

Discussion Note

Date 9 December 2011

Job No/ Name ST12118

Subject Maidstone Park & Ride Justification

Introduction

Travel in Maidstone

- 1.1 The Kent Local Transport Plan 2011 identifies that Maidstone suffers from significant congestion problems during peak periods. These are a function of the town's status as a major employment and service centre and the convergence of four key inter-urban roads (the A20, A249, A229 and A26) within the town centre.
- 1.2 The MBC Core Strategy (2011) also reiterates this level of congestion, specifically on the radial approaches to the town during the morning peak, but also around Junction 5, 6, and 7 of the m20 at peak times. The strategy also demonstrates Car as the dominant mode of travel within the urban area of Maidstone, making up around two thirds of all trips. Bus and rail make up an additional 25%, with walking and cycling levels relatively low at just 12%.
- 1.3 The Maidstone Transport Strategy 2005, and hence Kent County Council's Integrated Transport Programme for 2011-2016, is driven by the desire to preserve and enhance the accessibility of Maidstone town centre by sustainable means.
- 1.4 The Maidstone Integrated Transport Strategy 2005 – 2015 notes that the following measures will be developed in appropriate circumstances to manage traffic growth.
 - Improved enforcement measures – on street and cameras;
 - Introduce Urban Traffic Management Control system (UTMC);
 - Extended bus priority measures and controls;
 - Improved transport user traffic information system, with signs linked to M20 Controlled Motorway (CM) system;
 - In conjunction with air quality monitoring, identify key locations where reduced traffic flow and network improvements are required;
 - Review Traffic Regulation Orders and parking restrictions to assist in improving traffic flow; and
 - Develop an updated Car Parking Strategy that covers: on street parking, off street parking, residents parking and Park and Ride, while co-ordinating charges to control demand.

Future development

- 1.5 The MBC Core Strategy sets out growth plans to incorporate an additional 10,080 new homes within Maidstone and around 10,000 new jobs. This scale of growth will continue to put pressure on the existing transport network during peak periods of travel and is forecast to increase road journey times on the key radial routes into the town centre by up to 85% by 2026. These delays will impact upon all road users and will have both direct and indirect impact upon the prosperity of the town centre in terms of efficient economic activity and as an attractive place to live and work.

Existing Transport Network

Highway Network

- 1.6 There are eight main radial routes that lead into Maidstone Town Centre. The A20 (east), A229 (north), A249, and A20 (west) provide access from Junctions 5, 6, 7, and 8 of the M20 to the north of the town. The A274, A229, and B2010 provide access from the south, whilst the A26 provides access from the east. All these routes gradually meet, at a series of key junctions, as they move into the town centre before joining the central one-way gyratory system around the town centre.
- 1.7 The gyratory system provides a significant barrier to movement to other modes in and around the town centre, reinforced by the volume of traffic and increased speeds generally often encouraged by single direction traffic.

Car Parking

- 1.8 There is a significant amount of car parking provision with the town centre with 17 MBC operated car parks, and at least a further six private car parks. Overall there are estimated to be in excess of 4,000 spaces within the town centre. The initial analysis of recent occupancy counts at these car parks indicates that they have a maximum peak-period occupancy of 70%. The car park tariffs are relatively low for a major town in the south with 3-hour parking costing £1.80 and all day parking £4.50. This would appear to demonstrate that there is no significant constraint on parking availability within the town with significant supply.

Park & Ride

- 1.9 Maidstone has historically supported the principle of Park and Ride. The first site serving the town opened in 1989 with 3 others opening in subsequent years. All sites have dedicated bus services with payment on-bus. The four sites were:-
- Willington Street, Off A20, 2 miles East of centre opened in 1989
 - Coombe Quarry, Armstrong Road, 1.5 miles South of centre opened in 1990
 - London Road, A20 London Road opened in 1991
 - Sittingborne Road, off Bearsted Road near to A249 opened in 1998.

- 1.10 The Coombe Quarry site has now ceased operating.
- 1.11 The three current sites operate from 07:00 Monday to Fridays and 08:00 on Saturdays to circa 18:45 with buses to the town centre operating at least every 15 minutes.
- 1.12 Current patronage levels indicate that Park & Ride in Maidstone makes a positive contribution to town centre access and functions as a parking management measure rather than a public transport solution.

Rail

- 1.13 There are three rail routes through the borough serving a total of 13 stations. Three of these stations are located relatively centrally to the town centre, Maidstone East, Maidstone West, and Maidstone Barracks.
- 1.14 The principal route serving Maidstone East is the London Victoria to Ashford International Line. In addition the Medway Valley line links Strood in the Medway Towns to Paddock Wood via Maidstone barracks and Maidstone West, connecting a number of rural settlements to the town and other destinations.

