We provide the pedestrian and vehicular data tables used in Hillier and Iida (2005), which was originally used as part of Penn et al. (1998), as the Standard Area Test Cases. Four areas have been chosen in central London, and the pedestrian and vehicular movement data as well as some physical characteristics of the streets have been collected.

The areas are: - Barnsbury area in Islington - Clerkenwell area around Calthorpe Street - Knightsbridge area around Brompton Road - South Kensington museum sites

The pedestrian movement data and the vehicular movement data are provided in separate tables. Each table contains 19 columns and each row in the table represents the 'gate' in which the observation took place. The description of each column is as follows:

ID:

The ID of the record

Area_Name:

The name of the area (Barnsbury, Calthorpe, Brompton or SKM)

Gate_No:

The unique identifier of the gate

Axial_Map:

the name of the axial map the data is related (Barnsbury, Clerkenwell or Kensington)

Line ID:

The ID of the corresponding axial line in the map on which the gate is plotted

X:

x-coordinate of the gate on the map

Y:

y-coordinate of the gate on the map

mov_ad_ph:

Movement rate of adult pedestrians per hour

mov_veh_ph:

Movement rate of vehicles per hour

landuse:

The predominant ground-level land use of the street segment

trafmanage:

The state of the traffic management of the street
segment. Either 'twoway' (two-way through traffic), 'oneway' (one-way
through traffic), 'pedestrian' (pedestrian only), 'vehculdesac'
(cul-de-sac for vehicular traffic) and 'restricted' (restricted access).

streettype:

The type of street segment indicating the hierarchy
within the street network. Either 'primary', 'secondary' or 'local'.

avebuildheight:

Average building height (in stories) in the street segment.

maxbuildheight:

Maximum building height (in stories) in the street segment.

diff_max_avbheight:

maxbuildheight - avebuildheight

street_width:

The width of the street (in metres).

pavement_width:

The width of the pedestrian pavement (in metres), if it exists.

gross_veh_road_width:

street_width - pavement_width, indicating the gross width of the street
provided for vehicles.

parking_width:

The width of the area in the street segment which can
be used for parking vehicles.

effective_road_width:

gross_veh_road_width - parking_width,

indicating the width of the street segment provided for vehicles in effect.

The gate number of each area is taken directly from the ID of the original gate map of the observation carried out and used for 1998 paper. However, some gates have been omitted from the standard data. This is due to:

- No data was collected on the gate, or at least we did not have any data for the gate when we compiled the standard data (Barnsbury: 4, 5, 27, 33, 34, 35, 46, 54, 55, 56, 57, 60, 86, 87, 97, 98, 110, 115, 116, 121. South Kensington: 67).

- The gate is located on the cul-de-sac, therefore not generating any 'through' movement (Barnsbury: 36, 89, 90, 93, 113, 123).

- The street segment on which the gate exists cannot be considered as carrying normal flow, such as a back street (South Kensington: 39), mews (Brompton: 129, 144), steps leading up to a property (South Kensington: 55), streets inside the estate (Calthorpe: 6, 31, 32, 34) or streets inside the college campus (South Kensington: 59, 60, 61, 62, 63, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77).

- The gate is on the pedestrian path in the park for which the segment does not exist in the map (South Kensington: 43, 44).

- The gate is considered to be on the 'affected' street segment where linearly continued adjacent street segments have such traffic restriction that the segment is thought to be severely deprived of its

major source of movement (Barnsbury: 20. Calthorpe: 7, 15, 17. South
Kensington: 8. Brompton: 178).


Each gate is assigned to a corresponding segment in the map; no
segment has more than one gates assigned, and no gate is assigned to
more than one segment, except gate 42 in Barnsbury where two axial lines
intersect in the section including the gate. When more than one segments
are available for the gate, the segment which has the maximum value of
integration is always chosen.


The data tables are provided as plain text files (.txt) in CSV
(comma-separated value) format. Pedestrian movement data and vehicular
movement data are provided separately. The map data for the gates is
also included in the same archive. They are provided in three format:
text table (.txt), DXF (.dxf) and MapInfo MIF (.mif).


We also provide three axial maps of areas of London -- Barnsbury,
Clerkenwell and South Kensington. The data is provided in four different
formats: two plain text tables, DXF and MapInfo MIF. MIF and the text
table in 'Tables' folder contain some results of space syntax axial
analysis, whereas DXF and the text table in 'TXT' only contain x,
y-coordinates of the lines. The default projection system in MIF is 'Non
Earth'.


For any enquiries regarding this data set, please contact Shinichi
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We hope this data set helps your research.


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