



Gloucester Methodology Strategic Housing Land Availability Assessment – Hierarchy of Sites

September 2008

Introduction

Gloucester SHLAA has 49 potential sites. We have created a hierarchy of sites based on accessibility travel times for seven key facilities.

The seven key facilities were chosen from guidance in the Regional Planning Guidance 10 for the South West (RPG10). For residential development, RPG10 states a development “should be proposed within walking distance of a food shop and primary school, and for major residential development, RPG10 states development “should be within walking distance, or should have access by public transport, to employment, convenience and comparison shopping, secondary and tertiary education, primary and secondary health care, leisure and other essential facilities.” We have adopted both the residential and major residential development accessibility criteria to draw up a list of facilities.

Accession holds the updated local data set for each of the following services; branded supermarkets (not comparison shopping which includes retail parks), primary school & FE 16-19yrs, GP and A&E. The local employment data set was supplied by Gloucester City Council.

Methodology

Using the accessibility software tool Accession, the distance and travel time were calculated to seven key facilities, local employment, primary school, FE 16-19yrs, GP, A&E, leisure and post offices for each of the 49 sites based on the four main transport modes:

1. walking
2. cycling
3. public transport and
4. drive time (not included in comparison table, but is in the dataset tables)

Thresholds

For the purposes of the Gloucester LDF site hierarchy a middle ground of 1000m for walking and 5km for cycling was reached between RPG10 and the PPG13 guidance. ¹

Walking < 15mins.

The conversion to travel time for walking is based on the average walking speed of 3 miles per hour (1.2km per 15mins).

Cycling < 15mins.

For cycling the conversion is based on Manual for Streets guidance on design speed; taking the difference between normal and low cycling speed to reach 12 miles per hour (4.82km per 15mins).

Public Transport <30mins.

For public transport a maximum travel time of within 30 minutes was taken from RPG10 based on PUA threshold to other non-residential facilities as an average to compare across each of the seven facilities.

Scoring

Each key facility is scored out of 100 against 3 modes, walking, cycling and public transport when the facility is within the threshold of <15 minutes or <30 minutes for walking, cycling or public transport respectively. To gain a score of 100 the SHLAA site must be within the journey time threshold for all 3 modes of transport. The site is then allocated a weighting for each facility, (e.g 3 for primary school) to give a greater accuracy to rank each site and give an overall accessibility score.

E.g. (with 3 as weighing the example shows percentage rating)

Gloucester Comparison of mode travel time to sites

			Weighting		3				
			Factor		Primary School				
Ref	Site No.	Site	Wlk	Cyc	PT	<15	<30	Score	
20	20	26 Hempsted Lane, Hempsted	12	4	12	33.3	33.3	33.3	300

Weighting

In order to get a greater comparison between sites a weighting by key facility has been set by a multiplier of 1 to 3. (Example above $33.33 \times 3 = 100 \times 3 = \text{Score } 300$). Three being of greatest importance, 1 of least importance.

- 3 GP Surgeries, A&E, Primary School, Local Food Shop & Employment
- 2 FE 16-19yrs education,
- 1 Leisure

The site overall score is banded into four levels of accessibility. The higher the score the more accessible the development.

Band A	(purple)	225 - 250
Band B	(green)	200 - 225
Band C	(yellow)	150 - 200
Band D	(pink)	0 - 150

Key Indicators

Local Employment

Accession used the local data set supplied by Gloucester City Council based on digitised mapping layer for their Employment Land Review. The 22 large employment zones are

based on a minimum of 500 jobs. The calculations for distance and travel time are taken from the centre of the zone. The list of zones are in Annex A.

Primary School

This local data set is available on Accession. RPG10 includes primary education for major residential development as one of its accessibility criteria.

Further Education 16-19yrs (post 16 educational colleges)

This local data set is available on Accession, it contains all post 16 educational colleges including the University of Gloucestershire. It excludes the National Star College, a national provider of specialist education for severely disabled young people. This is both a local and national data set indicator.

GP Surgery

This local data set is available on Accession. This local data set is also a mandatory indicator in the Gloucestershire Second Local Transport Plan (LTP2). The LTP indicator uses Accession to calculate a baseline and monitor progress.

Branded Supermarkets

This local data set is available on Accession and reviewed in 2008. This data set includes a combination of large supermarkets and small mini-markets where a selection of fresh fruit and vegetables, meat, dairy and frozen produce is available. Accession does not hold the data for small independent shops or comparison shopping which includes retail parks.

A& E - Hospital Accident and Emergency Departments

This local data set is available on Accession. For this purpose we have only included the specific data set for Gloucestershire Royal Hospital A&E.

Leisure

This local data set is available on Accession. For the leisure indicator Accession used the local data set for gyms, school sport facilities, swimming pools both local authority and private. RPG10 includes leisure and other essential facilities for major residential development as one of its accessibility criteria. We adopted the major residential development criteria for all sites.

1. For walking PPG13 proposes a greater maximum distances of under 2km “walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres”.

