

NW Bicester

Social Infrastructure Provision

Hunt Dobson Stringer

October 2010

Introduction

The land to the north-west of Bicester has been identified as one of four locations to accommodate an eco-town development and the Site is also identified in the emerging Cherwell District Local Development Framework Core Strategy.

The Eco-Town at north-west Bicester is expected to provide for up to 5,000 dwellings with associated employment and social and community uses. As a first step, there are plans for an exemplar scheme of up to 450 dwellings again with associated non-residential uses.

Sustainability underpins planning policy objectives at all spatial levels. It is, therefore, important to demonstrate how the provision of significant numbers of new homes will be supported by the social and community infrastructure necessary to meet the needs of the population over the life-time of the development and its relationship to Bicester and surrounding settlements.

The purpose of this document is to set out existing levels of social infrastructure provision in the area surrounding the north-west Bicester eco-town site. These current levels of provision are then assessed against population projections for the exemplar scheme. The implications, in terms of the need for community facilities, are identified and assessed against proposed provision on-site.

Current Social Infrastructure Provision

The definition applied in this report of 'social infrastructure' is based on the Social Infrastructure Matrix – Guidance Note by ATLAS (Advisory Team for Larger Applications)¹. The range of social infrastructure assessed in this document, therefore, includes the following:

- Healthcare (including GPs, dentists, pharmacies, opticians and hospitals)
- Education (including day nurseries, primary schools and secondary schools)
- Emergency services (including police, fire and rescue, and ambulance)
- Leisure and recreation
- Open space and children's play space
- General community facilities (including libraries and community centres)

Healthcare

There are a number of GP surgeries located within Bicester (see 'Healthcare' map in *Appendix to Report*). The closest GP practice to the Site is the North Bicester Surgery. This surgery and the other surgeries in Bicester town centre are currently accepting new NHS patients. These practices serve a 'neighbourhood catchment'. The average list size for the five GP surgeries in Bicester is 1,230 patients per GP. This is in line with the average list size for Oxfordshire PCT (1,284 patients per GP). As a general rule of thumb, a figure of 1,800 people per GP is used when planning additional places for a population.

There are several dental practices in Bicester. These are largely concentrated in the centre of the town. The same can be said for pharmacies and opticians which tend to be focused in the town centre. There are some healthcare facilities in the settlements surrounding Bicester e.g. Ambrosden, Kirtlington and Kidlington.

There is one hospital in Bicester – Bicester Community Hospital. The hospital has 12 beds and provides intermediate care and GP admissions. It also accommodates therapist outreach as well as providing out-of-hours service in a minor injuries unit.

¹ ATLAS (2009) *Social Infrastructure Matrix – Guidance Note*

Education

Education services span from pre-school and nursery provision to universities and adult education. As a general rule, the younger the age group the more local the provision.

Day nurseries

Nursery and pre-school provision can broadly be split into two types of services:

- Provision for 0 to 2 year olds is mainly through the commercial sector. This can take place in a range of settings including childminders as well as part-time and full-time day care;
- Provision for 3 to 4 year olds involves part-time places within or associated with primary school, or service from the private sector sometimes requiring a 'top-up' contribution.

Amongst the 16 primary schools in the Bicester area, half have nursery classes. The closest three primary schools to the site are those which have nursery classes.

The nearest provision of day nurseries to the Site is in Bicester (see 'Education' map in *Appendix to Report*) and includes Busybees, Bubbles Pre-school and Jack and Jill Pre-School. Collectively, these nurseries provide 164 places. As well as the day nurseries in Bicester town centre, there is also some provision in the settlements surrounding Bicester including Shelwell and Fringford Pre-school Play Group in Fringford and Chesterton Play Group in Chesterton.

Primary Schools

Primary schools, like day nurseries, are also generally regarded as a 'neighbourhood' level service.

As stated above, there are 16 primary schools within the Bicester school area (see 'Education' map in *Appendix to Report*). The closest of these to the Site are: King's Meadow Primary School, Southwold County Primary School and Bure Park Primary School. Ofsted reports for these schools show that both Southwold County Primary

School and Bure Park Primary School² are assessed to be 'Satisfactory' while King's Meadow Primary School³ is considered to be 'Excellent'.

According to Annual Schools Census (2009) data, the 16 primary schools in the Bicester have surplus capacity of 13% (equivalent to 534 places). Of the schools closest to the Site, only one – Bure Park Primary School – is operating at full capacity. The other two schools closest to the Site have 194 surplus places between them.

