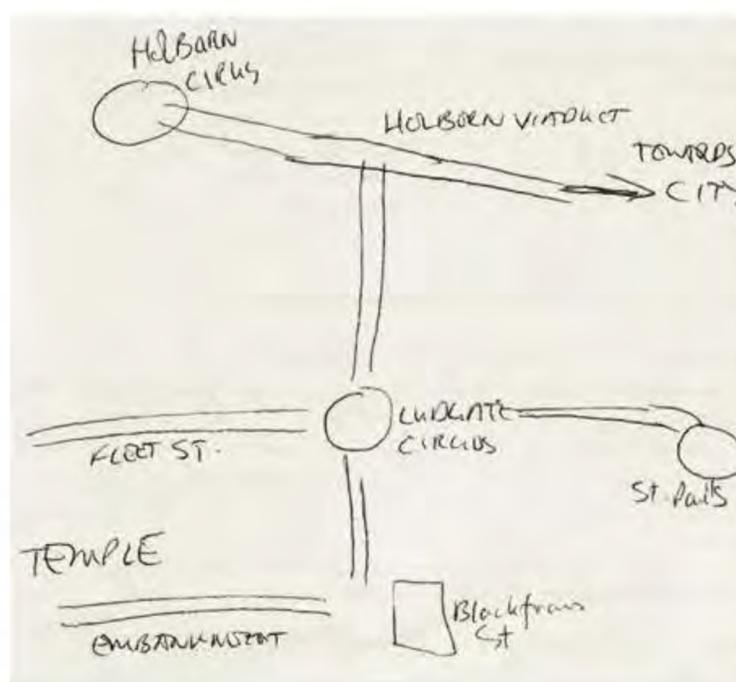
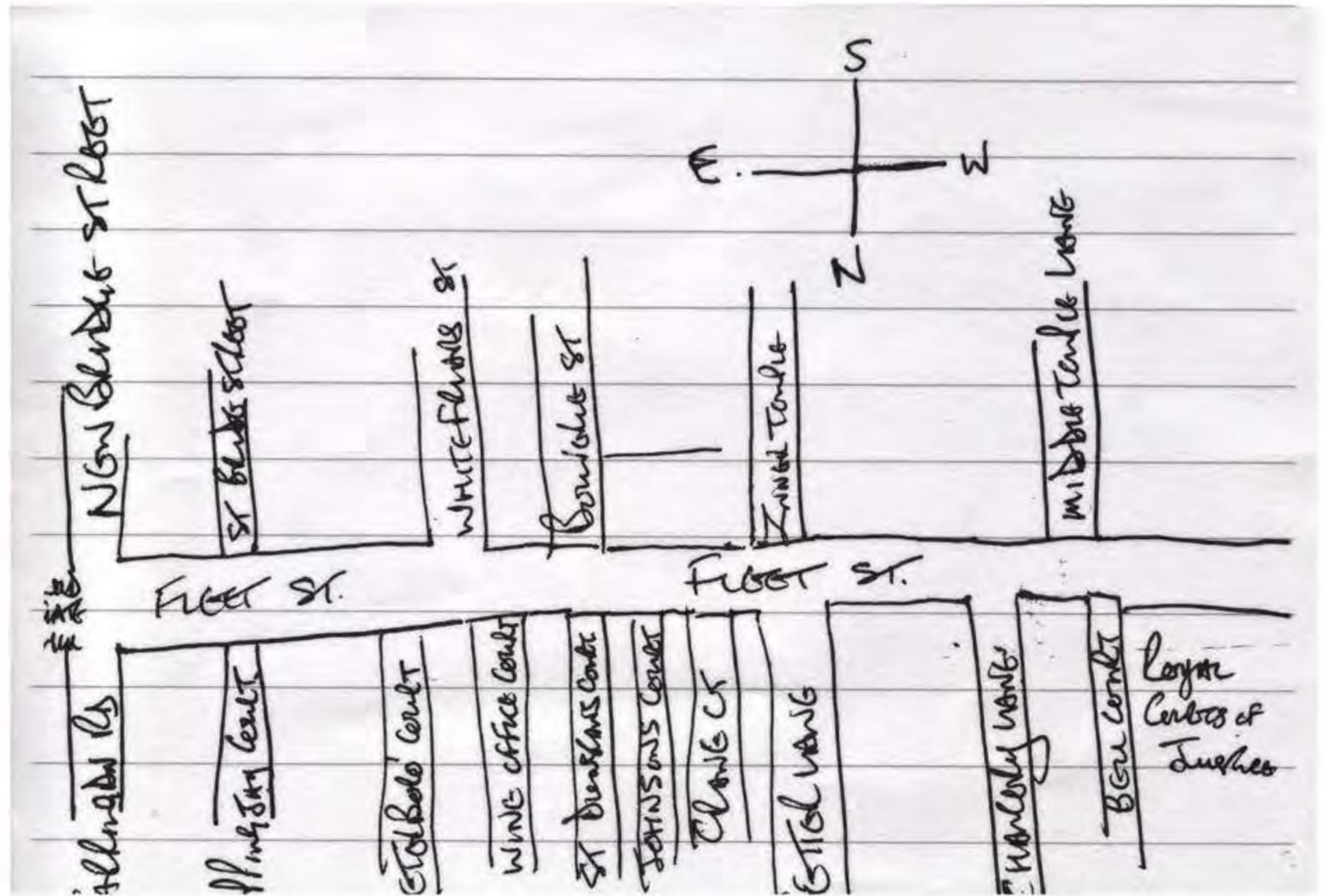
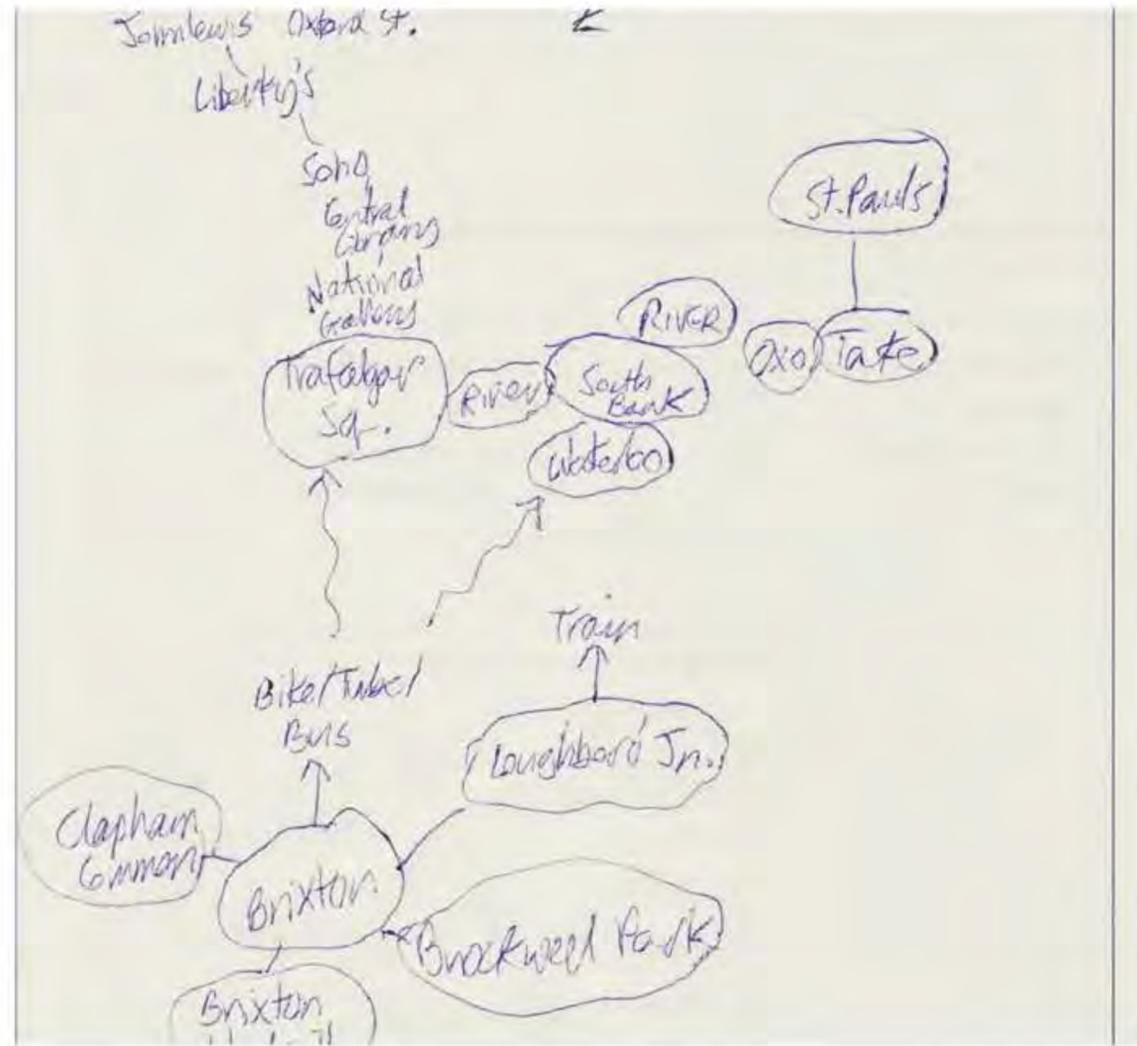
Long Lane

Tube

Riad

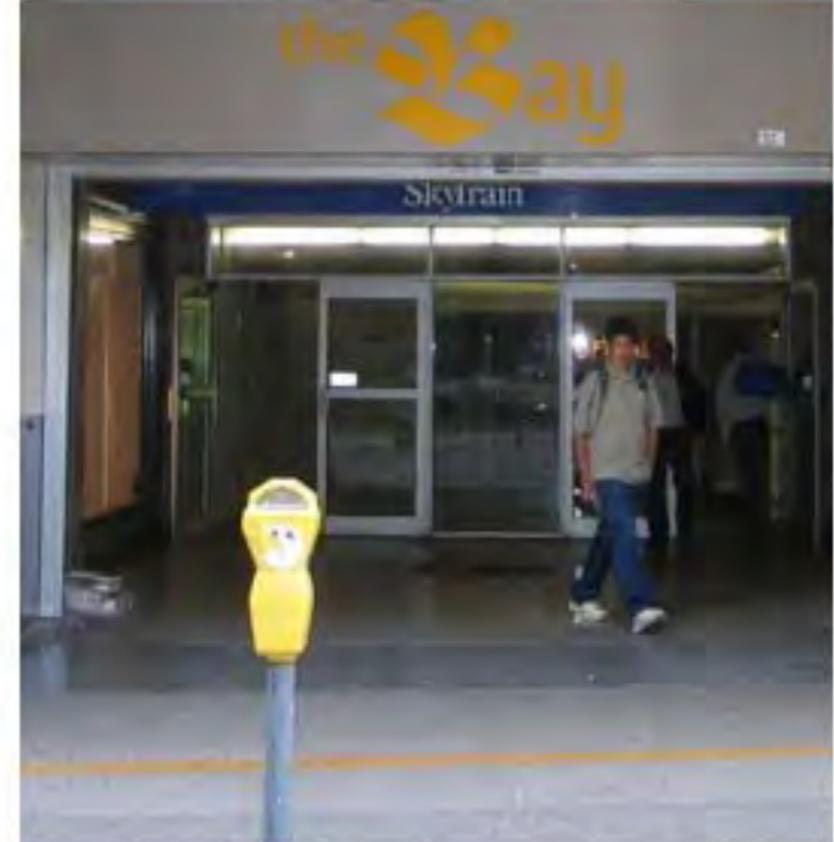
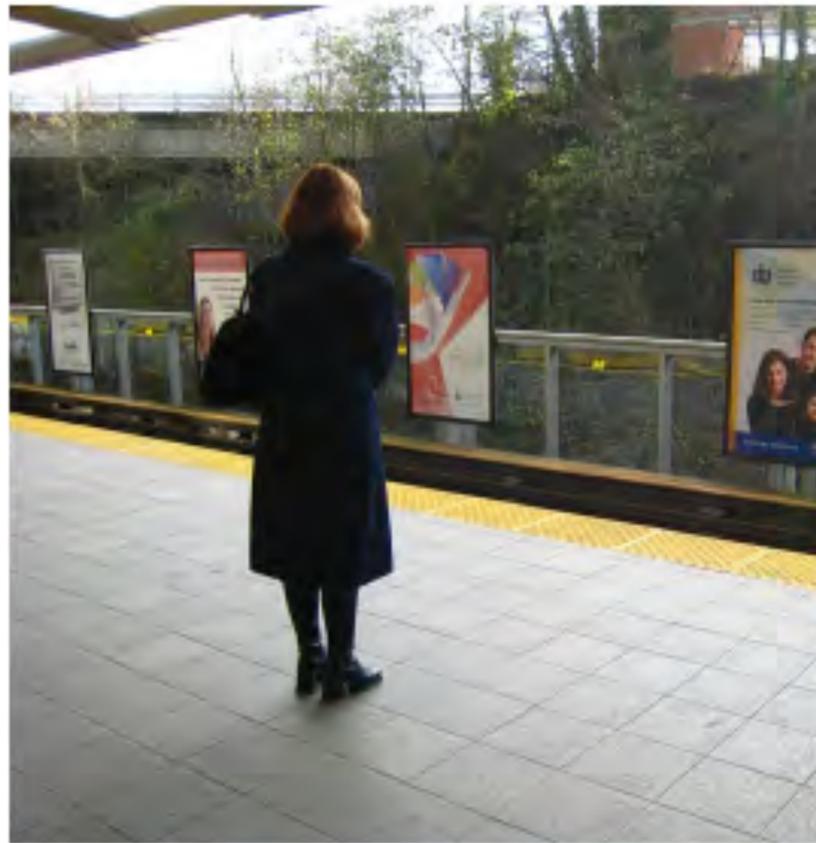


Mental maps



According to a research at an English university, it doesn't matter in what order the letters in a word are, the only important thing is that first and last letter is at the right place.

