HSTAT Health Service Travel Analysis Tool

London TravelWatch 10 November 2008

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HSTAT – Health Service Travel Analysis Tool

Presentation Outline

1. Why HSTAT?

Transport and Health Healthcare for London TfL and NHS London working together

2. What can HSTAT do?

Case Studies Results

3. What next?

HSTAT guidance and launch

Healthcare and transport in London: some facts & figures

Total number of trips per day in London - Source LATS 2001 household survey	18.2 million
Trips per day to / from health services	< 1 million
Health trips as percentage of all trips made in London	< 5%
Education trips as percentage of all trips made in London	13%
Shopping trips as percentage of all trips made in London	19.5%

Proportion of health trips made by car (driver / passenger)	51%
Proportion of health trips made by walking	19%
Proportion of health trips made by bus	14%
Proportion of health trips made by tube/rail	10%

Number of GP practices in London	~ 1600
Average travel time to nearest GP	8 minutes
Percentage of Londoners for whom walking is the quickest way to access GP surgeries Source: TfL work on accessibility	> 80%

Interaction between transport and health

Transport and Health affect each other in a number of ways

- The NHS is a generator of travel where / how health services are provided has an impact on travel patterns in London
- TfL is an enabler of access to health care – responsible for ensuring safe, accessible public transport (and main highway) access
- Promoting active travel and public health – TfL is actively engaged with the NHS (and others) to encourage walking, cycling and the use of public transport





Healthcare for London: Transport for London's response

TfL's view was that any reconfiguration of healthcare services should:

- Help to reduce the need to travel, especially by car
- Help influence a shift towards more sustainable modes of transport
- Encourage access on foot or by bicycle wherever possible – including through the design of healthcare sites
- Reduce inequalities in access to healthcare



Healthcare for London: Transport for London's response

TfL recommendations included:

- Develop criteria for selecting suitable sites for polyclinics and larger facilities to ensure they are located where accessibility is good
- Carry out a comprehensive analysis of the potential impacts of reconfiguration
- Develop appropriate measures to deal with impacts on transport including travel plans for all polyclinics and larger sites
- Care in the design of healthcare sites to prioritise those arriving on foot or by bike, and to actively manage parking in the context of travel plans

NHS London and TfL - working together

- PCTs support TfL's stated recommendations, and would like to work in partnership with us to achieve them. These recommendations include:
 - Ensuring that reconfiguration or relocation of healthcare services:
 - o Help reduce the need to travel, especially by car
 - o Help influence a shift towards more sustainable modes of transport
 - o Encourage access on foot or by bicycle wherever possible; and
 - Reduce inequalities in healthcare
 - Integrating the planning of healthcare services with transport provision
 - Promoting improved health in the capital by producing travel plans for larger developments
 - Designing healthcare sites to give priority to people arriving on foot, by bike or public transport
- NHS London is working in partnership with Healthcare for London, TfL and others to develop comprehensive guidance that can be used when PCTs consider any service reconfigurations. This guidance will be rolled out shortly

New work developed by TfL and NHS London in partnership

- Health Service Travel Analysis Tool (HSTAT)
- A consistent approach to analysing health service accessibility





HSTAT Health Service Travel Analysis Tool

- A toolkit of Accessibility Modelling techniques
 - uses TfL's 'CAPITAL' model
- Demonstrates the effects of different proposed health service locations on travel time
 - public transport, private cars, walking & cycling
 - can handle mobility issues
- Capable of analysing real (historic) health service use data alongside general population (census) data
- Can examine the effects of adding services in the community as well as consolidating services onto fewer or different sites