Secondary Schools

Demand for secondary schools is usually spread across a wider area than that for primary schools and day nurseries. Secondary school aged pupils tend to travel further to school than those of primary school age. In addition, the range of specialist subjects taught in secondary schools naturally means that they are larger institutions with wider catchment areas than primary schools. Therefore, it is appropriate to consider secondary school capacity across Oxfordshire as a whole as well as that of the nearest facility to the Site.

The closest secondary schools to the Site, located in Bicester (see 'Education' map in *Appendix to Report*), are the Bicester Community College and Cooper School. Collectively, these schools have a surplus capacity of 420 places. Ofsted reports for these schools rate them as 'Satisfactory'⁴ and 'Good'⁵, respectively.

Across Oxfordshire as a whole, Annual Schools Census (2009) data shows there is a 9% surplus capacity at secondary schools (equivalent to 2,800 places). As well as local authority secondary schools, there are also several academies in Oxfordshire. The most recent data available showed the North Oxfordshire Academy which opened in 2007 has 20% surplus capacity (based on PAN stated in Oxfordshire Council's admissions information)⁶. The Oxford Academy which opened in 2008 has surplus capacity of 40% (also based on PAN stated in Oxfordshire Council's admissions information)⁷.

Another academy – the Culham European School Academy – is due to open in September 2011 in Abingdon. The European School Culham is currently an existing

² Most recent Ofsted reports for Southwold County Primary School and Bure Park are from March 2008

³ Most recent Ofsted report for King's Meadow Primary School is from October 2009

⁴ Most recent Ofsted report for Bicester Community College is from October 2007

⁵ Most recent Ofsted report for Cooper School is from November 2007

⁶ Oxfordshire County Council (2010) *Starting School 2011/12*

⁷ Oxfordshire County Council (2010) *Moving On 2011/12*

school catering for children of staff at EU institutions and the children of fee paying bilingual and multinational families in South Oxfordshire. It is proposed that the European School Culham be brought into the mainstream state funded English system as an innovative, co-educational Academy, as far as possible retaining the ethos of a European school. The academy will specialise in Languages and Science. It will be an all-ages academy, providing an education for 3 to 18 year olds, and have an overall capacity of 980 places.

Leisure, recreation and open space (including children's play space)

Bicester is home to a number of leisure and recreation facilities (see 'Leisure and Recreation' map in *Appendix to Report*). Bicester Leisure Centre is a public facility and provides a swimming pool and a teaching pool, crèche, sports hall, activity hall, exercise studio, squash courts, meeting rooms and ten-pin bowling. This is the closest leisure centre to the Site.

As well as the leisure centre, Bicester has various sports grounds which provide grass pitches and were identified as 'pitch sites' in the Playing Pitch Strategy⁸. These grounds include: Sunderland Drive Sports Ground, Oxford Road Sports Ground, Pingle Field, and Coopers School.

There are a number of open spaces in Bicester, including some within 1.5km of the Site [see 'Open Space' map in *Appendix to Report*]. These are Purslane Drive and Shakespeare Drive Woods. Collectively, these areas offer approximately 10ha of open space. Both of these spaces are categorised as 'natural/semi-natural greenspace' in Cherwell District Council's Green Space Strategy. Garth Park which is slightly further from the Site, at a distance of approximately 3km, provides formal gardens, seats, picnic benches, a bandstand, a well-equipped children's play area and a BMX/skateboard park. As well as the formal parks and natural green spaces in Bicester there are also numerous play areas, maintained by Cherwell District Council, which serve the residential streets of Bicester.

⁸ Cherwell District Council (July 2008) *Playing Pitch Strategy Background Document*

Further afield, there are formal parks and gardens in Banbury. However, the majority of open spaces surrounding the Site are categorised as ‘natural and semi-natural space’⁹ and include a number of footpaths.

General Community Facilities

There are four community centres in Bicester (see ‘Community Facilities’ map in *Appendix to Report*). These are: Bicester East Community Centre; Langford Village Community Centre, Southwold Community Centre, and West Bicester. These centres provide a location for a number of groups to operate from. For example, Bicester Community Church uses Bicester East Community Centre to run toddler groups and over 50s groups.

The closest library to the Site is Bicester Library (see ‘Community Facilities’ map in *Appendix to Report*). This facility is open six days a week and offers internet access. The second nearest libraries to the Site is some distance away in Deddington (to the north-west) and Kidlington (to the south-west).

Emergency Services

Emergency services tend to be based in strategic location covering district and city-wide areas. Emergency services in Oxfordshire are provided by larger strategic bodies: the South Central Ambulance Service Trust (which covers Berkshire, Buckinghamshire, Hampshire and Oxfordshire), the Oxfordshire Fire and Rescue Service; and Thames Valley Police.