The rest can be a total mess and you can still read it without a problem. This is because we do not read every letter by itself but the word as a whole.





? Plan Your Trip Here

T 2010 Winter Games – Metro Vancouver Connections

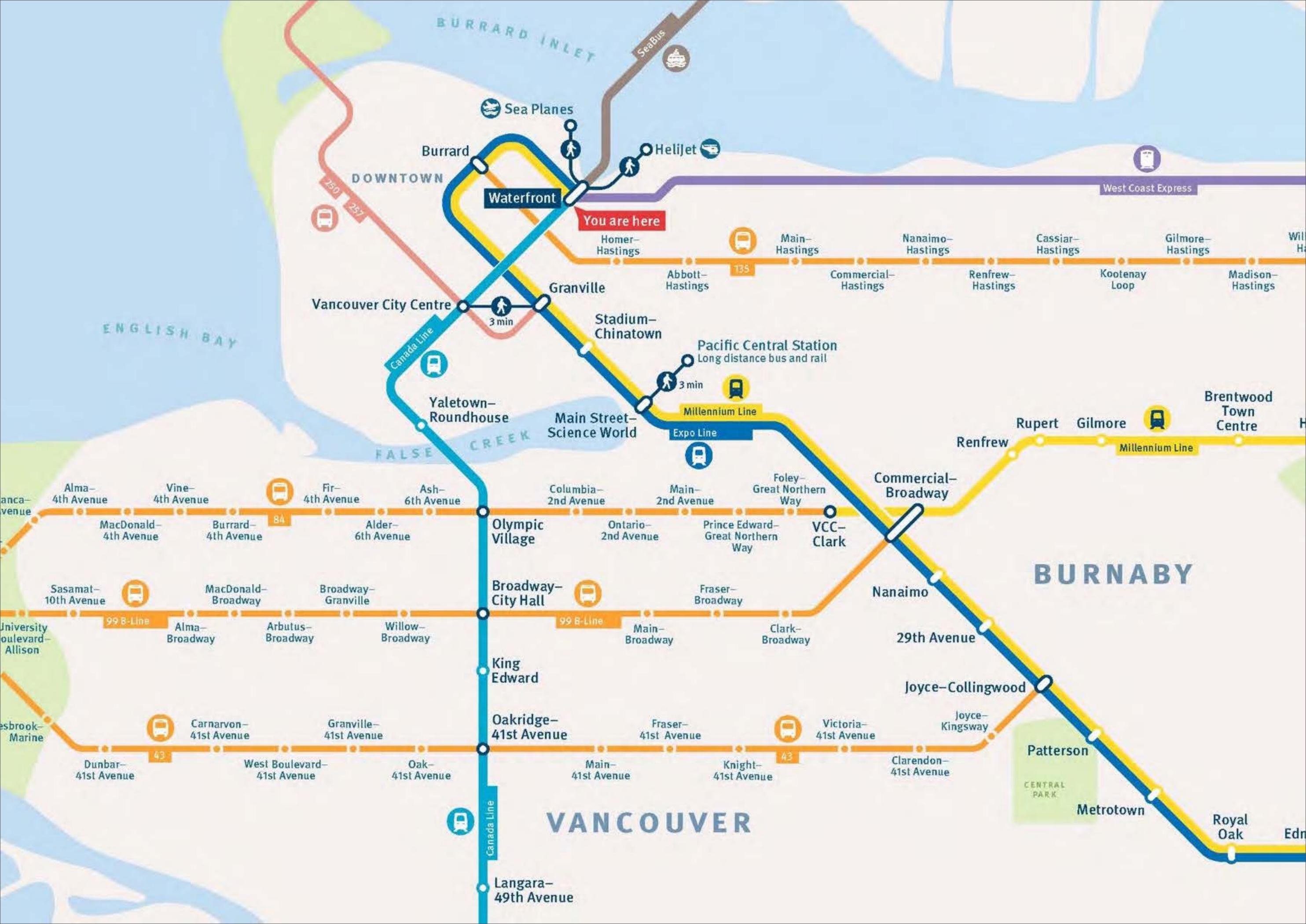


T Walking From Granville Station

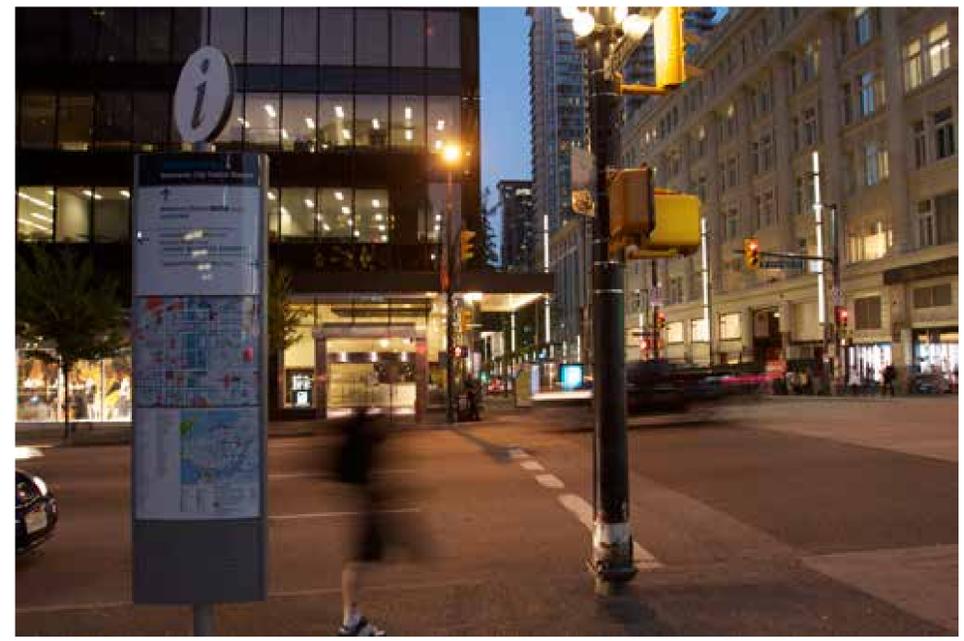
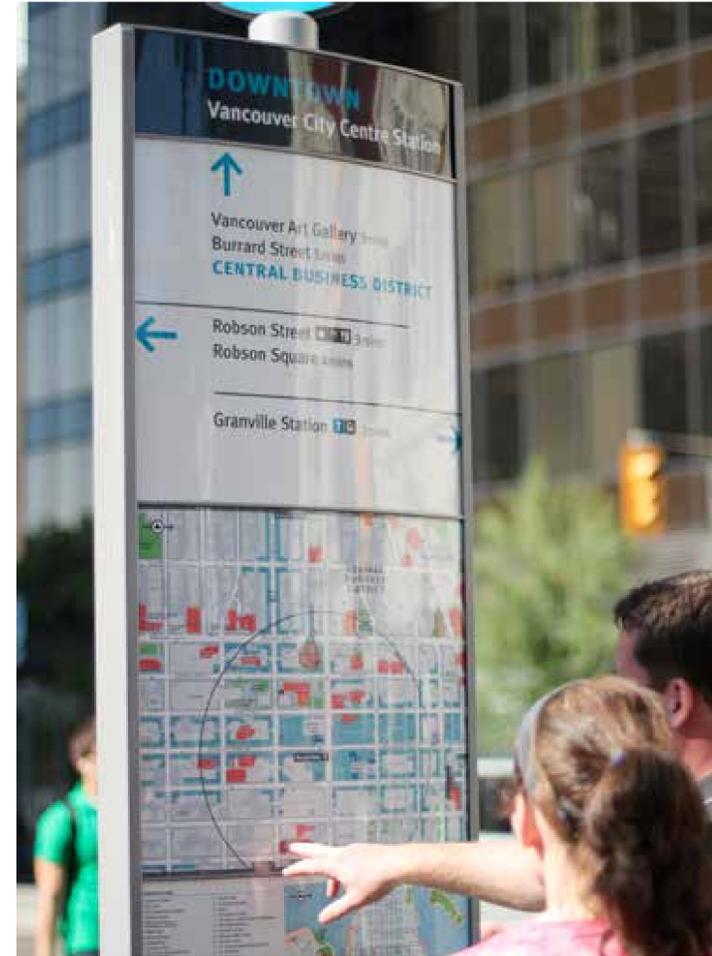
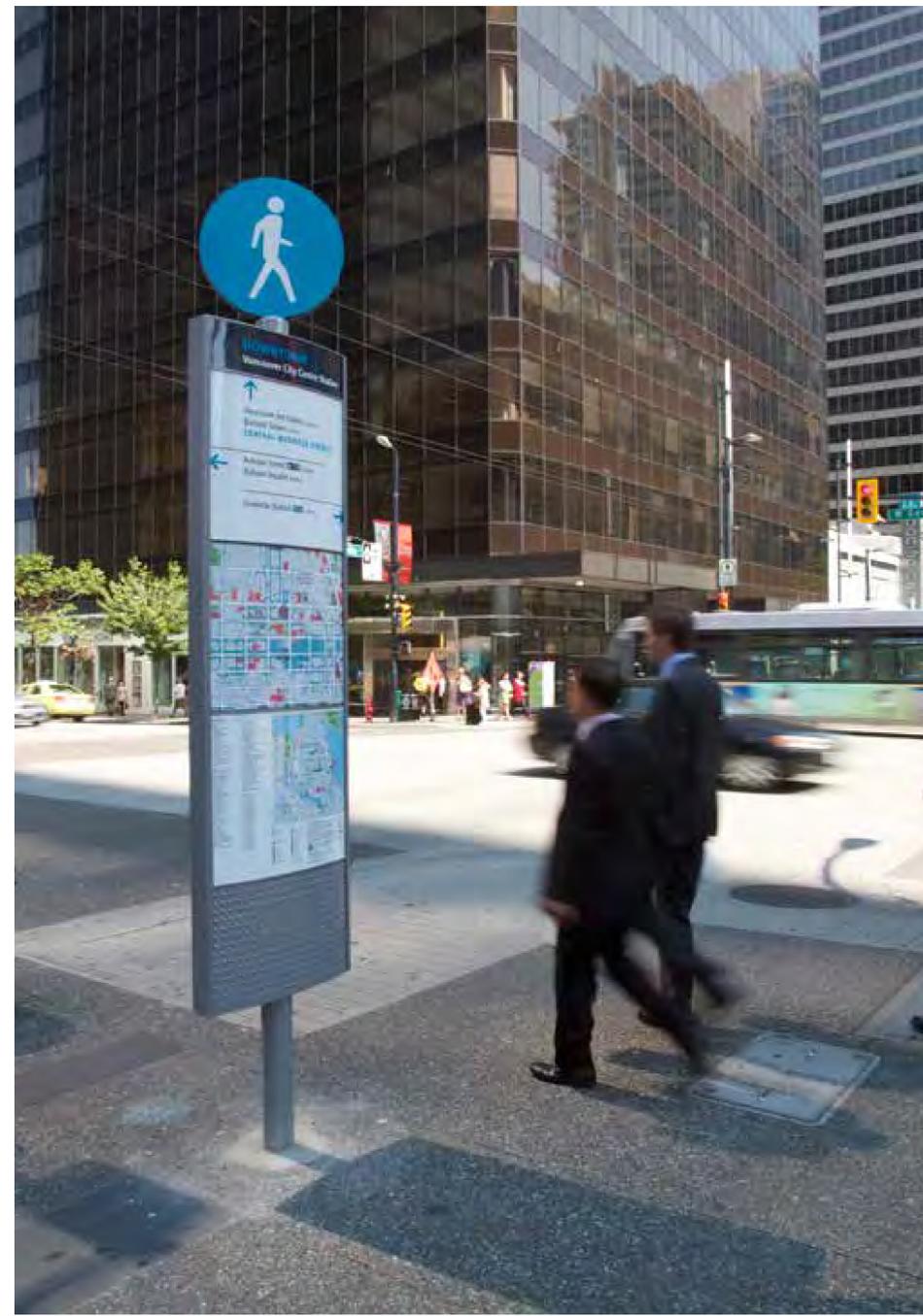