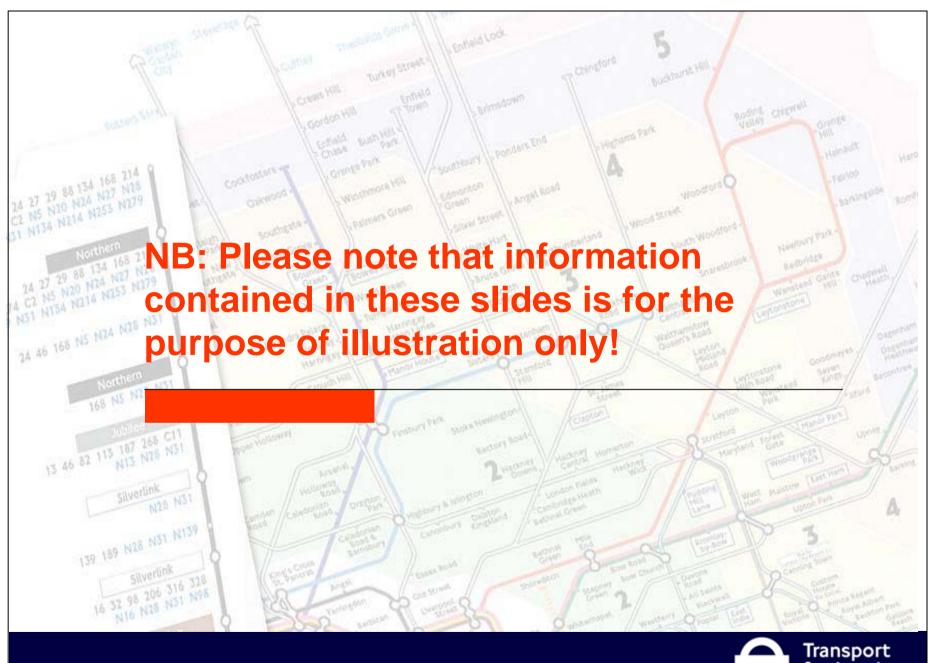
HSTAT Health Service Travel Analysis Tool

HSTAT will be able to answer questions such as:

- How many patients could be disadvantaged by these proposals?
- How many could benefit?
- What is the average travel time increase/decrease?
- What percentage of people live within x minutes by public transport of this service?
- Could there be a disproportionate effect on disadvantaged groups?
- This will enable NHS London and PCTs to take account of the accessibility implications of changing health services and their locations – alongside other influencing factors (site availability, cost, clinical considerations etc)
- It will also provide TfL with useful information on the potential for additional trips and the demographic groups affected

How HSTAT works

- HSTAT is a toolkit based around TfL's transport accessibility models –
 CAPITAL and PTAL
- Integrates information including:
 - ➤ Health care facilities & services (GPs, hospitals ...)
 - > Patient home postcodes
 - > Accessibility / travel time
 - ➤ Mode of transport
 - > Current & future year scenarios
 - > Customised transport scenarios (what-if ...)
 - > Socio-demographic characteristics