Bus

- 1.15 In the Maidstone area the main alternative to use of the private car is the bus. Although the area has a well established bus network, provided principally by Arriva, but also other operators, there has been a steady decline in service to the south of the borough due to cuts in central government subsidy.

- 1.16 Routes permeate out along all the main radial routes, along with additional routes permeating residential areas. There is an Urban Traffic Management and Control system that manages the road network and provides bus priority at junctions.

Walking and Cycling

- 1.17 There is an urban network of cycling routes that connect residential areas to the town centre; however, provision within the town centre itself is limited for cyclists.
- 1.18 As previously mentioned, the highway network in and around the town centre provides a significant barrier to non-vehicular traffic accessing and moving around the town centre. Within the main retail areas there are pedestrianised areas and restrictions to traffic.

Overall Network

- 1.19 The current transport network and mode choice is dominated by private car trips, resulting from the provision of a series of key radial routes leading into the town centre, the dominance of the highway network around the town centre and the ample provision of car parking.
- 1.20 The existing park & ride services, although historically declining in patronage, are still considered to be relatively successful in terms of patronage. This appears to demonstrate that the increasing levels of highway congestion along with comparatively cheaper long-stay tariffs are persuading drivers to leave their cars and travel into the town centre by bus.
- 1.21 With the proposed levels of further development growth, additional sustainable travel modes are definitely required as the highway network will not be able to sustain the forecast increase in private car vehicle trips.

General Case for Park & Ride

- 1.22 Increasingly towns and cities are faced with the dilemma of how to promote their retail, commercial and tourist centres, while limiting the insatiable demand from motorists for urban road space and central car parking spaces. The concept of Park and Ride has been recognised by many local authorities as a potential means towards achieving these sometimes conflicting aims.
- 1.23 The basic idea behind Park and Ride is that private vehicles are used for the least congested part of the journey towards an urban area and then travellers transfer to public transport for the most congested final stages of their trip.
- 1.24 To achieve this car parking facilities must be provided at suitable locations on the periphery of an urban area, whilst a public transport service must be provided to carry motorists, and their passengers, into the town centre and back again.
- 1.25 The justification for Park and Ride can be made across three policy areas.
- Effective use of road space;
 - On Environmental grounds; and
 - As a tool to stimulate economic activity

Use of road space

- 1.26 The effective use of road space links back to the Kent Local Transport Plan's observation that Maidstone suffers from significant congestion problems. The use of larger capacity vehicles (i.e. buses) with high occupancy rates makes best use of a fixed quantum of road space especially where journey destinations are grouped closely together, e.g. in a town or city centre.
- 1.27 Park and Ride was first recognized by the Central Government as a traffic management tool to deal with congestion whilst increasing the accessibility of host centres in This Common Inheritance (DoE,

1990) and in the 1994 version of PPG-13 which suggests that schemes are: “usually designed to avoid excessive congestion”.

- 1.28 Evidence indicating reductions in congestion as a result of Park and Ride, is available e.g. Canterbury where Roberts et al. (1996) reported a reduction of 9% in daily traffic flows during the first three years of Park and Ride opening. It is unclear however, if this reduction can be attributed solely to Park and Ride or the overall package of measures (including central parking controls) within which Park and Ride was implemented. Interception rates (the proportion of traffic diverted from radial routes to Park and Ride) have however been reported for Oxford’s sites as high as 17% (Huntley, 1993) .

Environmental grounds

- 1.29 The use of Park and Ride to reduce the environmental impact of traffic in town centre is reflected by the successful early development of Park and Ride in a number of historic cities such as Cambridge, Oxford and York. This success is suggested to have come about in the 1990s as a result of an increasing awareness of the environmental dis-benefits of car use coming to prominence. The presence in PPG-2 of Park and Ride as an appropriate use of green-belt land surrounding urban areas recognises that the balance of environmental convenience lies with Park and Ride provided the tests set out in PPG-2 as to site selection are met.

Stimulating economic activity

- 1.30 The economic-related goals for Park and Ride have essentially been the domain of local authorities competing regionally for economic activity within their centres. By providing additional parking stock to host centres Park and Ride increases accessibility whilst avoiding car park construction in the urban core where land is more valuable. Any reduction in congestion from the transfer of motorists to Park and Ride will free road space which may also induce further visitors stimulate economic activity. In more recent times the availability of capital receipts from the sale of underused town centre car parks may have generated an additional economic reason for the development of Park and Ride schemes and additional town centre regeneration activity.

Summary

- 1.31 In essence, Park and Ride is one of a number of tools that local authorities can use to manage their road space and parking stock. Academic evidence indicates that to be successful in the goal of managing road space and town centre parking Park and Ride must form one element in a suite of measures that promote the management of highway network capacity and the quantum / price of parking. In other words, park & ride provision cannot work in isolation to town centre car parking controls, be that in terms of overall supply or in relation to appropriate tariffs that restrict demand.