Platform 2





City sign





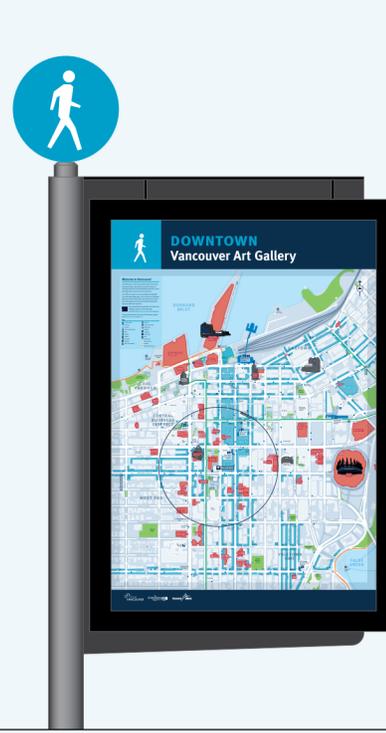
Arrival signs



City signs
pedestrian



City signs
cycle hire



Poster cases



Finger blades



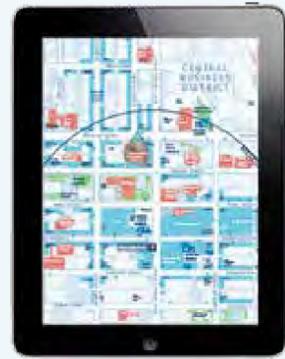
Park maps



Digital signs
interactive map



Website
interactive map



Tablet app
cross-platform



Cell app
cross-platform



Printed maps
tear off



Printed maps
folded



Thematic maps



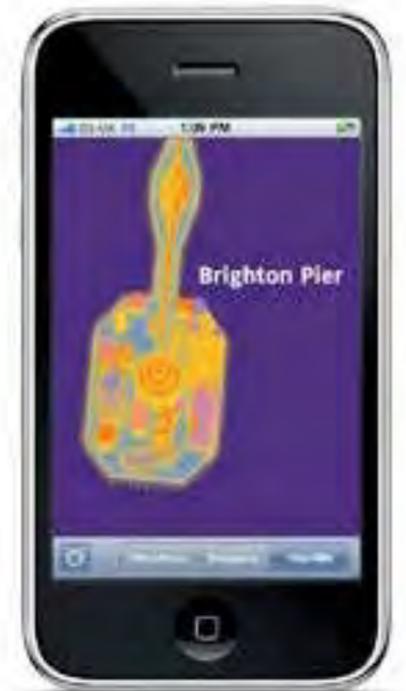
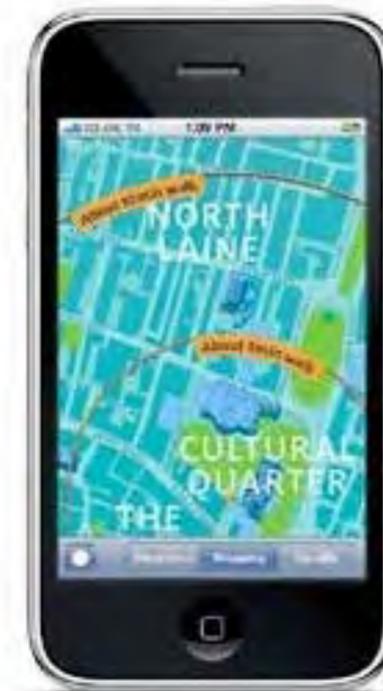
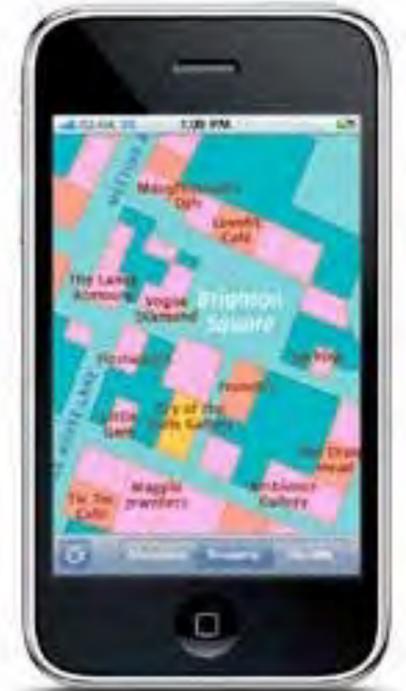
3rd party maps
digital & printed
applications

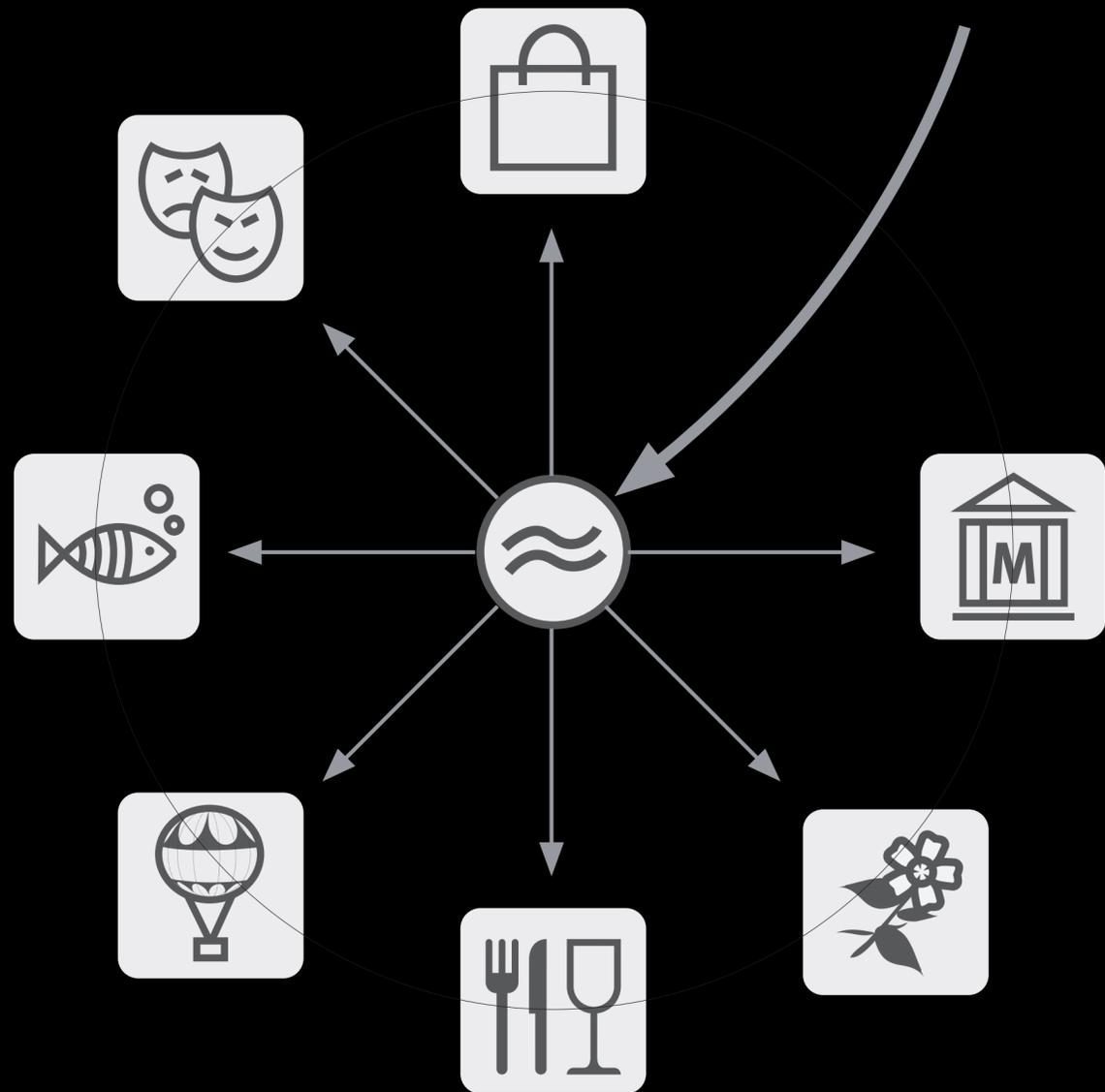
I Walk New York
A Plan for
Pedestrian Wayfinding
in New York City