There is a fire station and a police station in Bicester [see ‘Emergency Services’ map in *Appendix to Report*]. Although Cherwell is served by the South Central Ambulance Service, the closest ambulance station to the site is approximately 12km to the north, in Brackley, which is within the East Midlands Ambulance Service area.

⁹ Cherwell District Council (July 2008) *Green Spaces Strategy Background Document*

Population Projections: NW Bicester Exemplar Scheme

As has been noted previously in this report, it is expected that the exemplar scheme will bring forward up to 450 new homes. The population modelling set out in the subsequent paragraphs of this section of the report, are based on an assumption that 30% of these residential units are affordable tenures (split 70:30 between social rented and intermediate tenures).

The size and age of the population across the proposed development will depend on the size, type and tenure of the homes built. It will also evolve over time.

The age structure of new developments can be quite different from existing properties in the area. With a large number of people moving in over just a few years, there can be a concentration of households who are at a similar stage in their life, for example there may be a disproportionate number of young families.

As a result the school aged population of a development such as this is typically quite high in the initial years, but then peaks (earlier for primary school than secondary school). It then gradually returns to more normal levels for the area, as people begin to move in and out of the development and the population gradually gets a greater mix of people at different stages in their life. This process of “normalisation” can take many years.

The population model used here takes account of these effects, as set out in the box below.

Population Methodology

The population, on initial occupation of each phase, is based on Census data for households that had newly moved into a home in Cherwell in the year preceding the Census. This relates the number and age of residents to the size, type and tenure of dwelling.

This starting point population is “aged” and adjusted for births and deaths in accordance with national age specific fertility and mortality ratios, to show how the population grows.

Over time the weighting of the model then shifts from this towards a profile based on the long term ONS projections for the local “background” population in Cherwell, to reflect the maturing of the development.

The Unit Schedule

The residential schedule for the exemplar scheme used in the population model is set out below:

	Affordable units		Private units	Total
	Social rented (70%)	Intermediate (30%)		
1 bed	8	3	0	11
2 bed	46	20	88	154
3 bed	33	14	114	161
4 bed	8	3	63	74
5 bed	0	0	50	50
Total	95	40	315	450

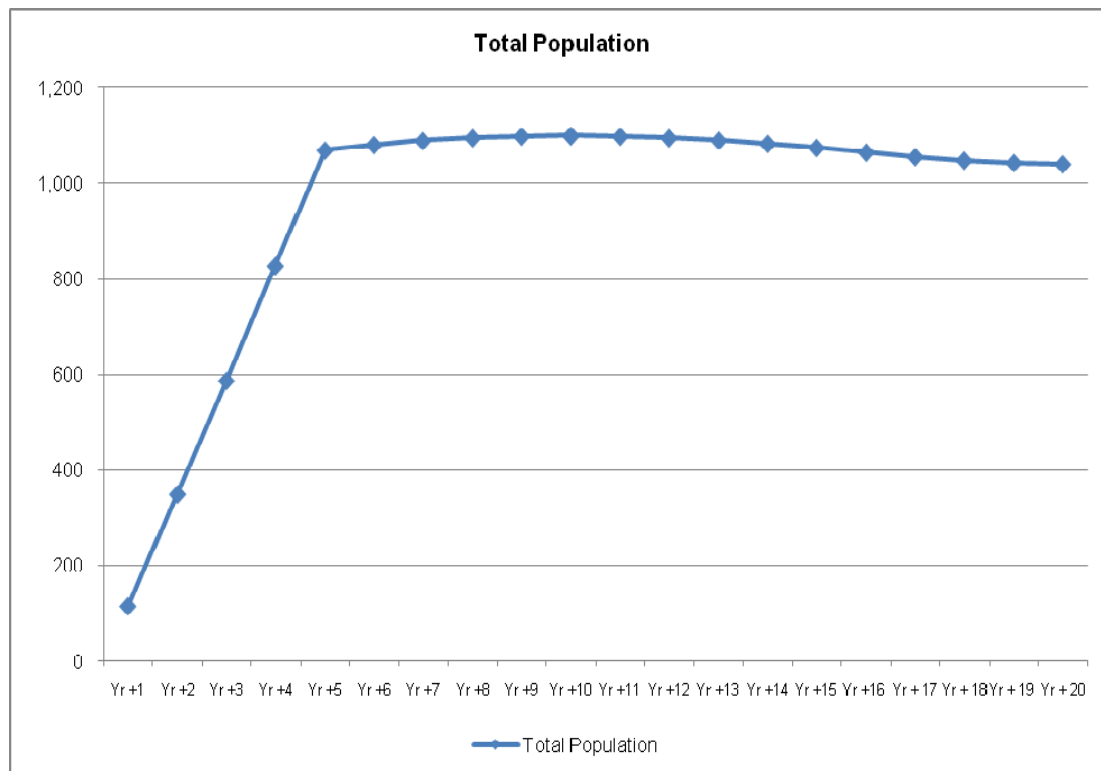
The phasing of the scheme over a five year period has been divided as follows:

- Year 1 = 50 units
- Year 2 = 100 units
- Year 3 = 100 units
- Year 4 = 100 units
- Year 5 = 100 units

Population

On completion of all 450 units during Year 5, the total population is expected to be approximately 1,100 people. Over the 20 year period from when the first units were occupied, this overall population figure is expected to drop but only slightly, to just over 1,000 people.

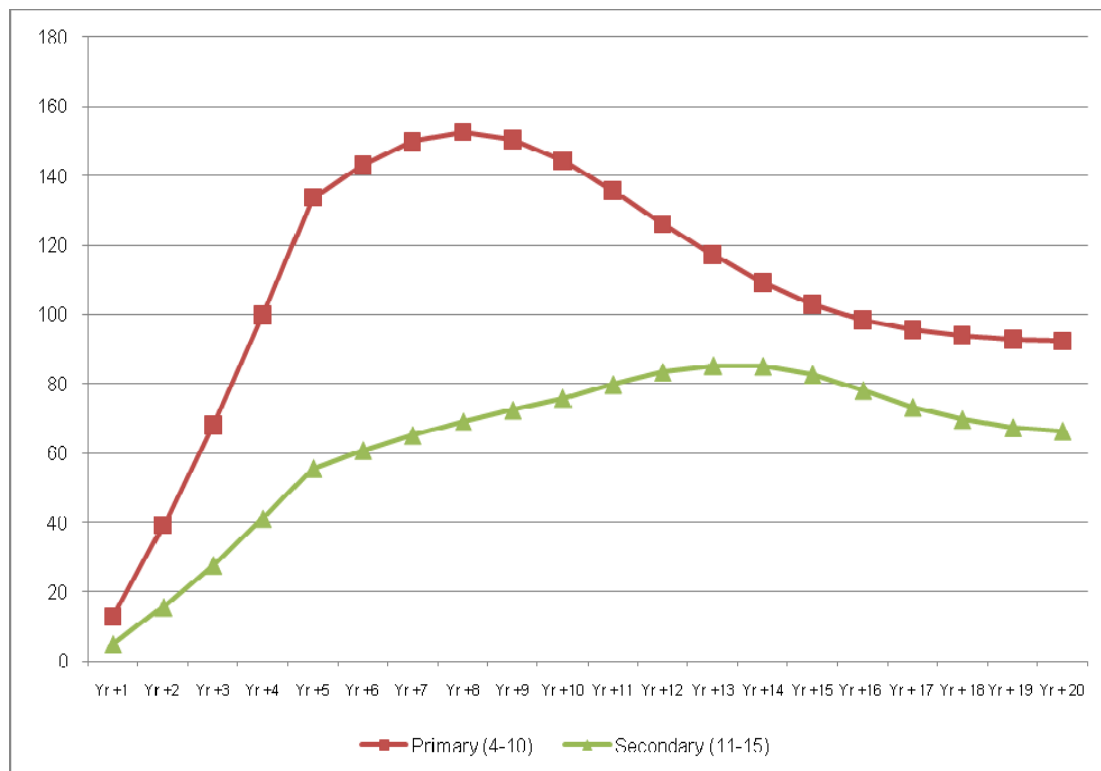
The change in total population over a 20 year time period is shown in the graph below.



Once the 450 units are complete and occupied, there are forecast to be around 135 primary school age children on-site. This number is expected to rise as the population of the homes ages, reaching a peak (at around 155 children) three years after completion of the last dwelling, then gradually declining as the population matures.

On completion, around 55 secondary school age children are forecast. This too will rise, although peaking later than the primary school numbers, with around 85 secondary school children around 8 to 9 years after completion, before numbers start to decline.

The numbers of primary and secondary school age children over the 20 year period from the start of the scheme is plotted on the chart below:



Oxfordshire Child Yield Model

Oxfordshire County Council has undertaken population modelling for the proposed development based on their own model. The results reveal a similar total population but higher numbers of school age children.

