

TRANSPORT STUDY

August 2006

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TRANSPORT

1. INTRODUCTION

- 1.1 This report sets out the European, national, regional and local contexts for developing transport policies in Dacorum.
- 1.2 Good transport is essential for a successful economy and society. It provides access to jobs, services and schools, gets goods to the shops and allows us to make the most of our free time. However, vehicle emissions are a major influence on climate change. Transportation and planning policy seeks to reduce the negative impacts of travel whilst still meeting travel needs. The growth in motor vehicle use also has adverse effects on the economy through congestion and delay, and social and health costs related to stress, noise and air pollution.
- 1.3 Dacorum is not involved in the direct provision of transport facilities and services apart from parking and contributing to bus subsidies. Bus and rail companies provide services and Network Rail maintains track and rail facilities. Hertfordshire County Council is responsible for the Local Transport Plan and scheme design and maintenance. The Highways Agency is responsible for motorways and trunk roads. However the Borough Council can ensure accessible locations for new development and contribute to identifying issues and priorities within its boundaries.

2. EUROPEAN AND NATIONAL CONTEXT

Common Transport Policy

- 2.1 Whilst the White Paper on Transport (EC2001a) is concerned with ease of movement between countries and harmonisation of controls, it also covers the imbalance between modes, the failure of road transport to meet its environmental costs, the effect of congestion on economic competitiveness and reducing dependence on oil. It sets out a 60 point action plan. The West Coast Main Line improvement is included in the list of strategic projects.
- 2.2 Progress is reviewed by the European Environment Agency in one of the environmental assessment tools of the Common Transport Policy, the Transport and Environment Reporting Mechanism (TERM). The 2004 report identified a reduction in air pollutant emissions, despite traffic growth, but a continuing rise in greenhouse gas emissions. Road and air market shares were continuing to grow, and passenger fares were increasing faster than the cost of private car use. Access to many basic services was dependent on car use, partly due to centralisation. The 2005 report points out that transport is a means to an end, but transport users are locked into production and consumption patterns that are not easily changed in the short term. Companies are located in certain places and need supplies; people need to get to work and children to school. Road freight continues to gain market share, and car occupancy and lorry load factors are decreasing. The fall in car occupancy is put down to increased car ownership, decreasing household size, and dispersed spatial patterns leading to individual travel patterns that cannot be pooled.

PPG13 Transport

- 2.3 The objectives are to:
 - integrate planning and transport at the national, regional and local levels
 - promote more sustainable development choices for people and freight
 - promote accessibility to jobs, shopping and leisure facilities and services by public transport, walking and cycling
 - reduce the need to travel, especially by car
- 2.4 The main ways of delivering these objectives are through the careful location of transport generating development to ensure a choice of modes, and the use of parking policies along with other measures. Priority should be given to people over ease of traffic movement.
- 2.5 Standards for roads, layouts and car parking should be critically examined to avoid profligate use of land. The concept of Travel Development Areas is introduced to maximise the use of the most accessible sites.
- 2.6 Transport Assessments replace Transport Impact Assessment for schemes with major transport implications. These will need to illustrate accessibility to the site by all modes of transport, the likely modal split of all journeys to and

from the site, measures to improve public transport, walking and cycling and to reduce car parking.

- 2.7 In rural areas service providers should work together to achieve the maximum benefit from e.g. postal services, school buses, mobile libraries, home deliveries. Adequate employment opportunities should be promoted in the rural areas.
- 2.8 The aim for public transport is to have a high quality, secure reliable network of routes with good interchanges, matching the pattern of travel demand. Local authorities should identify key routes for bus improvements and priority measures. Walking is the most important local mode and the forgotten part of longer journeys. It should be encouraged to replace the most polluting car trips (i.e. those less than 2 kms). Strategies should be developed identifying the need for wider pavements, and pedestrian friendly road crossings. Cycling could potentially replace car trips under 5 kms. The publication "Walking and Cycling: An Action Plan" sets out examples of good practice.
- 2.9 The distribution sector has undergone changes in the last few years with "just in time" deliveries. Warehousing should be located away from congested central and residential areas and have adequate access to trunk roads. Freight Quality Partnerships should be established to agree lorry routes, loading and unloading times and reduction of emissions.
- 2.10 Availability of parking has a major influence on choice of modes. A consistent approach is needed in the Regional Transport Strategies to avoid wasteful competition. Levels of parking requirements should encourage sustainable choices; reduce land take, promote linked trips and access for non car owners and reduce congestion.
- 2.11 Park and Ride schemes can vary considerably in their size and purpose a robust assessment is required, and they should be designed and implemented in association with measures such as public transport improvements, traffic management and parking controls.
- 2.12 Travel Plans should be submitted for
 - major developments
 - smaller developments near Air Quality Management Areas, and where there are targets for reducing car use
 - new and expanded school facilities
 - where a Travel Plan would help address local traffic problems
- 2.13 There is no standard format, but travel plans could reduce car usage, especially single occupancy journeys, increase use of sustainable modes and encourage more environmentally friendly delivery and freight movements. Local authorities should set an example to local businesses by adopting their own plans.

Transport Ten Year Plan 2000

2.14 The aim of the plan is to transform the country's transport infrastructure over the period 2000/01 – 2010/11, by significantly increased and sustained investment, an increase of almost 75% in real terms over the previous 10 years.