applied_ 2 12 NEW YORK CITY DOT









**New West End Company
City of Westminster
Mayor of London
Transport for London**

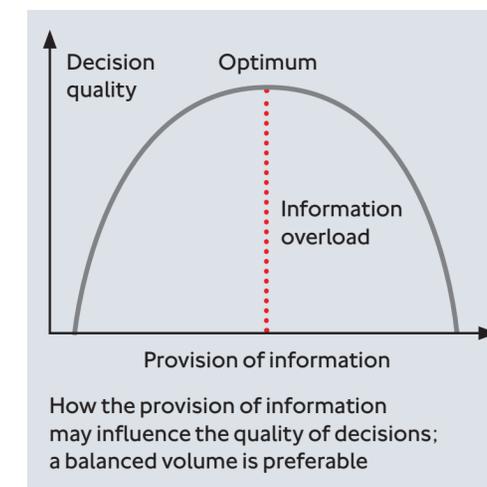
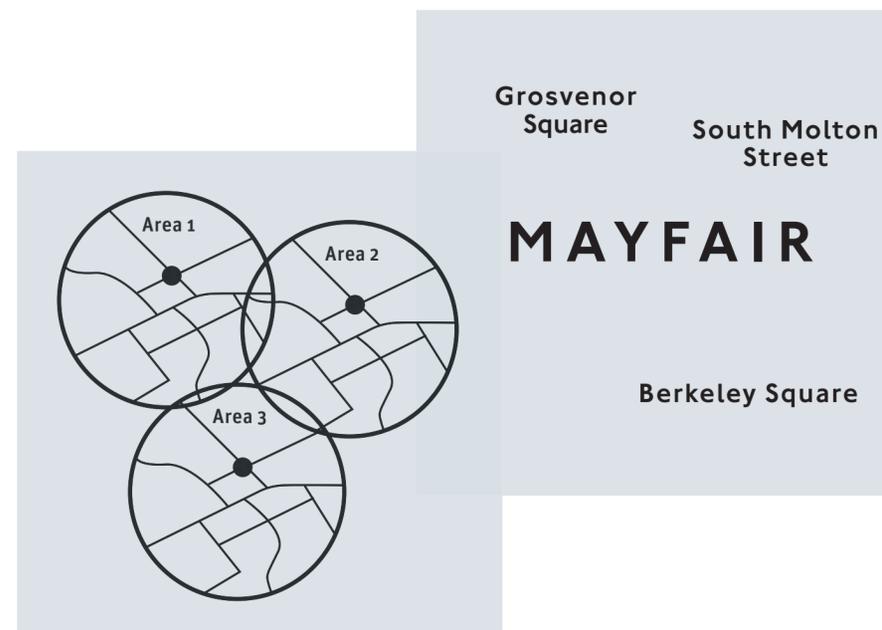
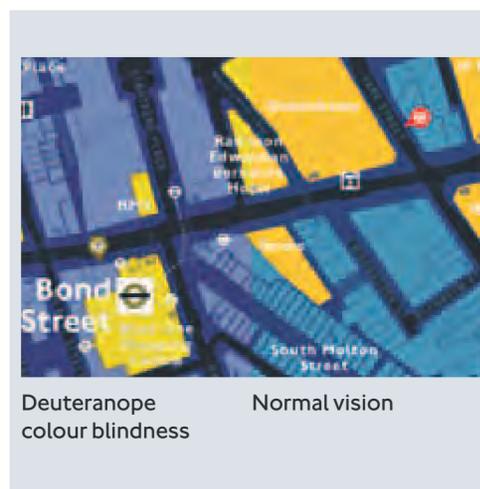
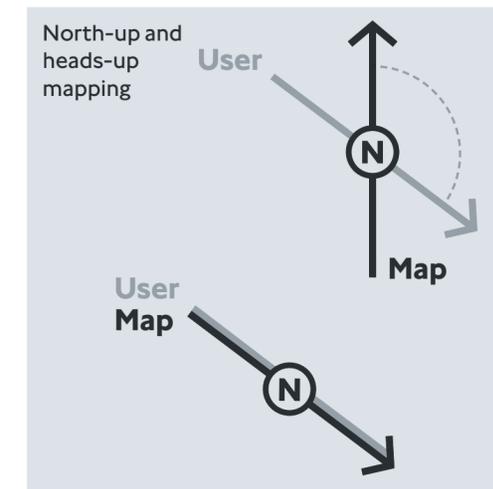
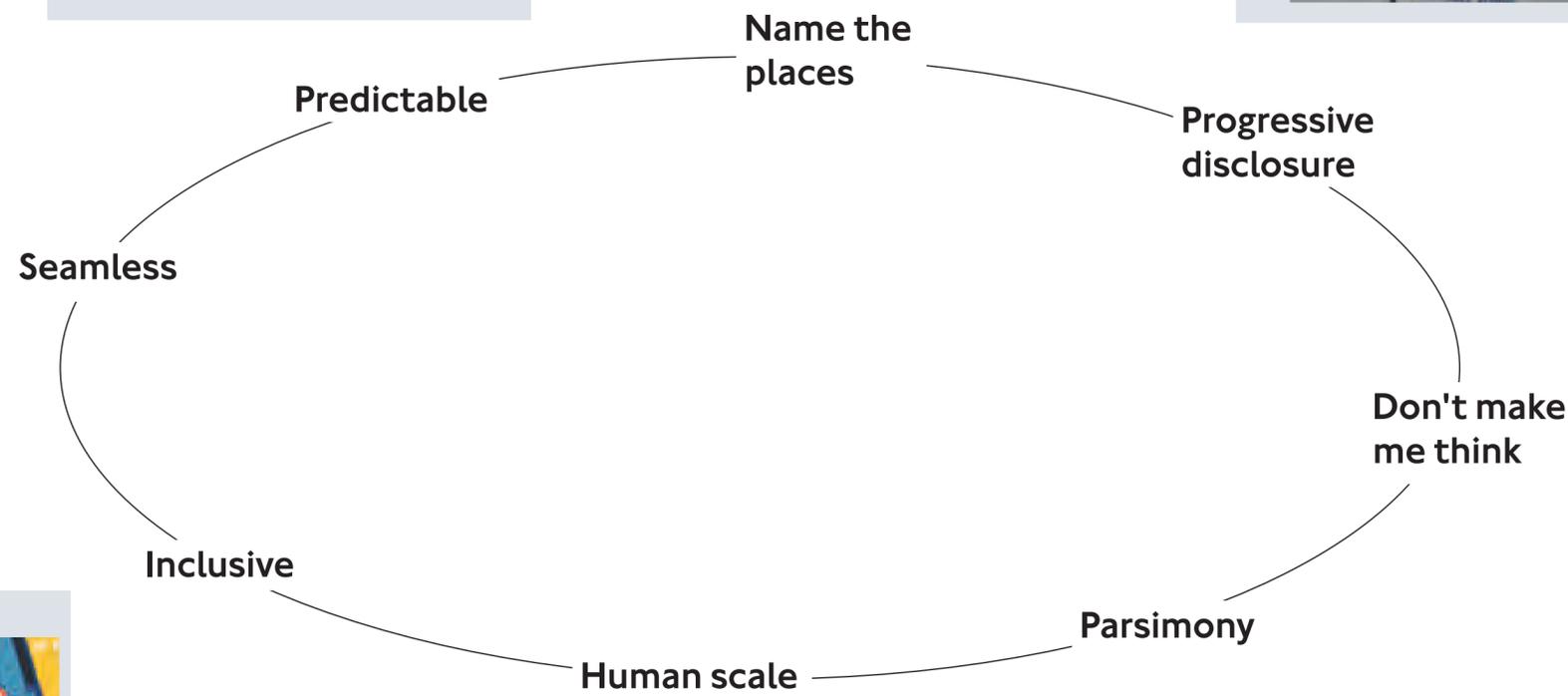
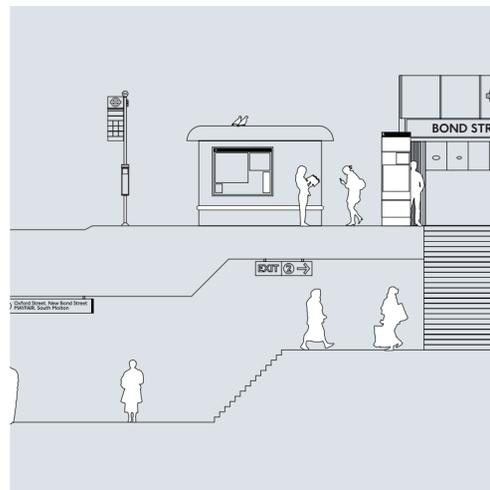
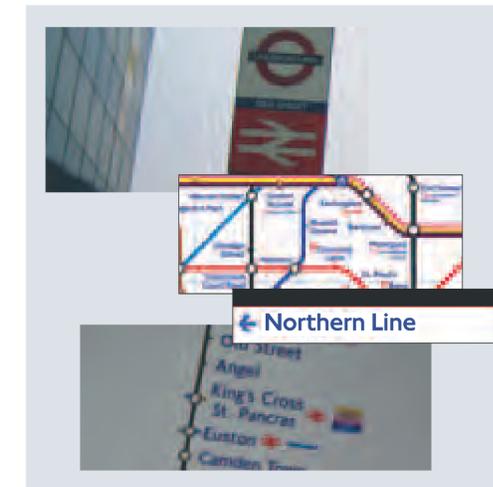
What is Legible London?

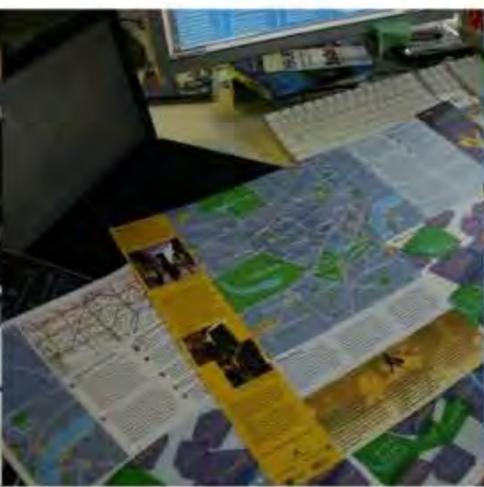
Design principles

Legible London is based on a set of design principles derived from wayfinding best-practice. These principles have guided the development of solutions.



Level 1	Country	UK
Level 2	Nation	England
Level 3	Region	SE England
Level 4	County	London
Level 5	Area	Westminster/ West End
Level 6	Village	Marylebone
Level 7	Neighbourhood	Marylebone Village
Level 8	Street	Marylebone High Street





Listening



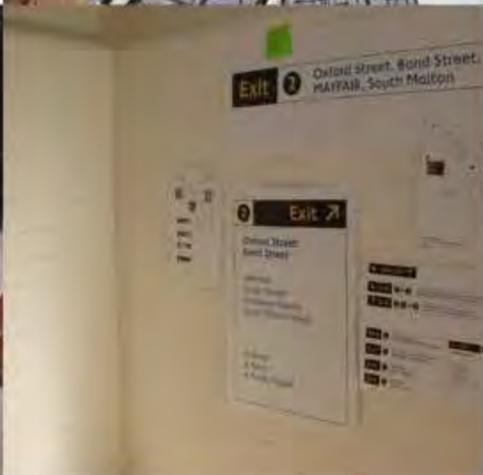
Exploring



Testing



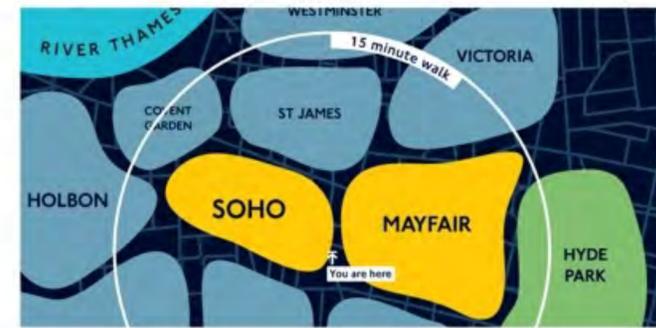
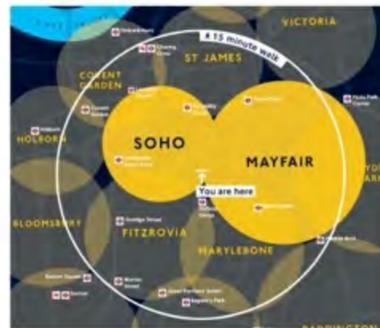
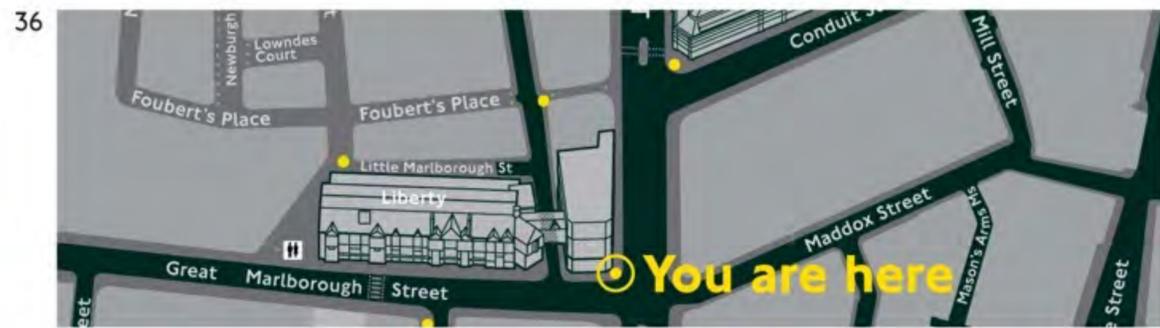
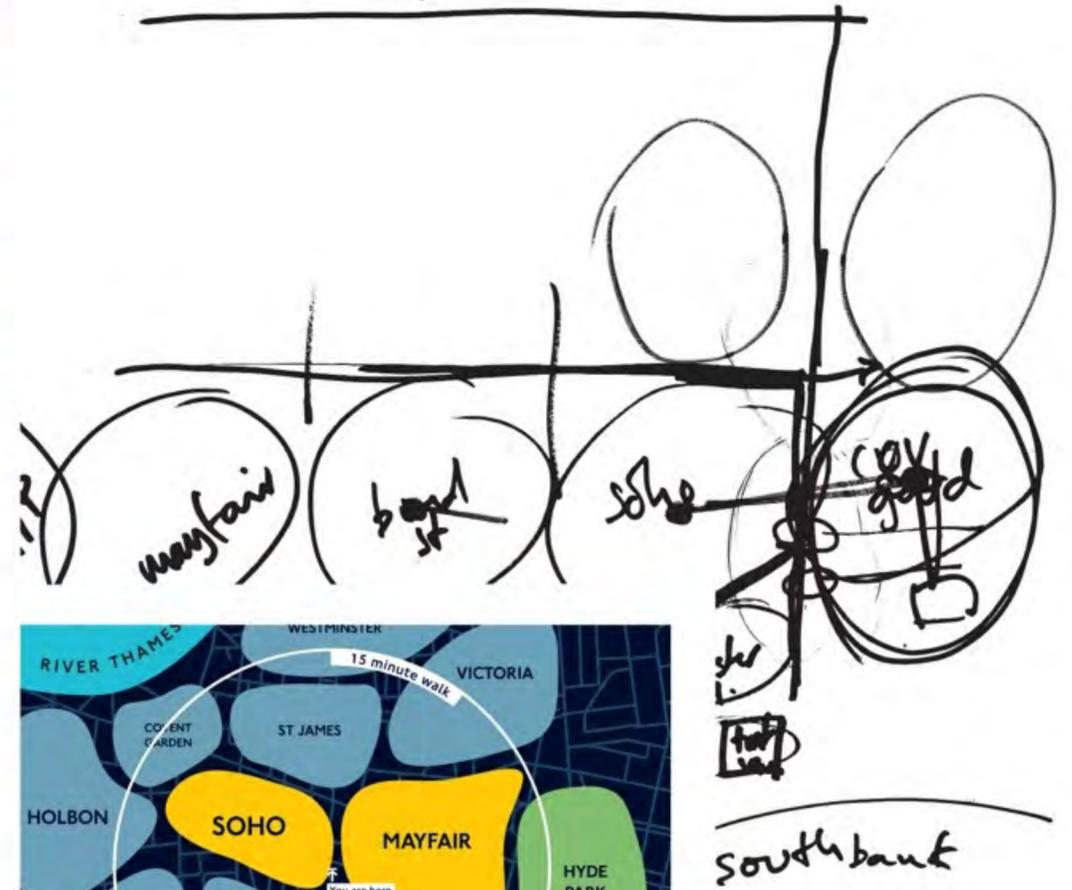
Options



