

Extract from Core Strategy Appendix 3 – Policy Evolution

Paper 6 - Transport

Introduction

6.1 This paper describes the main elements of the transport strategy that forms Policy CS8. These have evolved from a series of assessments of various development scenarios and packages of transport measures made using a VISUM multi modal transport model.

6.2 The output from these tests provides a means of comparing the potential impact of various development proposals. This is a strategic tool. It is not intended to provide accurate figures for the flows on each road and turning movements at each junction in each peak hour in 2026. However, it provides a base from which to assess the effectiveness of transport measures in dealing with future growth expectations identified in the LDF Core Strategy, using statistics such as traffic flows, travel times on selected routes, and overall network performance. The options tested were (noting that the option labelling is as according to the commissions issued to Jacobs, and is different to the MBC nomenclature):

- Option A – 11,080 new homes, of which 3,725 being in a south east urban extension
- Option B – 10,080 new homes, with a more dispersed distribution
- Option C – 8,200 new homes with a dispersed distribution
- Option S – 10,080 new homes, with a different dispersal pattern (“optimal” option)

Background

6.3 The guiding principles of the measures that have been included in the transport package are those which :-

- a) manage existing resources as efficiently as possible
- b) promote sustainable transport
- c) seek to manage the demand for travel downwards
- d) are achievable within the life of the LDF
- e) are within the bounds of reasonable expectations of available funding

6.4 This emphasises that future transport strategy will not be based on the “predict and provide” approach, but seek to accommodate growth in as sustainable manner as possible.

6.5 The focus of both existing transport issues and future development will be in and around the urban area (the area subject to transport modelling). Therefore the main measures in the transport policy have evolved principally to deal with issues in this part of the Borough. It is fully accepted that there are a number of pressing transport problems in the rural areas, and that the final version of the strategy will have to include additional measures to address them.

6.6 The initial tests identified the scale of the challenge of creating a package of measures that would deal with the growth aspirations. For the “optimal” development option, the size and locations of housing and employment sites were determined by the MBC Cabinet, and the transport package was subsequently evolved to support the this scenario. This package balances the desire to increase the capacity of the transport networks to accommodate the additional demand from the regeneration proposals in the town centre with the financial and land availability issues that are inherent in providing this capacity. Hence the complementary issue of managing the future demand downwards that must be part of the strategy.

6.7 Funding and deliverability issues are particularly relevant to future Park and Ride services (which require commitment to both capital and revenue support) and to demand management by placing restrictions on town centre car parking (which could have a detrimental impact on the inward investment needed to fulfil regeneration aspirations)

Sustainable transport package

6.8 The full set of measures that have evolved from the option testing to contribute to the sustainable transport package is :-

TP1 Reduction of town centre long stay car parking spaces, and an increase in charges(assumed to be a 100% increase in long stay fees)

TP2 Travel Plan requirement for all large new development sites, including reduced car parking provision (assume 15% reduction of single vehicle occupancy)

TP3 Continued liaison with KCC to promote School Travel Plans

TP4 Refreshment of KCC and MBC in-house Travel Plans

- TP5 Maintenance and promotion of car share website (kentjourneyshare.com)
- TP6 Enhancement of County Hall Car Club
- TP7 Cycle Network – improvements to existing network and extension to serve new developments, and improved cycle parking facilities in the town
- TP8 Enhancement of pedestrian route between Maidstone East and Barracks railway stations
- TP9 Maidstone High Street Public Realm Improvement Scheme
- TP10 A274 Park and Ride site (located on Sutton Road)
- TP11 A229 (North) Park and Ride site
- TP12 Upgrade exiting Park and Ride sites at London Road and Willington Street
- TP13 Town Centre Bus Stop Improvements
- TP14 Maidstone East Bus/Rail Interchange Improvements (to be carried out in association with railway station redevelopment)
- TP15 Quality Bus Partnership route improvements
- TP16 General increase in bus frequency on main routes as development is delivered
- TP17¹ A229 Barracks Roundabout conversion to traffic signals (to enhance pedestrian accessibility to development on Whatman Way)*
- TP18 General improvements to assist pedestrian mobility and accessibility
- TP²19 New Pedestrian/Cycle bridge across the River Medway from Earl Street to St Peters Street (depending on long term development on St Peters Street)*
- TP20 Romney Place Bus Lane (to improve access to Chequers Bus Mall)
- TP21 M20 Improvements at Junctions and on main carriageway (detail to be determined through liaison with the Highway Agency)
- TP22 A20 London Road – Enlargement of existing Park and Ride site

¹ TP17 would be intended to support the development of a "Campus Quarter" as identified in the Town Centre Study, should it come forward. It has not been modelled at this stage.

² TP19 is dependent on future potential redevelopment of commercial sites on St Peters Street.

TP23 Thameslink Rail service to Maidstone East (currently scheduled by 2018)

TP24³Rural Service Centre sustainable transport improvements (particularly to encourage walking and cycling)

6.9 It is also important to note that the central area of Maidstone is subject to an Urban Traffic Management and Control system, so the road network is already (and will continue to be) managed as efficiently as possible, in line with the County Council's obligation under the Traffic Management Act.

6.10 Maidstone lies alongside the main access route to Dover and the Channel Tunnel, and thus local development and transport decisions have an impact on the strategic road network. Liaison with the Highways Agency has identified their expected requirements for improvements at the M20 junctions serving Maidstone. These include the introduction of traffic signals at Junction 5, 7, and 8, and the potential for lane reallocation on the main carriageway and collector distributor roads.

