

APPENDIX 1

Bicester Sustainable Transport Strategy July 2015

Executive Summary

Bicester, a large market town in Oxfordshire with a population of 30,000 is due to undergo major expansion over the coming 20 years. Located on the train line between London and Birmingham, the town has strong relationships with Oxford and Banbury and lies within the Knowledge Spine. Development of Bicester has been relatively recent - up until 1961 the population was still only 5,500. The town is roughly circular in form with peripheral and radial roads, between which residential areas are located.

The conservation area of the town centre includes Market Square and Causeway, where St. Edburg's Church is located. Bicester's topography is relatively flat with large areas of open space including the nature reserve of Bure Park. Air quality is generally good but with some issues along the central corridor (King's End and Queen's Avenue), and there has been some flooding of the River Bure in the town centre in the past. Bicester has industrial areas, with the Bicester and Banbury College Campus well-known for its automotive focus. Retail destinations are the town centre and the internationally famous Bicester Village, to the south of the town. Local amenities - shops and schools - are located in the surrounding residential areas.

EcoBicester provides a sustainable vision for the growth of the town as a whole, while the Draft Bicester Masterplan outlines ambitions for the growth of the town including employment and housing in accordance with Local Plan requirements to 2031. A wealth of national and local policy guides this strategy, from the National Planning Policy Framework to policy covering economic development, integrated transport and physical health. This is best understood graphically – see Figure 1.1.

The strategy is also underpinned by previous transport studies of Bicester, including the Bicester Integrated Transport and Land Use Study, the Bicester Movement Study and the Travel Behaviour Demonstration Project, all of which aim to promote travel by sustainable means. European and UK best practice examples are used to inform this strategy.

Key messages from European towns for the successful implementation of sustainable transport include: the importance of commitment to policies favouring sustainable modes, implemented consistently over a sustained time period; the importance of investing in infrastructure; segregation of cycling; a coarse grid for motor vehicles and finer grid for cycling; the use of filtered permeability; the implementation of 20mph zones in residential areas; and integrated ticketing. Houten (the Netherlands) in particular is used as a key example. It is similar to what Bicester may become and has a similar relationship to other major places and strategic infrastructure.

While there are fewer outstanding examples within the UK, key messages from UK towns for the successful implementation of sustainable transport include: the importance of a governance structure that embeds cycling across a range of service areas for which a local authority is responsible; reducing vehicle speeds; investment in infrastructure; segregated

cycling facilities; overcoming barriers and implementing smarter choices programmes. Research on Sustainable Mobility and the Built Environment reveals a clear association between walking and cycling and the urban variables of density, land use mix, proximity and connectivity. Links between transport system characteristics and design characteristics are less clear, and evidence suggests that psychological and social factors mediate these associations. Research is now attending to models that propose that walking and cycling is dependent on demographic, psychosocial and physical environmental factors, and a multi-level approach is necessary to encourage behaviour change towards active travel.

A study of the existing movement network established existing conditions. Key findings were:

- Walking and cycling - Walking and cycling within most residential areas is relatively easy, but the main radial roads have limited or poor quality provision – with the exception of Banbury Road north of the London-Birmingham railway. While the town centre is easily accessible on foot, the pedestrianisation of Sheep Street and one-way traffic on Causeway present significant barriers to cycling through the town. Provision of cycle parking in the town centre is limited and very well-used.
- Trains - Bicester is well connected by rail with two train stations: Bicester North, which lies on the route between London Marylebone and Birmingham; and Bicester Town, which is currently undergoing redevelopment and will re-open providing service between Oxford and London Marylebone (2016), and eventually as far as Cambridge, forming part of East-West Rail.
- Buses - While there are quite a number of bus routes serving Bicester and neighbouring towns and villages, the provision is somewhat confusing with some very infrequent and others under-used. The most frequent service is the S5, which runs every 15 minutes and serves the town, Kidlington and Oxford. There is also a taxibus service from Bicester North station and shuttle bus services to Bicester Village. The bus interchange is in the town centre on Manorsfield Road by the Pioneer shopping centre – this is newly built and provides a good level of bus stand and information.
- Strategic Road Network - Bicester is well-situated in the strategic road network, located immediately east of the M40, with the A34 and A41 running south of the town. Within the town there are primary routes (peripheral route), secondary & tertiary routes (radial roads) and residential streets. Of these, the roads with the highest traffic flows are the A41 (>20,000veh/hr) and the ring road to the north and east of the town (flows between 16,000 and 19,000veh/hr). The speed limit within the town is 30mph. There is copious provision of car parking within the town centre, with car parks on average only at 50% capacity.
- Accessibility and Connectivity - In terms of neighbourhood access and connectivity, access to residential neighbourhoods is generally from the radial roads, with less connectivity between neighbourhoods due to the predominant cul-de-sac form of the road layouts. The town centre is accessible on foot within 20 minutes from most areas of town. Bicester is very accessible by bike – most parts of the town are within a 10 minute cycle of the town centre and both train stations, with all of the existing development within an easy 15 minute cycle.
- Movement - The existing movement profile for Bicester shows that residents generate a total of 86,500 trips per day, of which 56% are contained within the town. Overall, 31% of trips by residents are undertaken by sustainable modes and 69% by private motor vehicle.