Mixing media



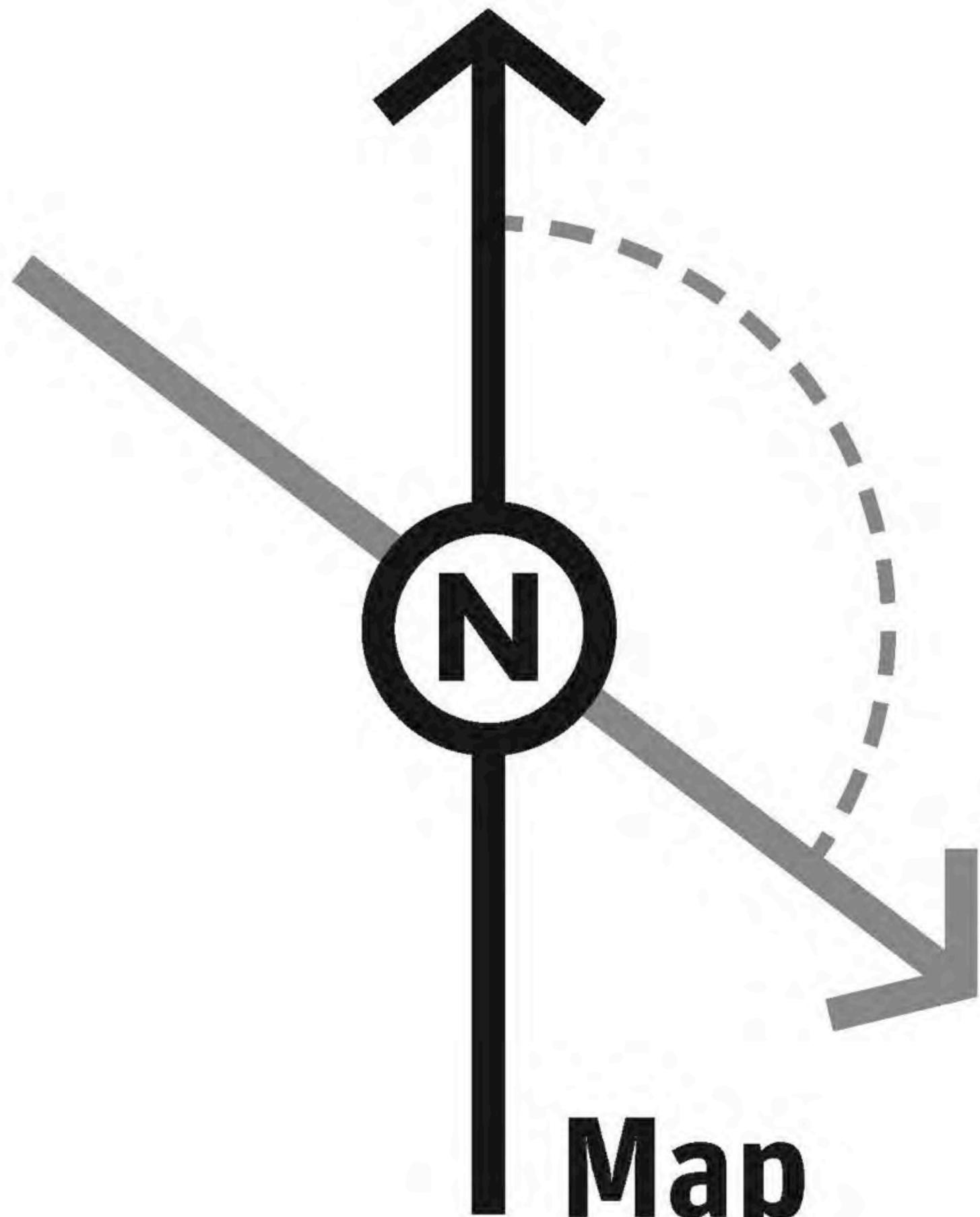
Evolving the design



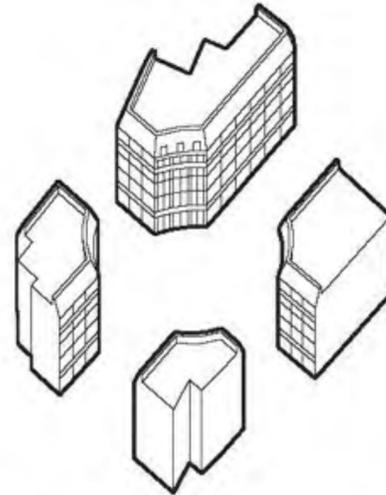
User

N

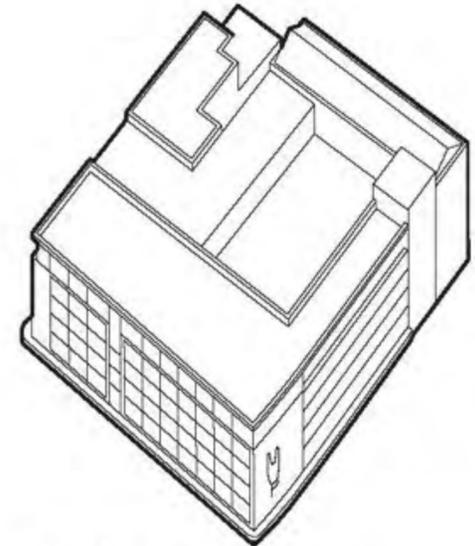
Map



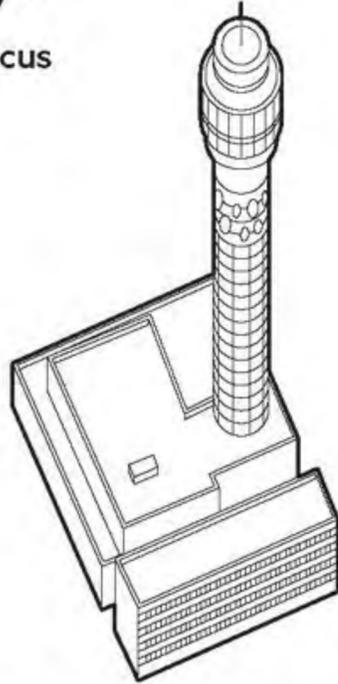
Mapping



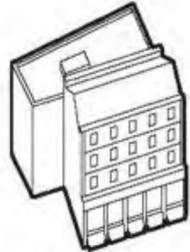
Oxford Circus



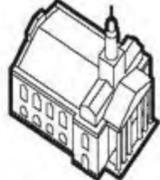
John Lewis



BT Tower



Hamley's



St Georges



Liberty

MAYFAIR

Marble Arch

Marks & Spencer



St Christopher

The Mandeville Hotel

Reiss

St Christopher's Place

Gap

Wigmore Hall

Bond Street



HMV

Berkshire Hotel

Debenhams

Royal Society of Medicine

Mariott, Grosvenor Square

You are here

Boots

St Peter's

Royal College of Nursing

Grosvenor Square

South Molton Street

House of Fraser

Cavendish Square

John Lewis

Embassy of Italy

Argentine Embassy

South Molton

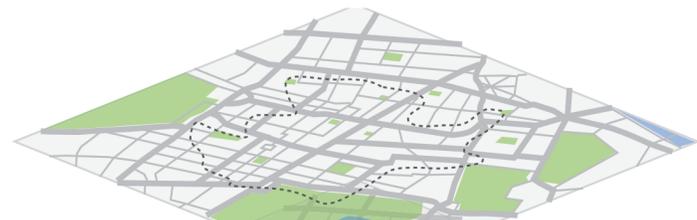
Next

Canadian High Commission



Handel





Core data



Future development



Place naming



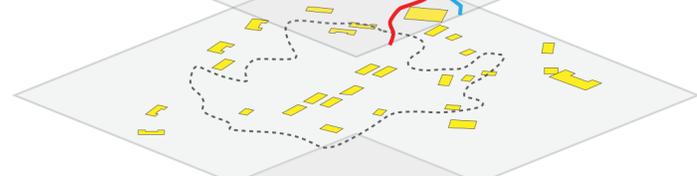
Land use



Arrival points



Pedestrian movement



Assets



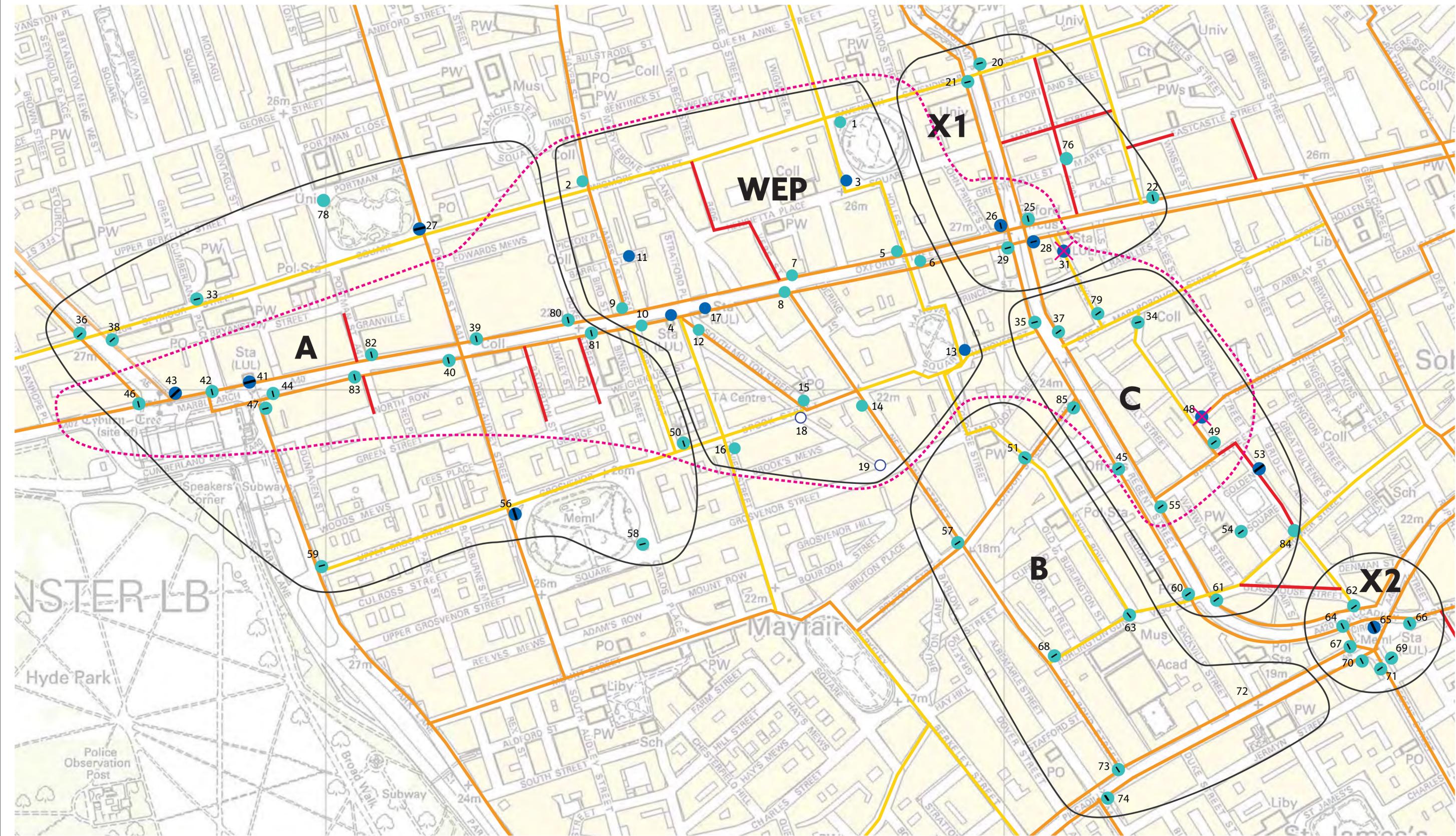
Route hierarchy



Sign locations



Placement



WEP

X1

A

C

B

X2

MANCHESTER LB

Hyde Park

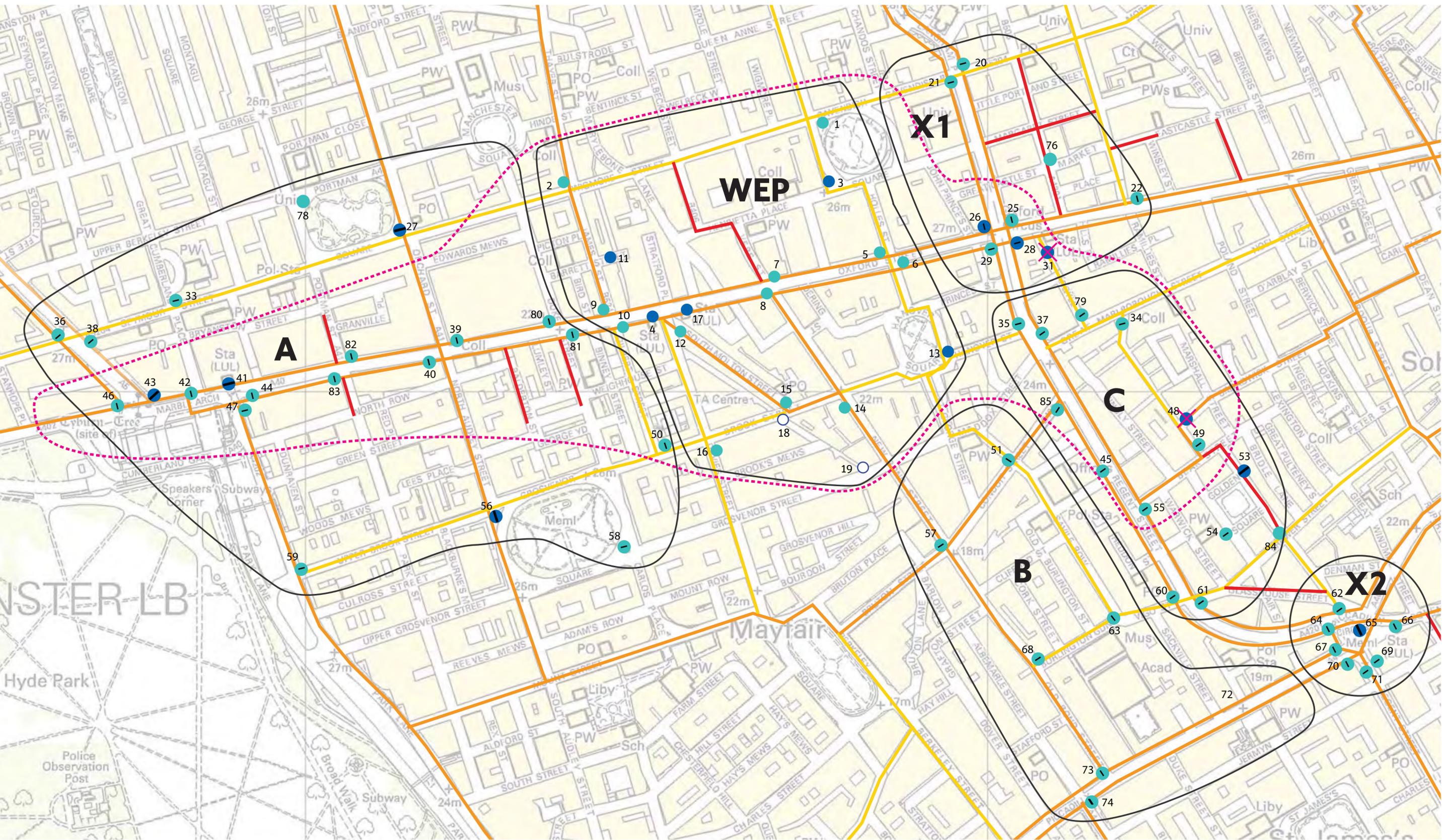
Mayfair

Police Observation Post

Subway

Liby

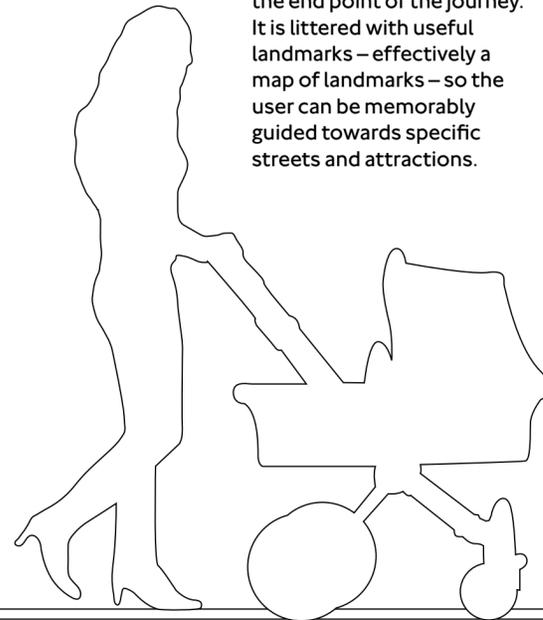
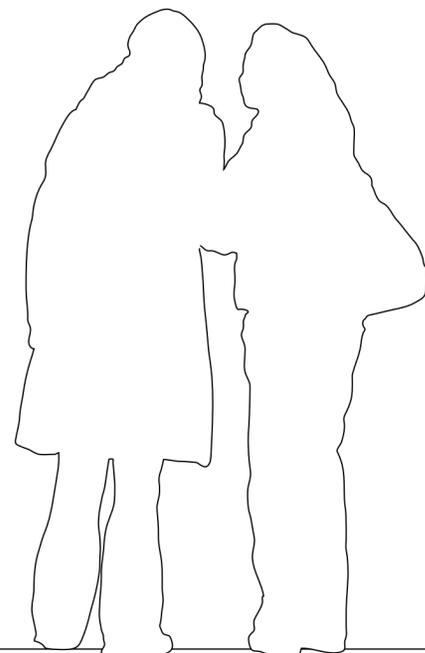
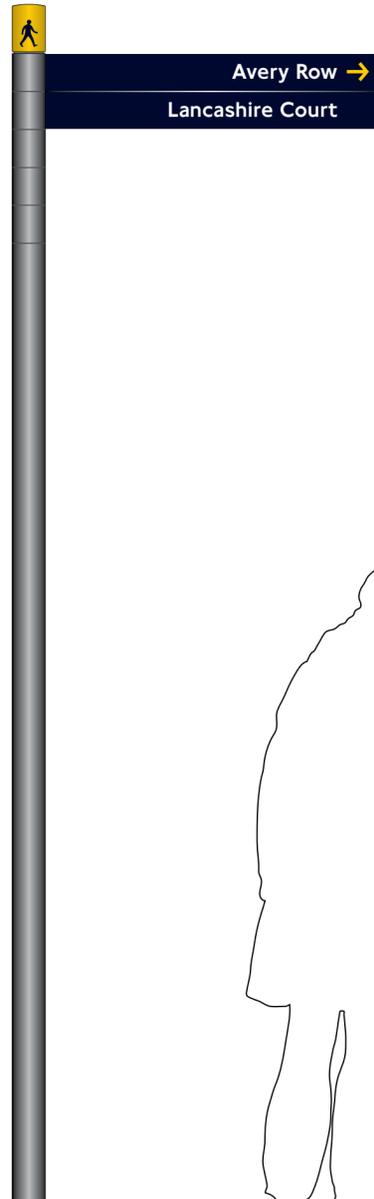
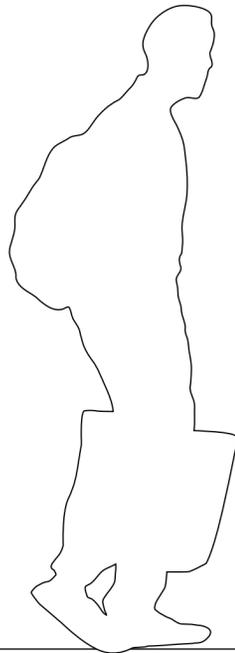
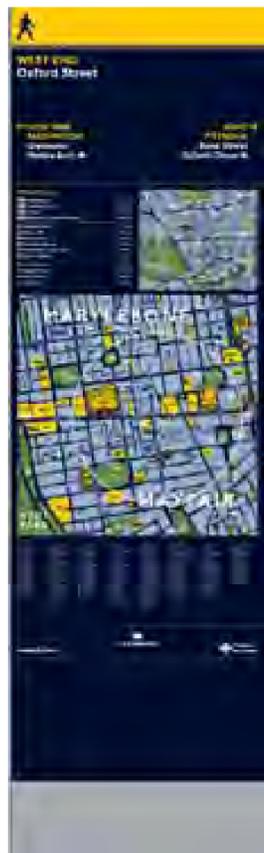
PO



Prototype in the West End
A family of sign types for walkers

Because of the density of destinations in London, a map-based system is the most appropriate and practical solution. It does away for the need to use many, many 'fingerposts' and in this context can alert the user to over 400 destinations. The Legible London