Alternative Options

Overview

- 1.32 The future transport strategy requires both the overall management of demand for travel into and out from Maidstone, as well as to encourage car drivers, and specifically single-occupancy car drivers, to travel more sustainably.

Demand management

- 1.33 There are a range of tools available with which to manage overall demand for travel, incorporating both reducing the need to travel through use of technology, reducing the overall level of travel through linking trips, or through managing the times at which people travel.
- 1.34 Travel planning with local businesses, schools, leisure venues, as well as with individual households can all help employers/individuals identify ways in which they can travel less or travel outside the peak periods.

- 1.35 Regardless of any additional transport strategy provision, demand management tools should be an important aspect of any strategy development.

Behaviour Change

- 1.36 When determining the optimum approach to tackling traffic congestion and high car dependency, it is important to consider the ways in which individuals can be encouraged to change their travel behaviour.
- 1.37 It is empirically acknowledged that drivers have an attachment to their vehicles that results in them continuing to drive, even when alternative options may appear cheaper and faster. Whilst sometimes this can be as a result of a lack of knowledge of alternative options, it is often that they have a attachment to driving above other modes of travel. When examining options for encouraging more sustainable travel, it is therefore important to acknowledge this attachment.
- 1.38 The strong advantage that park and ride often has over conventional bus services is that it still allows driver to undertake part of their trip by private car. If the park & ride site is correctly located it should take drivers along the highway network up until a point just prior where significant congestion begins to occur.
- 1.39 As a measure for encouraging modal shift away from single-occupancy car travel, park and ride is a more attractive measure than conventional bus services. This can also be re-emphasised through appropriate marketing and provision of a perceived high-quality bus operation from the park & ride site.

Bus Park & Ride against Rail Park & Ride

- 1.40 Rail-based park and ride can provide an attractive alternative option to single car occupancy trips. It is generally perceived to be of higher quality than bus-based park & ride and can offer a quicker journey time from the site to the town centre.
- 1.41 In more practical terms, however, rail-based park & ride generally is much less flexible in its operation and, in particular existing rail stations are not necessarily in ideal locations or have space for necessary car parking provision. The fixed nature of rail lines means that stations are often not on main radial corridors leading into town centres and so require significant diversion to access. In addition, if stations are located too far out from the town centre, and in particular from areas of congestion, there can be less incentive to access rail. Within the town centre, rail will typically provide only a single point of access to the town centre, which may not necessarily be close to major employment or retail centres. The frequency of rail services can also often limited by line capacities that may mean that frequencies cannot be increased or made into clock-face departure times
- 1.42 In contrast bus based park and ride can be much more flexible, both in terms of the location of the sites, as well the operation of services. Frequencies can be tailored to demand and drop-off locations in the town centre can reflect demand attractors.

Bus-based Park & Ride against Conventional Bus

- 1.43 There are obviously many potential similarities between a conventional bus services and bus-based park & ride in terms of transport operations. It is, however, important to understand that, in their basic form, they often serve different markets.
- 1.44 Conventional urban bus services are generally developed in order to serve specific residential areas and to connect them to the town centre. This often will mean that speed of journey is, in part, sacrificed in order to increase direct access to the service for residents. Inter-urban or rural services will have a higher priority for journey speed, albeit with a focus on direct accessibility at either end of the service route, or key intermediately locations. Generally these services are used by individuals who place a higher weight on tariffs/fares than on journey time.

- 1.45 In contrast bus-based park and ride clearly eradicates the requirement for local residential accessibility and so can provide, not only a more direct and quicker service, but also a more frequent level of service.
- 1.46 When considering the relative benefits of enhancing conventional bus services against bus park & ride provision, it is therefore important to understand the profile of car trips that are being targeted for mode shift. Those trips originating on the outskirts of the urban fringe of the town or in the hinterland can be better targeted through park & ride.

Summary

- 1.47 In principle, this review has demonstrated that there are strong reasons to support a transport strategy for Maidstone that promotes bus-based park & ride, along with town centre car park management. This approach will target longer distance car drivers with origins from around the urban fringe or the hinterland beyond and encourage them not to drive into the town centre.
- 1.48 Rail-based park & ride is not considered to provide the same level of flexibility and measures would be restricted to existing rail corridors and stations. As an example, the location of Barming Station, Bearstead Station or east Farleigh Station are not located along the major transport corridors leading into the town centre.
- 1.49 Conventional inter-urban or rural bus services are considered to be less attractive to existing car drivers than park & ride that allows them to complete part of their trips by car and to then access a service that is both likely to be higher frequency and potentially faster.
- 1.50 Overall, it is important that a 'joined-up' approach to transport provision is taken that seeks to manage overall demand and links sustainable travel provision with the traffic management priorities.

Distribution MBC

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