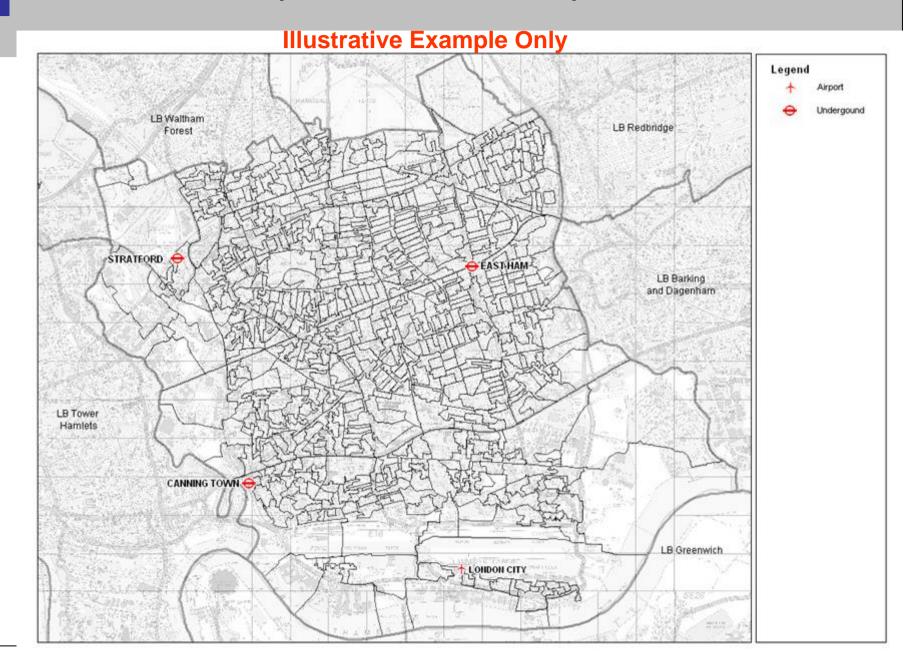




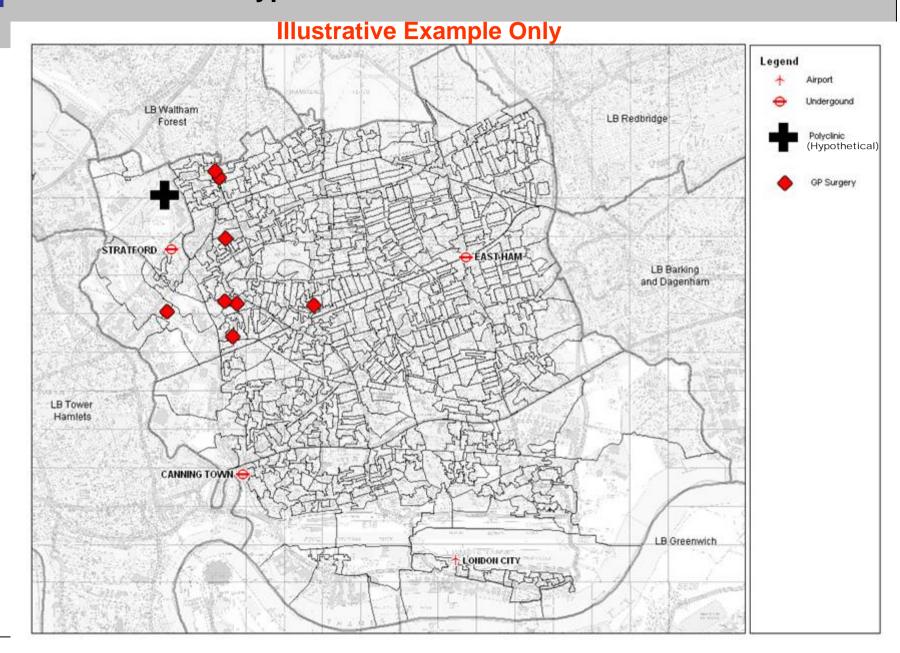
Street Map, Boroughs & Transport Nodes

Illustrative Example Only Legend + Airport ⊖ Underground LB Waltham LB Redbridge Forest STRATFORD 0 O EAST HAM LB Barking and Dagenham **LB Newham** LB Tower Hamlets CANNING TOWN . LB Greenwich + LONDON CITY