prototype uses two main types of sign, the 'monolith' and the 'minilith' – they act as both area identifiers and route supports, helping people to build their personal mental maps.



The 'walker'

All the signs are clearly identified by a yellow strip at the top and a 'walker' – the universal symbol for travelling by foot. They stand above head height so that they are clearly visible from a distance.

Directional information

Directional information is used in two main ways: to show the way towards villages and neighbourhoods, and act as a homing beacon for attractions. These have an important role in London, where major destinations are often obscured from view.

Finder map

The Finder or 5-minute map is used to find a destination – the end point of the journey. It is littered with useful landmarks – effectively a map of landmarks – so the user can be memorably guided towards specific streets and attractions.



Addressing

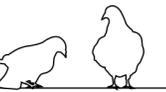
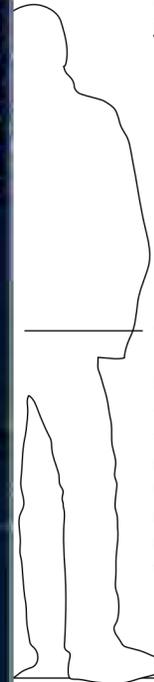
The typography, colour coding and naming conventions are consistent with those on the Legible London printed walking maps and other elements of the system, so that they link up and work together as a coherent whole.

Planner map

The planner or 15-minute map is used to orientate the user and show how close the villages are to each other. It provides the user with the information needed to link areas of London and the confidence to attempt longer-distance walking journeys.

Street finder

This fills in the gaps. Most people are familiar with the convention of using alphabetically ordered street names and reference points to find individual streets on a map – it's a means of quickly realising what's just around the corner.