The future movement profile predicts that in 2031, residents will generate a total of 132,300 trips per day, of which 59% are contained within the town. Overall, 40% of trips by residents will be undertaken by sustainable modes and 60% by private motor vehicle. A level of behaviour change is necessary to achieve the NW Bicester goal of a modal share of at least 50% for sustainable modes, and the strategy goal of 40% for the town as a whole. The complexity of how modal choices are made is considered, establishing distance as a limiting factor. Bicester's compact size gives the town a great advantage in encouraging sustainable travel particularly for the purposes of leisure, education, town centre shopping and work. Future opportunities for Bicester include place-making, particularly the historic core; innovation, and branding with EcoBicester and Bicester Village. The vision for the strategy is to create a network of transport infrastructure and services that make it easy and attractive to travel by sustainable means. The principles underpinning the strategy are that it be: Sustainable, Resilient, Incremental, Modal Priorities, a Hierarchy of Routes, High Quality and Integrated. The future movement strategy considers all modes and their integration. Key points are:

- The walking and cycling network is divided into primary and secondary routes, and is based on the core principles of coherence, directness, safety, comfort and attractiveness. The base network of existing facilities requires upgrading in order to fulfil these principles, set out in a comprehensive schedule of improvements. The focus for improvements will be to crossing facilities at radial distributor roads and minor residential roads. In the town centre, through movement of motor vehicles is to be restricted, with cycling facilitated and traffic speeds slowed to less than 20mph.
- The strategy proposes interchange hubs at the two stations, encouraging multi-modal journeys. The possible closure of London Road level crossing is of major concern, impacting bus services and cutting off Langford Village, Graven Hill and East Bicester from the town centre.
- Bus provision is made legible by separating out longer distance and town services. A local retail relay route is established along the north south corridor (connecting also the new park and ride to the south), with all other town services passing through the town centre bus station - enhanced to form the major interchange hub. These changes would be phased and all new bus stock would be accessible, low carbon and have smart ticket readers.
- Changes in the town centre would allow the retail centre of Bicester to expand, in tandem with the town's wider expansion. This is a particular opportunity for Market Square, which is currently undervalued and dominated by parking and a one-way traffic gyratory. It is proposed to pedestrianise the northern and eastern sides of the Square as well as Causeway. Through traffic would be restricted to buses, taxis and cycles between the hours of 7am and 7pm. Implementation would take place gradually, and be supported by a servicing & deliveries and car parking strategy to ensure its successful operation.
- Current retail space is approximately 35,000m² with car parking provision of 1,160 spaces, or one car parking space per 30m² of retail space. With the town's expansion, retail space and parking provision should also increase. The additional parking would be provided by development on the site of the Claremont car park - forming a retail anchor to the south east of Market Square, which would mirror the retail anchor of Sainsbury's/Vue to the north west.

This would increase retail space in the town to approximately 45,000m², and car parking provision to approximately 1,250spaces.

- Even with sustainable transport gains, the modal share for car driving for Bicester would still be 60%. The use of electric and ULEV vehicles for these trips would make these car trips more sustainable. There is currently a high level of funding available for this, and ULEV are also more pleasant and healthy in terms of air pollution and noise levels. Recommendations include strategic placement of electric charge points and an electric car club. These improvements align with the EcoBicester vision and offer positive branding opportunities. Infrastructure improvements are critical to creating an environment where sustainable travel is the most popular choice, but this will be most effective when supported by the management and implementation of a smarter choices and active travel programme. This should be funded and staffed appropriately. Particular opportunities for Bicester with potential for change are identified, and measures proposed include travel awareness campaigns, a sustainable travel roadshow, work with rail stations, sustainable transport hubs, workplace engagement, a commuter challenge, school engagement, residential personalised travel planning and community street design.