

ASHFORD AREA TRANSPORT STUDY
TOWARDS A TRANSPORT STRATEGY

10.0 HIGHWAY CAPACITY AND IMPROVEMENTS

10.1 Introduction

10.1.1 The transport strategy proposed will result in a significant quantum of public transport trips and a transfer of vehicles to public transport which would otherwise use the car. However, even with a major high quality public transport scheme and parking restrictions and charges, the demand for car travel in and around Ashford will remain significant.

10.1.2 This section considers the overall change in traffic movements and goes on to consider, at the strategic corridor level, the need for improvements to accommodate traffic demand. Finally, access to major development areas is considered.

10.2 Future Traffic Patterns

10.2.1 Future transport demand is calculated by taking account of growth and new development. Trip ends are calculated for each zone in the model and, in forecast mode using DMS procedures, the model predicts a trip distribution and modal split by car and public transport.

10.2.2 Because growth of trip ends within Ashford is very significant as a result of new development, the Strategic Transport Model predicts that, proportionally, more travel is made internally within the town in 2031. This is illustrated below for car trips:-

Proportion of Total Car Trips (%)

Base Synthesised (2003)			Forecast Synthesised (2031)		
	I	E		I	E
I	42.9	27.8	I	50.7	24.5
E	29.3	-	E	24.8	-

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10.2.3 Thus the land-use and transport strategy itself results in benefits in terms of containing travel within the town. This effect is reflected in the growth in trip ends by sector of the car matrix:-

Growth 2003-2031

	I	E
I	51%	13%
E	9%	-

10.2.4 Overall car travel growth is therefore concentrated within Ashford. This is also reflected by considering the traffic flows across the external cordon (used in the base year model). The AM peak shows traffic growth of 29% inbound and 34% outbound but this is reduced to c22% when flows on M20 are excluded ie. a large part of the growth results from M20 through trips. This compares with growth on the approaches to the town centre of c70%.

10.2.5 Whilst the growth in Ashford needs to be managed, it does have overall benefits in terms of overall travel distances and containment of travel within the town provides better opportunities for modal shift.

10.2.6 The Strategic Transport Model takes account of these redistribution affects and, when combined with changes in modal split and reassignment effects, results in new traffic flows on links. These have been analysed for the AM peak period and, where necessary, account has been taken of peak hour flow variations. This has pointed to the need for some capacity improvements and these are considered below.

10.3 Managing Traffic in and around the Town Centre

10.3.1 The land-use growth envisaged by Ashford's Future results in significant growth in travel movements across a cordon around the town centre. Even with parking restraint and high quality public transport then growth will remain significant. Growth will be particularly high on the southern approach to the town and, to a lesser extent, along the A28 and A20 corridors from the south-

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west and west respectively.

- 10.3.2 The management of traffic around the town centre is being considered as part of ATCDF and it is envisaged that an overall final strategy for the town centre will emerge from ATCDF and GADF. ATCDF will need to consider the implications of significant traffic growth.
- 10.3.3 One particular issue is the capacity of the Beaver Road bridge and the junctions at either end. Future traffic flows will be difficult to manage given the close spacing of the junctions, geometric characteristics and the need to provide better access to both the station and town centre by public transport. It is likely that a new crossing of the railway will be needed if public transport is to be given priority, which we recommend. This issue needs to be considered in detail by ATCDF. Options for crossing the railway to the west of Beaver Road, for example by taking a road or public transport alignment through the Victoria Road area, should be investigated.
- 10.3.4 The transport model also indicates a transfer of traffic to Magazine Road as a result of a diversion from The Barracks Link and Simone Weil Avenue. Whilst it is likely that this effect can be managed, it needs to be given further consideration in relation to modifications to the ring road.
- 10.3.5 Access to parking areas, both existing and those proposed as part of ATCDF, needs to be considered in detail.
- 10.4 **Key Radial Routes**
- 10.4.1 We have examined the flows along the main radial routes from the edge of the urban area into Ashford town centre. The link capacity of A2042 should accommodate future traffic demand although the junctions with Beaver Road, Newtown Road, Norman Road and Malcolm Sargent Road are likely to need improvement. These need to be considered in conjunction with the detailed evaluation of a new public transport alignment along this corridor.

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- 10.4.2 Flows increase significantly on A28 Chart Road. The level of increase will depend upon the detailed access strategy adopted for the south-west mixed-use development area, and in particular the distribution of traffic between A2042 and A28. The A28 may require dualling from the southern end of the Great Chart bypass as far as The Barracks Link and this should be investigated with AHTS. The main junctions along the route will need to be improved. Traffic through the Singleton and Stanhope area should be investigated with a view to introducing traffic management measures as necessary to prevent rat-running between A28 and A2070.
- 10.4.3 The model predicts increases in traffic along A292 Hythe Road. Whilst the flows are within the link capacity, any significant increases could result in environmental impacts given the close proximity of residential frontages to the highway. The capacity of the junctions along the route is likely to restrain traffic flow but the route should be investigated in detail with AHTS, taking account of any transfers if A2042 is capacity restrained at the Beaver Road bridge.
- 10.4.4 The A20 western approach to the town is likely to have sufficient link capacity to accommodate future flows but the junctions are likely to require improvement, in particular the Drover's roundabout which currently experiences some queues and delays at peak times.
- 10.4.5 The radial routes also have the potential to act as corridors for park and ride bus services. Our analysis suggests park and ride sites serving the A28 south west, A2070 south and A20 west corridors.
- 10.4.6 In the longer term, there is the potential to replace buses serving the A28 and A2070 sites with the proposed dedicated high quality public transport services. This would avoid the need for specific bus priorities although the design of new public transport routes will need to consider priority as set out in Section 8.0. In the shorter term, consideration could be given to introducing priorities along A2042 by dedicating a lane for buses. Junction improvements along A2042 and A28 could be phased to include priorities for buses in the shorter term with this capacity released for general traffic as

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traffic growth and much higher quality public transport, along new alignments, is introduced.