Planning strategy

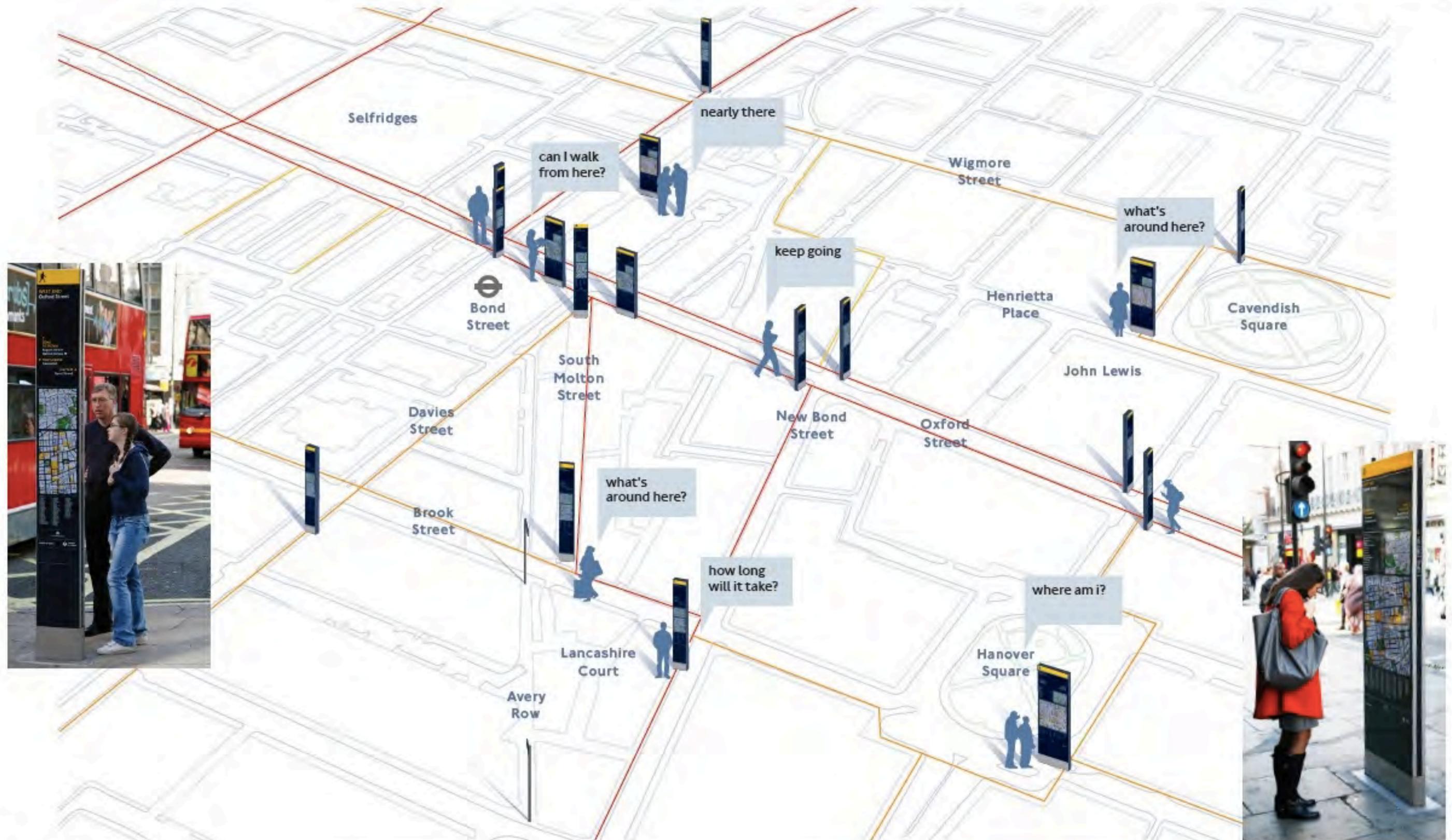
Where they go and how they work together

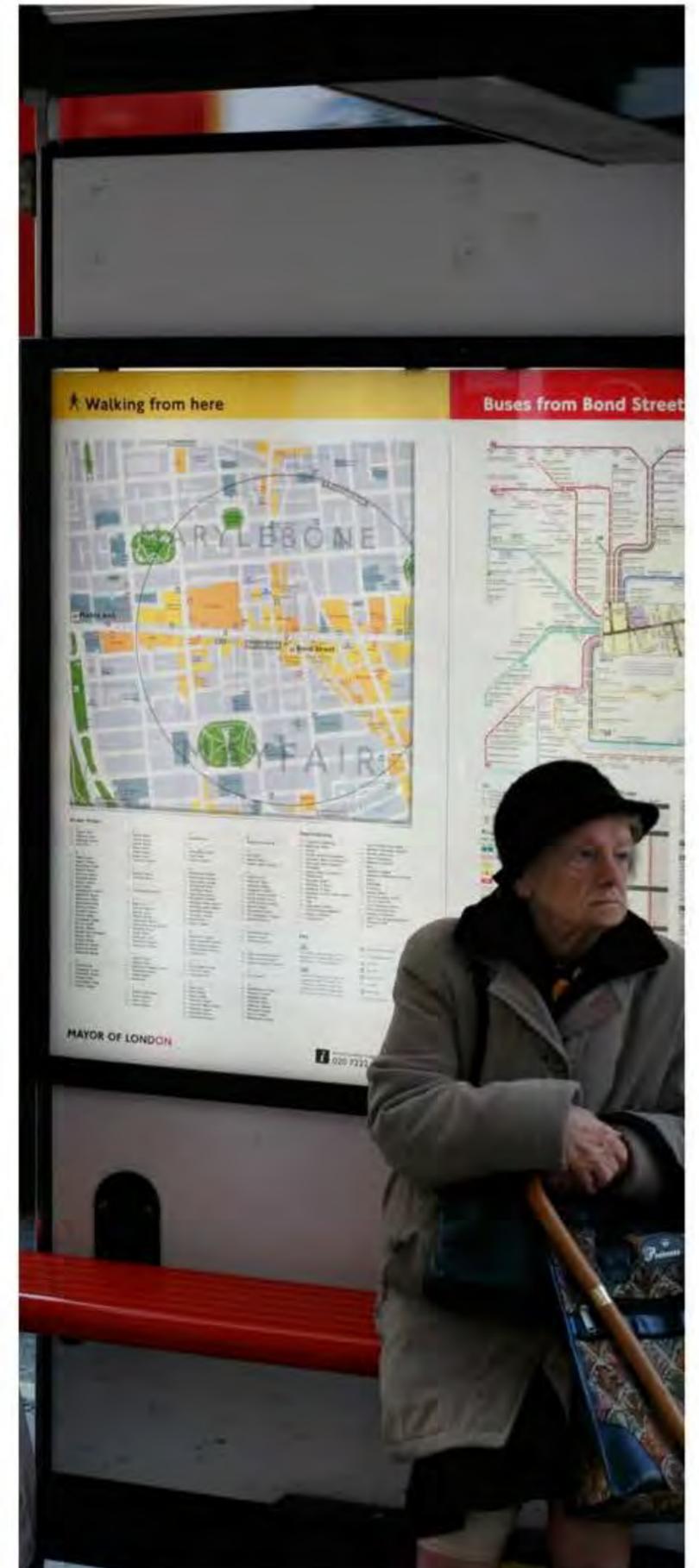
A key to a successful system is to site information in effective and consistent locations. They need to connect and be predictable - ie where they are expected. How the system is delivered across borough and landowner borders will be crucial.

Human scale

The explanation on this page supports the principle of human scale.

For further detail, see 4.0 Design principles, IDS Version 1.1, March 2008.