Transport model results

6.11 The model produces a range of statistics that demonstrate the predicted situation on the transport networks in 2026. The full set of results is shown in the Option Testing Report that forms part of the Core Strategy Evidence Base.

6.12 Table EN1: Comparison of Person Trips for the Optimal Development Option

Mode	2007 (am)	2026 (am)	2007 (pm)	2026 (pm)
	%	%	%	%
Car	74	69	77	72
Bus	14	14	10	12
Rail	10	12	11	12
P and R	2	5	2	5

6.13 The 2026 figures show a decrease in the proportion of trips undertaken by car and a corresponding rise in the proportion made by sustainable transport. It should be noted that the figures refer to travel by vehicle. It has been assumed that the proportion of total trips made by walking and cycling will increase from the current 12% to 15%, due to the influence of travel planning and infrastructure improvements.

³ TP24 has been identified to ensure that future development sites are fully connected into the pedestrian/cycle route networks in the various villages. The actual needs will be clarified once the specific development sites have been identified through the Land Allocations process

6.14 However, although the optimal option shows a proportional decrease in trips by car, the total number of trips made on the network rises considerably. The total number of individual journeys is predicted to rise considerably between 2007 and 2026 – from some 36,400 to 44,800 in the morning peak and from 31,400 to 39,100 in the evening. The effect of this rise can be seen in the summary of travel times shown in the tables below. The most representative figures have been taken as the morning peak inbound and the evening peak outbound, as this is when the road network is currently under the greatest pressure. The extent of the routes is shown in the Option Testing Report.

6.15 Table EN2: Comparison of A.M. Inbound Option Travel Times with 2007 Base (average travel time per vehicle in minutes : seconds)

	2007	Option S
A – A274 Sutton Road	16:20	20:19
B – A20 Ashford Road	14:24	14:43
C – A249 Sittingbourne Road	16:59	30:41
D – A229 Royal Engineers Way	10:08	18:34
E – A20 London Road	08:05	10:39
F – A26 Tonbridge Road	10:34	17:56

6.16 Table EN3 : Comparison of P.M. Outbound Travel Times (average travel time per vehicle in minutes : seconds)

	2007	Option S
A – A274 Sutton Road	09:47	14:23
B – A20 Ashford Road	15:12	12:57
C – A249 Sittingbourne Road	06:34	05:17
D – A229 Royal Engineers Way	06:00	17:02
E – A20 London Road	07:58	08:39
F – A26 Tonbridge Road	08:14	06:57

6.17 These figures show a relative stability or reduction in evening peak travel times (apart from the A229), but a combination of results for the morning peak. There are still predictions of considerable increases on some routes, although the modest rises on the other routes suggest that there is considerable scope for drivers to modify their trip patterns to balance out the delays, so that in practice there would be likely to be a general smaller rise in travel times on all the radial routes, rather than dramatic increases on a few. The Option S figures are the most promising results to emerge from the option testing process (other than the 8,200 option which was rejected as being incompatible with employment growth

aspirations and also being unable to generate sufficient funding for the overall Core Strategy infrastructure needs).

6.18 The overall network summary statistics are more concerning, as shown below.

6.19 Table EN4: Comparison of Total Network Delays (vehicle minutes) – A.M. Peak

	Network delay	Increase (total)	Difference (%)
Base 2007	924,780		
Option S	1,468,148	543,368	58.8

6.20 Table EN5: Comparison of Network Delays (vehicle minutes) – P.M. Peak

	Network Delay	Increase (total)	Difference (%)
Base 2007	914,220		
Option S	1,257,422	343,202	37.5

6.21 These results show that the overall congestion on the network is not just confined to the main radial routes, and that the peripheral network is likely to become more congested as drivers seek to avoid the busy central area.

Conclusion

6.22 The objective of the transport strategy is to address the Borough's existing transport problems, and support the expected development growth in the LDF Core Strategy. The package of measures includes a wide range of encouragement for sustainable transport modes, but the picture that emerges indicates that the provision of greater opportunities for sustainable travel would only be taken up if the cost and convenience of making trips is "re-balanced" towards these modes.

6.23 Therefore the package includes both positive investment in the Borough's Park and Ride service, an assumption of a general increase in commercial bus services, and the management of demand by reducing the number of long stay town centre car parking spaces available.

6.24 The figures above indicate the scale of the challenge. Even with a package that includes a doubling of the number of Park and Ride spaces available, and a reduction of at least several hundred long stay parking spaces, the model predicts considerable increases in congestion by 2026, both on the main radial routes and across the network generally.

6.25 Transport is one of the main influences on the economic activity of the Borough. The LDF Core Strategy seeks regeneration and prosperity for the town centre, for which its accessibility is a key component of the success of these policies. The prediction of future growth in both development and its transport impact is not an exact process. Maidstone does not exist in isolation. Decisions made nationally and by neighbouring planning authorities affect both commercial decisions made by potential developers and travel decisions made by individual members of the public on a rolling basis. However, the option testing so far carried out shows that strong support for sustainable transport and demand management will be required to make the town centre attractive to inward investment. It is quite likely that further measures will emerge in response to meet the expectations of both the public and development industry expressed through the Core Strategy public participation process.