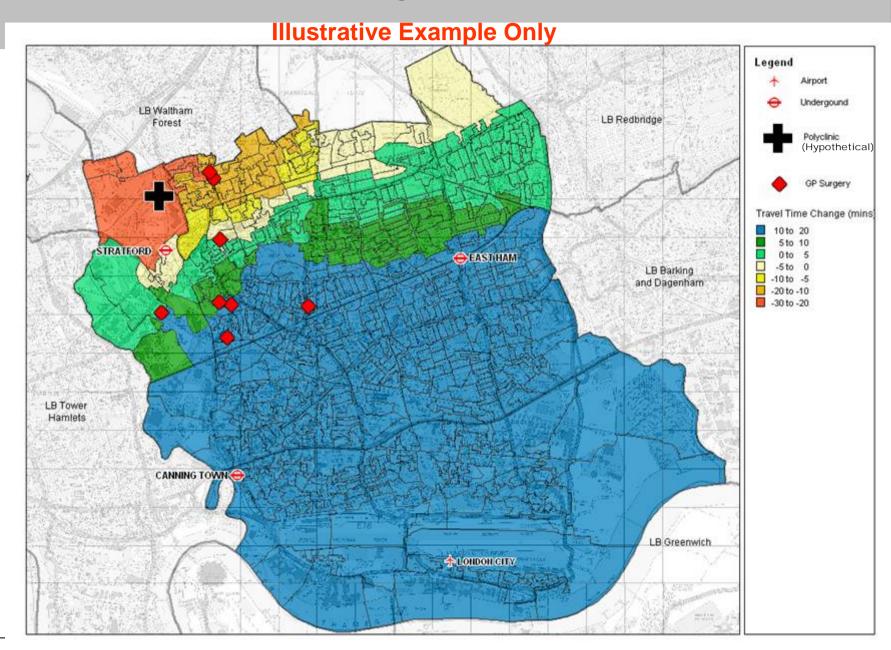
Transport Nodes & Census Output Areas



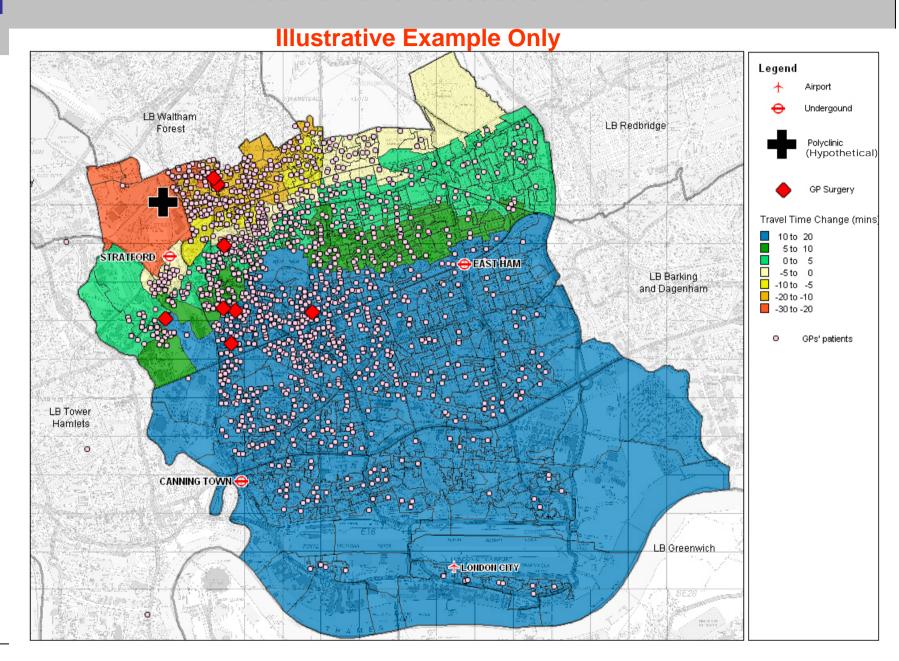
Typical Location of Health Facilities



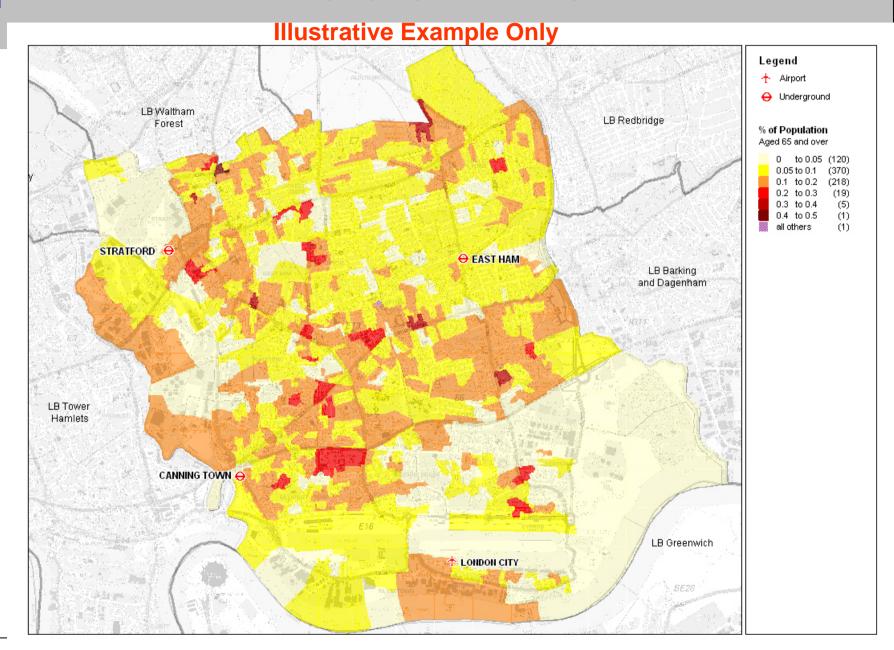
Indicative Change in Travel Times - PT



Indicative Home Postcode of Patients

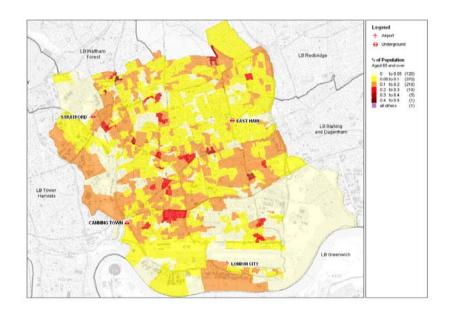


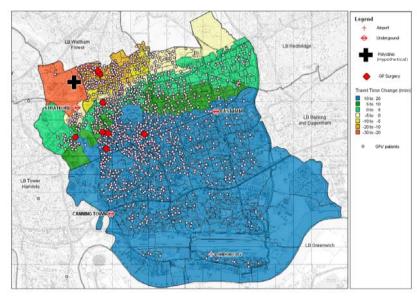
Older People (65+) as a % of Population



Older People and Travel Time Analysis

Illustrative Example Only





Before & After Travel Time Analysis

Illustrative Example Only

Travel time change from "ABC" Health Centre to Polyclinic

Number of Patients	Time to I	Polyclinic	•					
Time to GP Surgery	0-10	10-20	20-30	30-40	40-50	50-60	over 60	Grand Total
0-10	140	130						270
10-20	49	276	156					481
20-30		49	167	85				301
30-40			16	71	69			156
40-50				1	8	5		14
50-60						2	2	4
over 60							1	1
Grand Total	189	455	339	157	77	7	3	1,227

Summary

Increase	447	36%
No Change	665	54%
Decrease	115	9%
Total	1,227	100%

Inputs and Outputs