Results



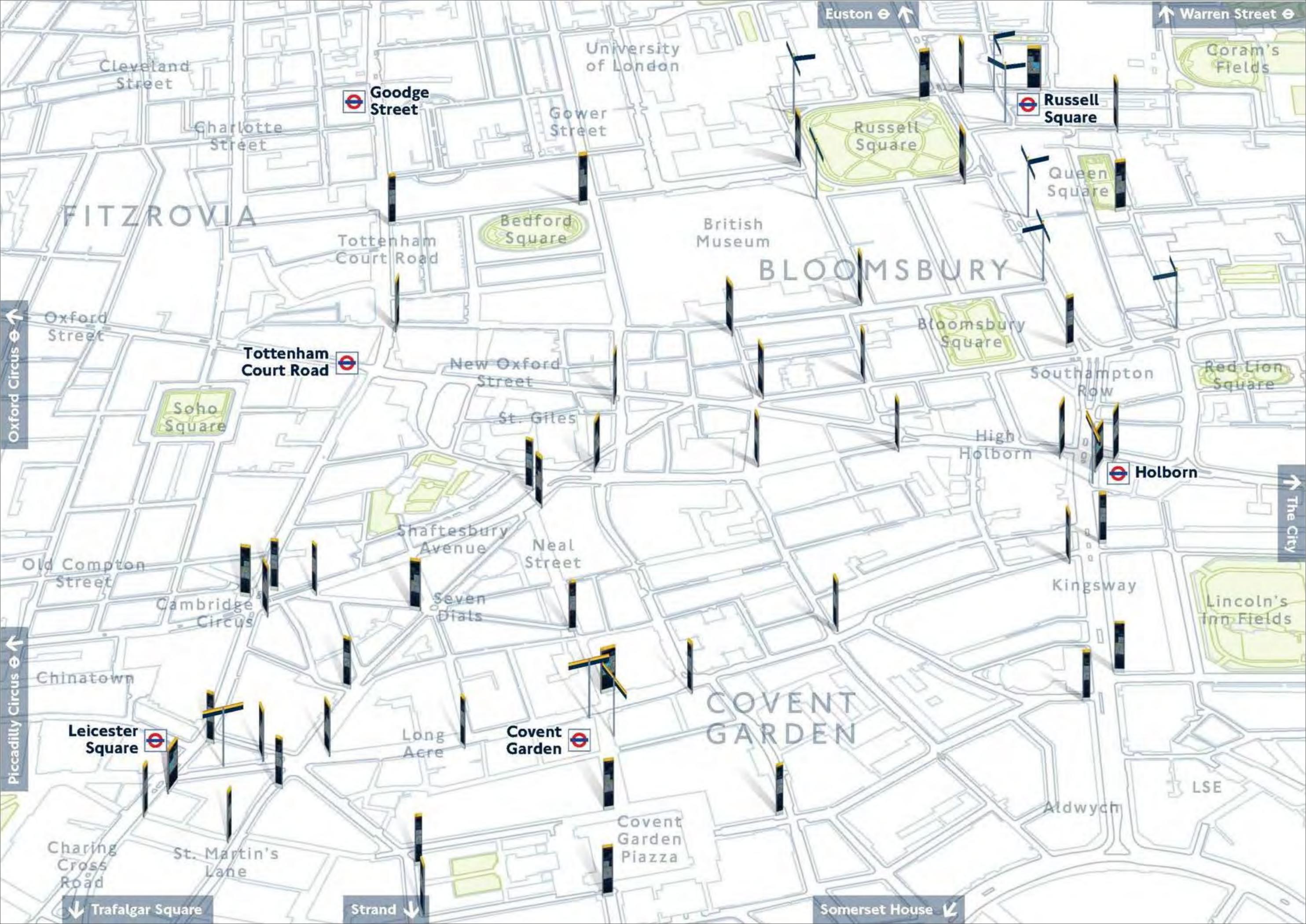
1/3 decrease in people feeling lost

16% saving in journey times

2/3 increase in knowledge of names and offer

49% awareness of the system

62% said it encourages them to walk more



FITZROVIA

BLOOMSBURY

COVENT GARDEN

University of London

British Museum

LSE

Cleveland Street

Charlotte Street

Goodge Street

Gower Street

Euston

Warren Street

Russell Square

Coram's Fields

Bedford Square

Tottenham Court Road

Queen Square

Oxford Street

Tottenham Court Road

New Oxford Street

Bloomsbury Square

Southampton Row

Red Lion Square

Soho Square

St. Giles

High Holborn

Holborn

Old Compton Street

Shaftesbury Avenue

Neal Street

Kingsway

Lincoln's Inn Fields

Cambridge Circus

Seven Dials

Chinatown

Leicester Square

Long Acre

Covent Garden

COVENT GARDEN

Aldwych

Charing Cross Road

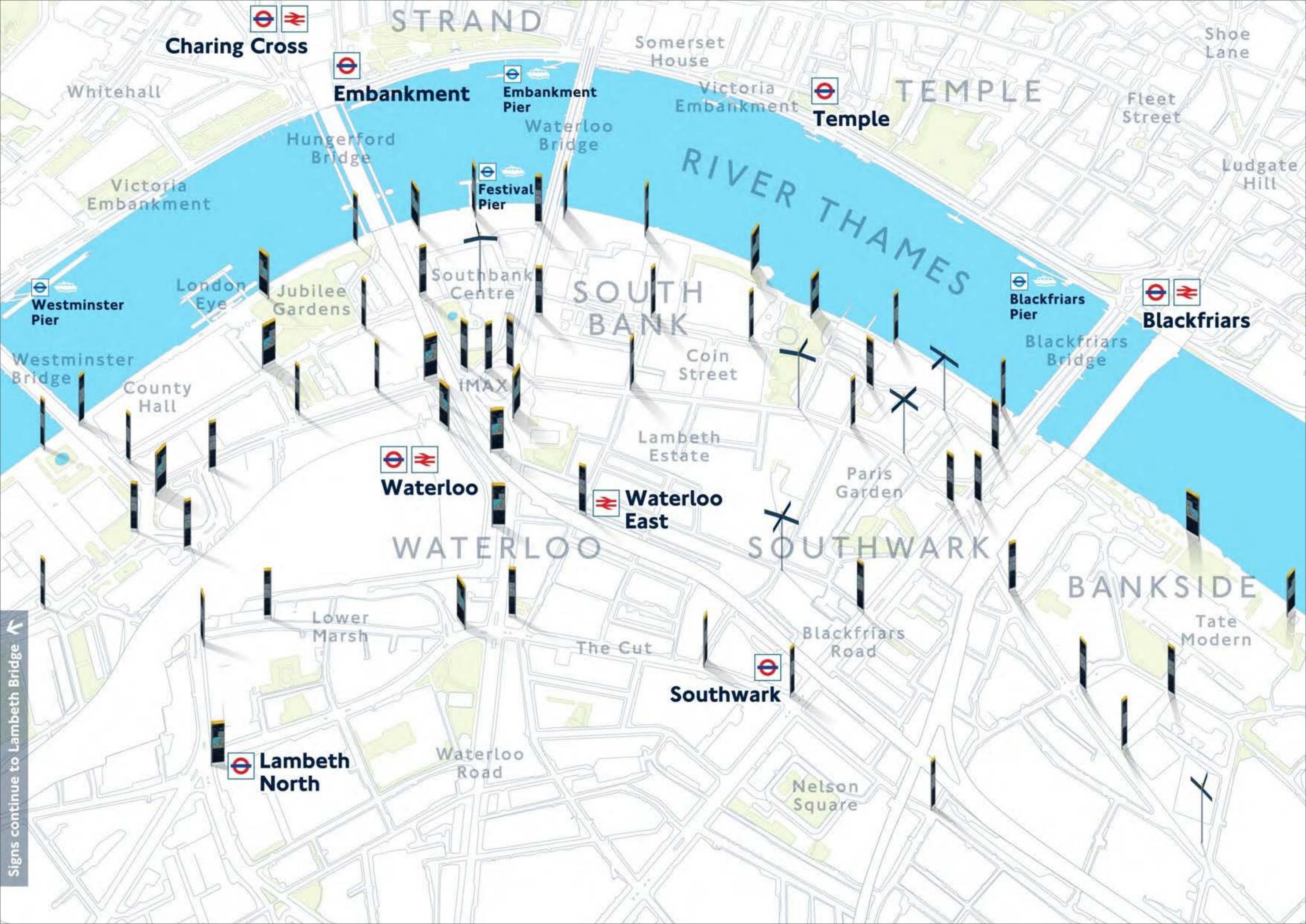
St. Martin's Lane

Covent Garden Piazza

Trafalgar Square

Strand

Somerset House



Charing Cross

Embankment

Temple

TEMPLE

SOUTH BANK

Waterloo

Waterloo East

SOUTHWARK

BANKSIDE

Lambeth North

Southwark

Signs continue to Lambeth Bridge ←

Sign elements – Map based signs

Walker



Directional information panel

TfL
Size 16mm (h)



National Rail
Size 15mm (h)



Arrow
Size 15mm (h)



Walking from here table

London Underground (monolith)
Size 10mm



London Underground (midlith)
Size 6.5mm



Docklands Light Railway (monolith)
Size 10mm



Docklands Light Railway (midlith)
Size 6.5mm



London Overground (monolith)
Size 10mm



London Overground (midlith)
Size 6.5mm



TfL Pier (monolith)
Size 10mm



TfL Pier (midlith)
Size 6.5mm



National Rail (monolith)
Size 10mm



National Rail (midlith)
Size 6.5mm



Key

London Underground
Size 10mm



Docklands Light Railway
Size 10mm



London Overground
Size 10mm



TfL Piers
Size 10mm



National Rail
Size 10mm



Stakeholder branding

TfL
Size 93.75mm (w)



**Transport
for London**

Side panel

Walker
Size 30mm (h)



Telephone
Size 30mm (h)



TfL
Size 7.5mm (h)



Sign elements – Directional signs

Finger posts and Headline Information Finger Posts

Walkers



Finger post arrow
Size 40mm (h)



TfL
Size 42mm (h)



National Rail
Size 40mm (h)



Headline finger post arrow
Size 40mm (h)



Map elements – Planner and Finder maps

Planner map

London Underground
Size 5.5mm



Docklands Light Railway
Size 5.5mm



London Overground
Size 5.5mm



TfL Pier
Size 5.5mm (h)



National Rail
Size 5.5mm



Bus station
Size 5.5mm



Finder map

Transport interchanges

London Underground
Size 10mm



Docklands Light Railway
Size 10mm



London Overground
Size 10mm



TfL piers
Size 10mm (h)



Non TfL Piers
Size 5mm (h)



Station
Size 10mm



Bus Station
Size 10mm



Parking

Car park
Size 6.5mm



Car park entrance
Size 4.3mm



Toilet facilities

Male/female toilets
Size 6.5mm



Disabled toilets
Size 6.5mm



Baby changing
Size 6.5mm



24 hour toilets
Size 6.5mm



Additional building icons

Building entrance point

Active frontage

Shops
Size 5mm



Gifts
Size 5mm



Fresh produce
Size 5mm



Clothes
Size 5mm



Shoes
Size 5mm



Cafés
Size 5mm



Restaurants
Size 5mm



Bars
Size 5mm



Lock up examples

You are here

Minilith (Central London)



You are here



You are here

Midlith and Monolith (Central London)
and Minilith (Outer London) and Monolith
(Outer London)



You are here



You are here

Off-map tabs

← Neighbourhood name

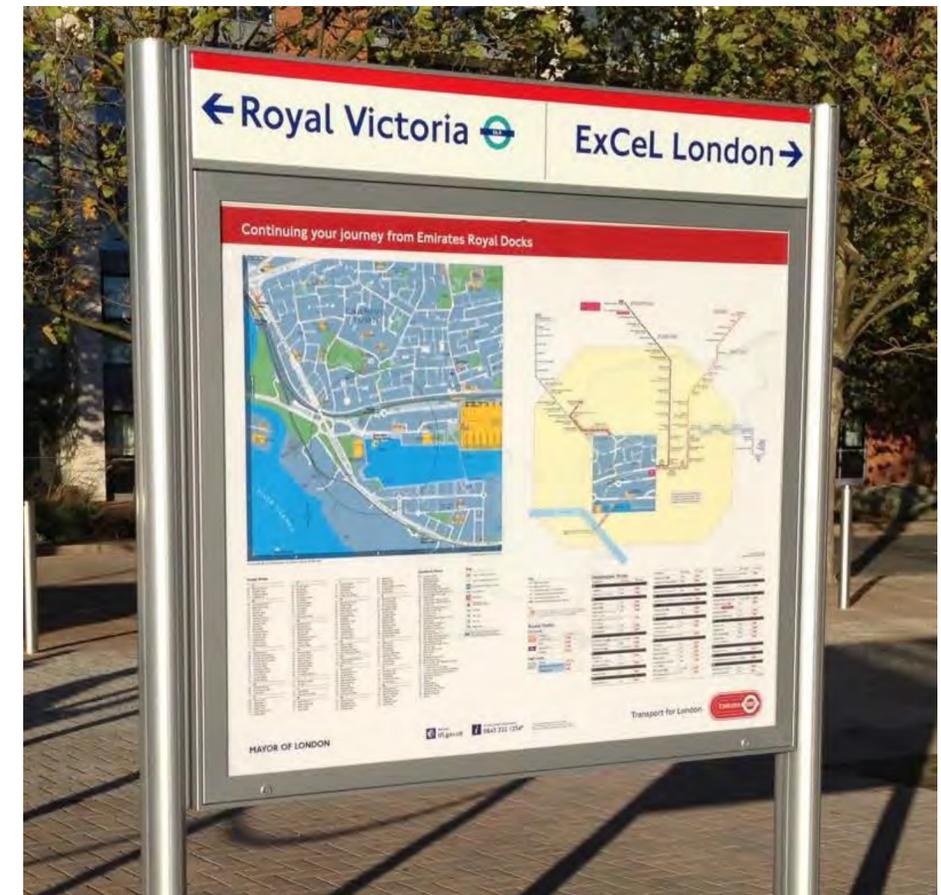
Station name ⇄ →

← Station name ⇄

North indicator

Minilith (Central London)









Visa Customer Services & ATM



Pharmacy
Pharmacie



Information
Informations

Welcome to Orbit Circus
Get some food to go - from authentic
Czechoslovakian to delicious British dishes
like curry - and relax in the 2012 Gardens
while you admire the towering Orbit. At
11km, the Orbit is the tallest structure
on the Olympic Park and Britain's
tallest artwork.

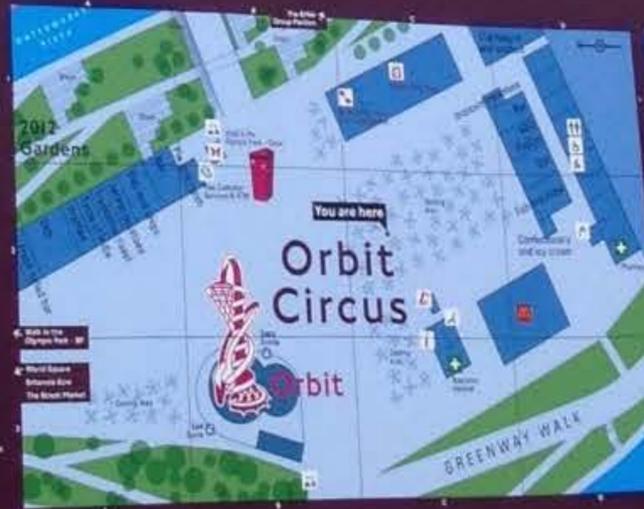
If you're a pin badge fan, make sure you visit
the Coca-Cola Official Pin Trading Centre.

Map

A1 Bar	A2 Bar	A3 Bar	A4 Bar	A5 Bar	A6 Bar	A7 Bar	A8 Bar	A9 Bar	A10 Bar	A11 Bar	A12 Bar	A13 Bar	A14 Bar	A15 Bar	A16 Bar	A17 Bar	A18 Bar	A19 Bar	A20 Bar
A21 Bar	A22 Bar	A23 Bar	A24 Bar	A25 Bar	A26 Bar	A27 Bar	A28 Bar	A29 Bar	A30 Bar	A31 Bar	A32 Bar	A33 Bar	A34 Bar	A35 Bar	A36 Bar	A37 Bar	A38 Bar	A39 Bar	A40 Bar

Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40



Explore the Olympic Park
The Olympic Park covers 2.5 square kilometres - roughly the size
of 200 football pitches.

As well as world-class sport, it is hosting exciting events and
attractions during the Games, Tokyo Live events and mascot
experiences, the official opening photographs and interactive
experiences presented by London 2012 Partners - there's
something for everyone.

The Olympic Park is divided into four zones, each with its own
unique atmosphere. Explore the map to find out more.

Map

The Olympic Park is divided into four zones, each with its own
unique atmosphere. Explore the map to find out more.

The Orbit is the tallest
structure in the Olympic
Park. It is the tallest
structure in the Olympic
Park.

Make the most of the
view from the Orbit. It's
the best view of the
Olympic Park.





Legible
London

Parks

How?

Prepare the case

Communicate

Prototype

Create the system



Kia ora