Background Paper:
Accessibility Study
2018

1.0   Section 1: Introduction

1.1   Accessibility can be described as "the extent to which individuals and households can access day to day services…"

1.2   In a planning context, accessibility, in particular to shops, services and public transport is an important factor to consider when determining the future location of development. It can ensure that a number of key objectives are achieved. These include: the promotion of sustainable development, decreasing the reliance on the car whilst promoting the increased use of sustainable modes of transport, encouragement of greater social cohesion and promotion of health and wellbeing amongst local communities.

2.0   Informing Local Plan Preparation

2.1   Specific accessibility standards have been used to help inform the preparation of the new Local Plan and its development allocations. They have been included as part of the indicators of 'sustainability' within the Strategic Housing Land Availability Assessment (SHELAA) and Sustainability Appraisal (SA) which accompanies the emerging Local Plan. The purpose of the SHELAA and SA processes is to help inform the decision-making process for allocating sites within the Local Plan. Potential development options can be scored by assessing their conformity to the accessibility distances identified for the specifically selected services and facilities. The Council seeks where possible, to allocate developments that are in the most sustainable locations as such, this is the reason accessibility is being considered as one of the many factors within the SHELAA and Sustainability Appraisal processes.

3.0   Choice of Facilities

3.1   The facilities that were chosen are based upon the frequency of need by the local community and their importance to maintaining the overall quality of life in the Borough. For example, in order to promote the use of sustainable modes of transport it is imperative that people are within a reasonable walking distance to a bus stop or a train station. Likewise, if families are within a reasonable walking distance to schools, there is an increased chance of children and parents walking to school and reducing the number of trips by car. Being close to facilities such as GP surgeries, local centres and natural greenspaces is important for communities, particularly for their overall health and wellbeing. In addition, these facilities are often visited on a regular basis and so it therefore seemed prudent to identify accessibility standards for each of them.

3.2   The list of potential facilities to have access to is not exhaustive, those chosen and shown below are deemed to be the most relevant and important to the residents of Fareham Borough.

4.0   Accessibility Standards

4.1   Table1 below presents the facilities and their defined access standards which have been used to help inform the accessibility scores in relation to the SHELAA and the Sustainability Appraisal.

Table 1 Facilities and Associated Accessibility Standard

Facilities	Accessibility Standard in Metres (m)	Approximate Walking Time (minutes)
GP Surgeries	1,200m	15
Bus Stops	400m	5
Train Station	1,600m	20
Community and Leisure	800m	10
Secondary Schools	1,600m	20
Primary Schools	1,200m	15
Newsagents /Convenience Store	800m	10
Town / District Centres / Parades	1,600m	20
Designated Employment Areas	1,600m	20
Accessible Green Spaces (unrestricted and not including greenways or incidental spaces) or Play Space	800m	10

4.2 For clarity, the community and leisure facilities used in this study are those facilities that are bullet pointed below:

- Community Halls/ Centres
- Libraries
- Health and Social Care including Day Centres
- Art and Cultural Facilities including museums and art centres
- Adult Care Services
- Youth Centres
- Scout and Guide Centres/Huts
- Places of Worship
- Public Houses

4.3 There may be other community facilities that are not identified above which would also need consideration and taking into account when assessing accessibility.

4.4 The accessibility distances and timings are based on an average time to walking distance ratio of 5 minutes = 400m. This ratio is what underpins time- distance calculations used in web mapping applications such as Google Maps.

4.5 The time-distance standards are an indication of the maximum preferred distance for walking to facilities. It is felt that beyond these distances, the majority of able-bodied people would begin consider taking alternative modes of transport in particular, the private car to make journeys. It is acknowledged however, that there will always be exceptions to the rule in both directions. As such, this study acts as a guide and tool to enable the creation and a judgement to be made on sustainable development in Fareham.

5.0 Evidence Documents Which Underpin the Standards

5.1   The standards have been derived using information from a variety of published sources, including:

- The London Plan. Social Infrastructure Supplementary Planning Guidance. May (2015)[1]
- Eastbourne Borough Council Neighbourhood Assessment. (2011)[2]
- Department for Transport. Inclusive Mobility (2002).
- The Charted Institute of Highways and Transportation Providing for Journeys on Foot (2000)
- How far is it acceptable to walk? (2018) Research carried out by White Young Green and published on the RTPI website[3]
- The Charted Institute of Highways and Transportation, Buses in Urban Developments (2018).

5.2   Despite the age of some of the evidence documents and due to a lack of more recent available information, the evidence documents listed above are still considered relevant to inform this study.

5.3   Figure 1 below is taken from the London Plan Social Infrastructure Supplementary Planning Guidance. It demonstrates the minimum reasonable accessibility standards (as distances in metres) at different gross densities, whilst assuming actual routes on the ground and not as the crow flies. It has been used as a guide to inform and confirm some of the selected facilities and their distances listed in Table 1.

5.4   Estimates for the average population across the Borough were produced based on ward level data taken from the 2011 Census. This enabled a determination of the average density for the wards in Fareham. Most of the predominantly urban wards in Fareham (Fareham South, Fareham West, Fareham North-west, Locks Heath Titchfield Common, Park Gate and Hill Head) had densities of close to 40 persons per hectare (pph) or slightly below. To encourage development in existing urban areas and help to promote sustainable development, an assumed average density of 40 pph was used for the Borough, as shown in Figure 1 below.