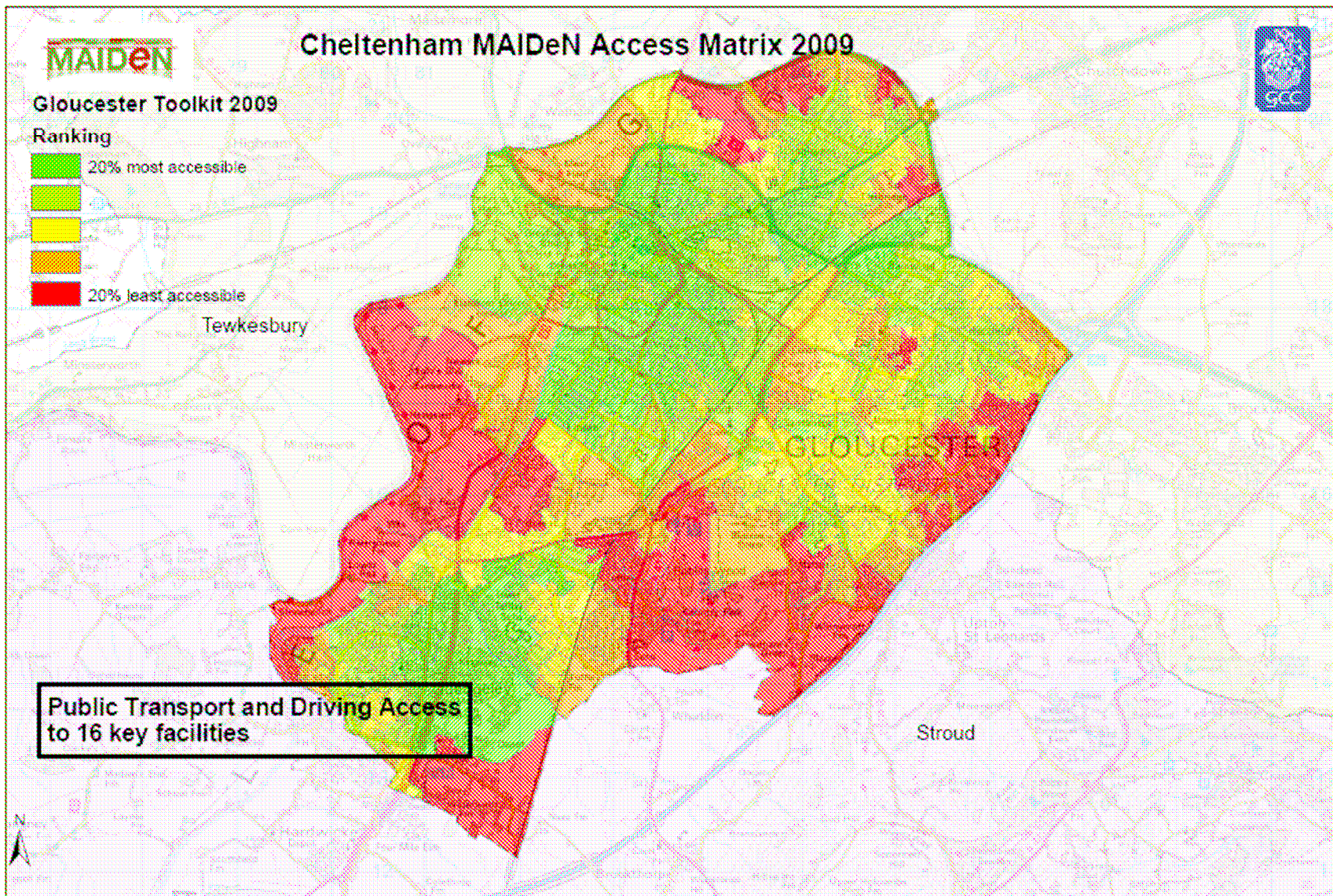
RPG10, Annex A, Table 1 sets a maximum walking desirable distance of 1km to other non-residential facilities, 600m maximum distance to food shop and primary school. For PUAs the target walking distance is set between 300m for food shop/primary school and 600m for other non-residential facilities.

PPG13 proposes a maximum distance of under 5kms, “Cycling also has potential to substitute for short car trips, particularly those under 5km”.

PRG10 mentions provision for cycling between the development and the non-residential facilities with a target distance of 4km.

Annex A
Gloucester Major Employment Sites (500+)

Gloucester Employment	St. Oswald's Park	382971 / 219394
Gloucester Employment	Gloucester City Centre	383170 / 218556
Gloucester Employment	Gloucestershire Royal Hospital	384106 / 218664
Gloucester Employment	British Energy	386261 / 218137
Gloucester Employment	Walls/Unilever, Luther Challis Business Park and Imperial Gate, Corinium Avenue	385923 / 218784
Gloucester Employment	Land Registry	383596 / 218477
Gloucester Employment	Asda	383827 / 218284
Gloucester Employment	City & County Council/Prison	382817 / 218462
Gloucester Employment	Ecclesiastical Insurance, Brunswick Road	383079 / 217974
Gloucester Employment	Gloucestershire College	382559 / 218134
Gloucester Employment	Quedgeley Enterprise Centre (including Target Express)	381632 / 213557
Gloucester Employment	Quedgeley District Centre (including Tesco, Matalan etc.)	380991 / 214329
Gloucester Employment	Barnett Way (including Sainsburys, Cheltenham and Gloucester, Capita, Barclays and Lincoln Finance)	386283 / 218341
Gloucester Employment	Waterwells Business Park	381408 / 212799
Gloucester Employment	Olympus Park	381171 / 214800
Gloucester Employment	Green Farm Business Park	381315 / 212806
Gloucester Employment	Lower Tuffley Lane (including Tuffley Park, Lower Tuffley Lane Industrial Park and Tuffley Industrial Estate)	381744 / 215605
Gloucester Employment	Empire Way/Ashville Road	382074 / 216231
Gloucester Employment	Hempsted Lane/Spinnaker Road/Sudmeadow Road	382165 / 218012
Gloucester Employment	Canal Corridor including Madleaze Industrial Estate, Mill Place and Permal Park	382504 / 217429
Gloucester Employment	Eastern Avenue (north of Metz Way)	385188 / 218026
Gloucester Employment	Eastern Avenue (south of Metz Way)	384812 / 217563



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SCALE: 1:51,001

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Please note: Title error on map, but data refers to Gloucester City.