10.4.7 A detailed study of the A20 approach to the town centre will be needed. The junctions, including the Drover's roundabout and Chart Road/Maidstone Road gyratory, will need to be improved and the opportunities for bus priority should be investigated.

10.5 Strategic Road Network

10.5.1 The future trip distribution pattern is such that traffic flows along M20 motorway are predicted to be well within the link capacity of the dual three lane motorway and improvements to the mainline will not be required.

10.5.2 M20 Junction 10A is considered to be committed and AHTS will need to consider both the standard of junction provision and the merge/diverge provision at both J10 and J10A. Traffic flows at junction 9 should be considered in detail by AHTS but the proposed approach to mixed-use development at Eureka should reduce overall traffic flows at the junction compared with full employment only development.

10.5.3 In terms of linkages to the motorway, we consider that (given the land-use strategy proposed) a new link from the SOR-M20J10A link road should be created to run southwards across CTRL. This would provide strategic access to the south-east mixed-use development area and, depending upon its alignment and the junction provision at M20J10, possibly to Waterbrook and Cheeseman's Green.

10.5.4 Our analysis indicates that A2070 Southern Orbital (Bad Munstereifel Road) will not require widening although this assumes a connection between M20J10A and A2070 Hamstreet bypass via the new mixed-use development area. The alignment of such a route should be considered in detail in AHTS but it should be possible to design a route which provides access to new development areas and allows management of traffic on the Southern Orbital Link such that a major improvement is not required. The evaluation of this

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route should also take account of potential park and ride access off A2070, ideally near Park Farm and Cheeseman's Green

10.5.5 A junction improvement will be needed at the Orbital Park access roundabout and this should be investigated in AHTS.

10.5.6 We have considered the need for and use of a South West Orbital Route. The pattern of land-uses and trip distribution pattern is such that we can see little overall need for the orbital route. The pattern of existing built development means that any route would involve long diversions for most traffic movements. We have tested a route in the model and coded reduced capacity in the town centre. The model predicts very little use of the road.

10.5.7 Increased out-commuting by car, which to some extent would indicate a failure of the Ashford's Future approach, could result in increased demand for an orbital road. We do not consider that this is an outcome which should be planned for at this stage. In any event, with J10A, we consider the road will not be needed within the time frame of the LDF.

10.5.8 A lower grade partial southern orbital between A28 and A2042 could be considered as part of the south-west mixed-use development area. This would provide access to the site and, through careful design, could be used to reduce traffic flows through Singleton and Stanhope. Magpie Hall Road is currently used as an informal southern bypass and the provision of a new route combined with traffic management on Magpie Hall Road should avoid this.

10.6 Access to Development

10.6.1 Access to the town centre development areas will need to be evaluated as part of ATCDF. Access to the BLP allocations can be provided from the existing road network although the sites at Cheeseman's Green and Waterbrook could be serviced by new roads connecting the south-east mixed use development areas with the motorway network.

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- 10.6.2 Two major mixed use development areas are proposed. As discussed earlier, the south-east area should be served by connections to M20J10A, A2070 Hamstreet bypass and A2070 Southern Orbital (at Orbital Park). Access provision can be phased to coincide with new infrastructure and this is discussed further in Section 12.0.
- 10.6.3 The development area to the south-west should be assessed from A28 Great Chart bypass or A28 Ashford Road and from Ashford Road near Park Farm. Phasing would depend upon the pace of development but an initial access could be provided off A28 which would also serve the proposed park and ride site. The access from Ashford Road near Park Farm could be introduced as flows on A28 approach capacity.
- 10.6.4 All development areas should include easy access for pedestrians and cyclists. The new development areas should be integrated to existing communities by providing high quality walk and cycle linkages where possible. It is assumed that GADF will advise on an overall walk and cycle network for Ashford (and will deal with on-site provision of sustainable modes). Priority for public transport should also be provided at the development access points where it is not possible to provide segregated access. Again, where possible, public transport services should be integrated with existing communities.
- 10.7 **Recommendations**
- 10.7.1 The recommended highway capacity improvements are shown on **Figure 10.1**. In summary they comprise:-
- i) Management of traffic in Ashford town centre to be assessed and recommended by ATCDF; assess potential for new route to avoid capacity issues at Beaver Road bridge.
 - ii) Introduce junction improvements along the A28 Chart Road and A2042 Romney Marsh Road corridors. Consider need for dualling of A28.

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- iii) Introduce traffic management measures in Stanhope and Singleton to avoid rat-running. Consider in conjunction with development access road between A28 and A2042, replacing Magpie Hall Road.
- iv) Introduce traffic management measures on A292 Hythe Road to avoid increased flows with resulting environmental impacts.
- v) Introduce junction improvements on the western approach to the town centre and assess the potential for bus priorities.
- vi) Introduce M20J10A and link roads cross CTRL connecting the south-east mixed-use development areas. Investigate merge/diverge provision at M20J10 and M20J10A.
- vii) Design new development access route between J10A and A2070 Hamstreet bypass to avoid widening of Bad Miunstereifel Road and, ideally, also provide access to park and ride. Improve Orbital Park junction on A2070.
- viii) Test South West Orbital Road with AHTS but this route is not considered to be needed within the LDF timescale.
- ix) Provide excellent access to the new development areas for pedestrians, cyclists and public transport. Use the provision of sustainable modes as a way of integrating new development with existing communities.