[1]The London Plan. Social Infrastructure Supplementary Planning Guidance. May 2015. Page 44, 45 https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/social-infrastructure

[2] Eastbourne Borough Council Neighbourhood Assessment. 2011 page 39. http://www.eastbourne.gov.uk/EasysiteWeb/getresource.axd?AssetID=163443&type=full&servicetype=Inline

[3] WYG. 2018. How far is it acceptable to walk. https://www.rtpi.org.uk/media/2739252/wyg_gareth_pdf.pdf

Local facility	Illustrative catchment populations	Minimum reasonable accessibility standards at different gross densities (assuming bendy routes)			
		40 persons per hectare	60 persons per hectare	80 persons per hectare	100 persons per hectare
Nursery / first school	2,000	600m	500m	400m	400m
Primary / middle school	4,000	800m	700m	600m	500m
Secondary school	8,000	1,200m	1,000m	700m	700m
Secondary school (large)	16,000	1,500m	1,200m	1,000m	1,000m
Health Centre (four doctors)	10,000	1,200m	1,000m	900m	800m
Local shop	1,500	500m	400m	400m	300m
Pub	6,000	1,000m	800m	700m	600m
Post office	5,000	800m	700m	600m	600m
Community centre	4,000	800m	600m	600m	500m
Local centre	6,000	1,000m	800m	700m	600m
District centre / superstore	24,000	1,900m	1,500m	1,300m	1,200m
Leisure centre	24,000	1,900m	1,500m	1,300m	1,200m

Source: Barton,H., Grant,M. and Guise,R. Shaping Neighbourhoods: A guide for health, sustainability, vitality (2003)

Figure 1 Accessibility Standards taken from London Plan, Social Infrastructure SPG. 2015

5.5 In addition to the London Plan Social Infrastructure SPG, the accessibility standards used in the Sustainability Appraisal were also influenced by the Eastbourne Borough Council Neighbourhood Assessment (2011). Figure 2 shows the standards applied in the Eastbourne Neighbourhood Assessment. The distances used in this study have helped inform some of the choice of distances for facilities such as play equipment, bus stops and accessible greenspaces shown in table 1.
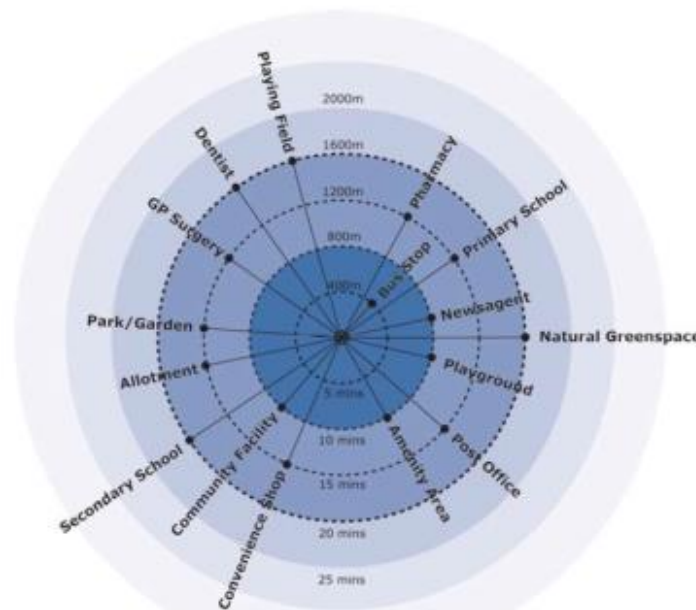

Figure 2 Accessibility Standards taken from Eastbourne Borough Council, Neighbourhood Assessment. 2011

5.6 Information supplied from the Institute of Highways and Transportation Providing for Journeys on Foot (2000) and further underpinned by recent correspondence with Hampshire County Council's School Travel Planning team helped support and justify using the standards contained within the Eastbourne Borough Council, Neighbourhood Assessment for the preferred maximum walking distance to primary and secondary schools.

5.7 The research carried out by White Young Green and published by the Royal Town Planning Institute (2018) also provided valuable information that also underpinned the selection of time/distances. Notably, the distance to train station where the maximum preferred distance of 1,600m (20 minute walk) was chosen. This was the 85th percentile in the White Young Green study and seen as the upper end to suggested walking distances.

5.8 The Charted Institute of Highways and Transportation (2018), in their publication called Buses in Urban Developments also advocates a walking distance to bus stops to be in the region of 400m which it is argued by the Institute to be particularly appropriate for BRT, express and principal corridor services.

5.9 Employment areas were not contained within the supporting evidence documents. However, the Council considers it important that they are included within the accessibility study to encourage active and sustainable travel. A maximum preferred distance of 1,600m (20 minute walk) was selected to be in keeping with other similar facilities where people would consider commuting to for example, district/local centres which also act as a source of employment.

5.10 It is clear that the evidence documents that underpin the accessibility standards can, and do provide conflicting standards for certain types of facility. However, the Council has considered the local circumstances of the Borough and applied a pragmatic approach when deriving what access standards to use for each identified facility. Each of the referenced documents that have been used have been compiled based on their own research and subject to some form of review and in some instances, public consultation. They can therefore be judged to be reasonably robust and reliable. It is not unreasonable in light of any other available guidance to use these documents as the basis from which to derive accessibility standards from.

6.0 GIS Mapping

6.1 Catchments of the selected services and facilities were generated using a walking route built from the International Transport Network (ITN) Dataset using the programme ArcGIS 10.1. By using the derived walking routes (from the International Transport Network (ITN) dataset), it was possible to generate realistic walking distance catchments around each facility rather than a general 'as the crow flies' buffer. This enables a more accurate picture of accessibility to be created taking into account natural barriers to accessibility such as motorways, railway lines and other natural features. These individual catchments are overlaid to produce a 'heat map' which indicates the number of facilities any given site is accessible to, within the preferred maximum walking distances in Table 1. The 'greener' the colour the fewer services are accessible from the site: the 'redder' the colour the more services the site is closer to.