Spatial and other key data sets (e.g. census)

Travel network data (Public transport, highway information, etc)

CAPITAL / PTAL

Health Service Travel Analysis Tool

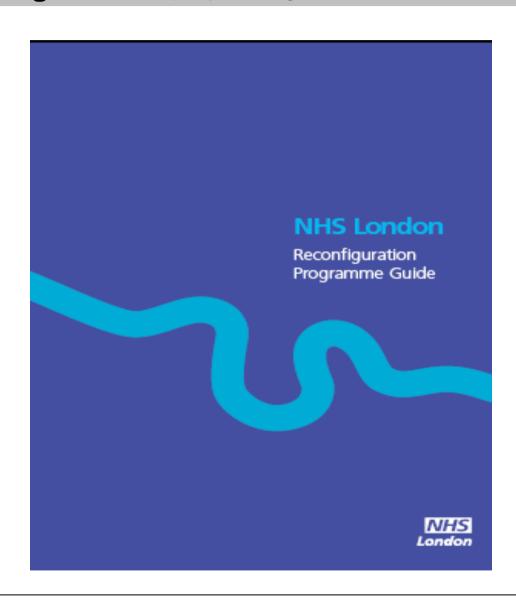
Health user data from NHS (service usage, demographic, etc)



Analysis

Accessibility and other demographic information

Reconfiguration Programme Guide to be supplemented with HSTAT guidance (subject to agreement between TfL and NHS London)



HSTAT Guidance – Coming soon

The guidance will include the following information:

- How you can use HSTAT
- •Issues to consider and actions to take
- Advice on transport assessments
- •Further sources of information
- Frequently asked questions
- •TfL & HfL key contacts

HSTAT Guidance

- Being developed jointly by TfL and NHS London
- Will accompany the formal launch / rollout of HSTAT

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HSTAT Health Service Travel Analysis Tool *END*

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Thank You