Although the figures of Oxfordshire County Council's population modelling have been made available to the project team, the yields and workings behind them have not been provided and, therefore, it is not possible for HDS to comment on their accuracy.

In the absence of detailed information, HDS cannot comment on the population estimates produced by Oxfordshire County Council. However, HDS would welcome an opportunity to discuss the figures with the Council.

Summary

An assessment of the total population and the numbers of children expected to live on-site once the exemplar scheme is completed is vital in identifying the social

infrastructure needs likely to result from this development. It will inform decisions on the need to provide facilities on-site or whether existing facilities in the locality have sufficient capacity to meet net additional needs. The implications of the exemplar scheme on the provision of social infrastructure are considered in the following section of this report.

It is also important to consider that the total numbers expected to live within the units on first occupation may be different to the numbers expected over a 20 year period. Therefore, social infrastructure provision needs to be made to be flexible in order to accommodate both increases and decreases in demand.

Future Service Provision

As well as the 450 new homes planned for the exemplar scheme, it is also proposed that the development will bring forward areas of retail, leisure, offices, open space and community floorspace. The community floorspace will provide a crèche facility as well as a meeting place for the new community on completion of the scheme.

The population modelling process set out in the previous section, highlighted that the population of the exemplar scheme would be expected to peak at around 1,100. The maximum number of primary and secondary school children expected to be accommodated by the scheme are 155 children and 55 children, respectively.

In order to fully assess the implications of the new population living within the exemplar scheme, it is important not only to consider the number of people living on-site and the capacity of existing infrastructure, but also the typical catchment area of different types of facility.

For the purposes of this report, three different categories of facilities have been identified:

- *Local/neighbourhood facilities* – these are facilities that are mainly within walking distance of where people live. Examples include: day nurseries, local shops, play space and in some cases GPs and primary schools;
- *District facilities* – these types of facilities would be expected to serve a larger district or small town and might be appropriate on-site given the scale of the proposed development. Examples include: secondary schools, libraries, some sports and recreational facilities; and
- *Strategic facilities* – these serve a larger city, county or sub-regional area. Examples include: hospitals, further and higher education facilities, and major recreation sites such as country parks.

Current plans for the proposed development make provision for a number of local and neighbourhood facilities to meet the needs of the resident population.

On the basis of current capacity figures, demand for school places generated by the primary and secondary school age children expected to live on-site could be provided for by existing school provision in the local area. Similarly, in terms of GP provision,

current capacity in the local area could provide for the majority, if not all, demand arising as a result of the proposed development.

The exemplar scheme is not of sufficient scale to generate the level of demand which necessitates the provision of significant social infrastructure in particular those which fall into the 'District' and 'Strategic' categories. However, as part of a larger plan for an eco-town to the north-west of Bicester, provision will need to be made to meet demand generated by new residents to the area beyond those accommodated by the exemplar scheme.

The scale of the community facility provision proposed for the Site, on the basis of current social infrastructure provision and population modelling, is assessed to be adequate for a development of this scale. The crèche would provide an important local facility for people with very young children, while the facility as a whole could provide a focus for community life in the early days of resident occupancy on-site. As other parts of the wider masterplan for the eco-town come forward, residents of the exemplar scheme will be able to look both to the west and to the existing town centre at Bicester to the south-east to meet their social infrastructure needs.

Conclusion

Overall, the current provision of community facilities surrounding the eco-town site is good. The existing settlement of Bicester, to the south-east of the Site, is home to a wide range of community infrastructure.

The capacity of existing facilities surrounding the Site has been considered where data is available. The data suggests that GPs, primary schools and secondary schools are not operating at full capacity and in some cases there is quite significant surplus capacity.

The population modelling carried out to inform this report showed that at its peak, the exemplar scheme would be expected to accommodate up to 1,100 total population, 155 primary school age children and 55 secondary school age children. The figure for the total population is in line with figures produced by Oxfordshire County Council using their own model. The main difference between the two models regards the numbers of children. The Oxfordshire County Council model produces higher figures than set out in this report. HDS will seek to clarify the methods applied by Oxfordshire County Council.

The population modelling showed that the development will not generate the level of demand necessary to support a wider range of facilities beyond those local and neighbourhood facilities already proposed for the Site e.g. a crèche and community centre/hub. Improved transport links between the development site and the town centre and Bicester train station will enable new residents on-site to utilise existing community facilities in the local area. As later phases of the eco-town are planned, additional social infrastructure are likely to be required to meet the needs of the new population.