Among its targets are:

- a 50% increase in rail use, measured by passenger kilometres
- an 80% increase in rail freight
- congestion to be reduced below 2000 levels
- 60% of trunk road network given lower noise surfaces
- 10% increase in bus passenger journeys

The Future of Transport – A Network for 2030 (White Paper)

- 2.15 By 2025 the population of Great Britain is forecast to increase by 8% over 4.5 m extra people. The 10 year plan for transport published in July 2000 sought to redress decades of underinvestment in transport infrastructure. It delivered a commitment to long term sustained increases in spending and improvements in transport management, but admitted that we cannot build our way out of problems.
- 2.16 Various options are being explored such as tolling on new roads, introduction of High Occupancy Vehicle lanes, Quality Contracts for bus services, road pricing, Transport Innovation Fund packages, new types of vehicle and fuel sources, and the Transport Direct Web-site. Road traffic in England is projected to increase by 40% over 2000 levels by 2025. The Railways White Paper (The Future of Rail July 2004) sets out a new structure for the industry to retrieve the problems of privatisation. Buses have suffered from the increased access to cars by older people and women but still makes up 2/3 of all public transport journeys. Between 1990 and 2003 bus and coach fares rose by 26% in real terms, rail fares by 21%, whilst motoring costs only rose by 4%. Regarding freight, efforts are being made to move more freight by rail or water, and lorry road user charging could be introduced by 2007/08.
- 2.17 A new approach to appraising transport schemes is being introduced. As well as the monetised impacts presented in a benefit/cost ratio, a wide range of factors reflecting the Government's objectives for transport (environment, safety, economy, accessibility and integration) are also taken into account.
- 2.18 The Government also has targets for reducing road casualties (Tomorrow's Roads Safer for Everyone, March 2000) by 40% for adults and 50% for children by 2010.

Focus on Personal Travel 2005 Edition (incorporating National Travel Survey 2002/03)

- 2.19 This sets out significant changes in travel patterns:
 - the 20% fall in the number of walking and cycling trips, 1992/4 2002/3, despite more people owning bicycles

- 11% fall in the distance travelled by local bus in the 1990s
- 20% of children aged 5 16 said they had not walked for 20 minutes or more in the last year.
- average shopping trip distance rose from 3.5 to 4.3 miles (1992/4 2002/3)
- 82% of respondents could not work from home at all
- 65% of households had ordered goods by post, phone or over the internet
- 61% of women aged 17 and over in 2002/03 held driving licences, compared with 81% of men, and the proportion of women who are 'main drivers' of a household car increased from 35% to 45%. Bus journeys by women fell by 17%
- about 20% of households without access to a car had some difficulty accessing supermarkets and doctors
- only 51% of households in rural areas were within 13 minutes walk of a bus stop with at least an hourly bus service compared with an average of 96% in urban areas.

National Cycling Strategy

- 2.20 The strategy published in 1996 aimed to quadruple levels of cycling between 1996 and 2012. The 10 year Plan for Transport (2000) set an intermediate target of tripling cycle use by 2010. The Future of Transport White Paper dropped the national target. The new approach is to encourage the development of soundly based local targets which are challenging but realistic as part of the development of second round Local Transport Plans. The number of cycling trips is to be a mandatory indicator in LTPs.
- 2.21 The review of the strategy (March 2005) notes that different measures to encourage cycling will be appropriate depending on local circumstances. The National Cycling Strategy Board has been replaced by a new body, Cycling England.

Walking and Cycling Action Plan (DfT July 2004)

- 2.22 Walking and cycling contribute to many key public policy priorities including health, liveability and urban congestion. The Action Plan looks at different ways of increasing walking and cycling:
 - Creating places people want to walk and cycle in;
 - Providing high quality facilities for safe walking and cycling;
 - Influencing travel behaviour through education, training, marketing and promotion;
 - Building skills and capacity; and
 - Monitoring success through better targets and indicators.

2.23 The remainder of the documents sets out examples of good practice and sources of funding. A list of 42 actions is contained in the Annex, and these are monitored on a quarterly basis.

Making the Connections: Final Report on Transport and Social Exclusion (ODPM Feb 2003).

2.24 The report examines the links between social exclusion, transport and the location of services. It is particularly focussed on access to those opportunities that most affect life-chances, such as work, learning and healthcare. Accessibility means being able to reach key services at reasonable cost, in reasonable time and with reasonable ease. Factors such as service availability, information, security, physical capabilities and cost are significant.

The problems can be illustrated in several ways:

- 40% of jobseekers say lack of transport is a barrier to getting a job, and 25% say the cost of transport is a problem getting to interviews
- 6% of all 16 18 year olds turn down training or further education due to lack of transport
- 31% of people without a car have difficulties travelling to their local hospital
- 16% of people without cars find access to a supermarket difficult compared with 6% of the population as a whole
- more than a quarter of child pedestrian casualties happen in the most deprived 10% of wards.
- 2.25 The report states that land use planning can undermine accessibility for people at risk of social exclusion in three main ways:
 - major new developments are frequently located in places that are hard to reach for people without cars, and public transport provision fails to adapt
 - low-cost and social housing areas often lack basic amenities such as GP surgeries, food shops, financial services and other facilities, and have inadequate transport links to services further afield
 - it fails to promote development activity that will address accessibility needs of deprived and isolated rural neighbourhoods.

Under Local Development Frameworks, gaps in local service provision should be highlighted, and suitable sites identified to fill any shortfalls.

Draft Manual for Streets (July 2006)

2.26 The draft manual relates to residential streets and lightly trafficked roads. It seeks to transform the way streets are designed, and to change the focus from motor vehicle related criteria to people-friendly provision. A street is defined as "a highway that has important functions beyond just the movement of traffic".

- 2.27 Among the suggestions for change from current practice are:
 - replacement of the roads hierarchy
 - reductions in sightlines
 - minimisation of signage, clutter and road markings
 - ratios between width of street and height of buildings.
- 2.28 The manual restates the priority to be accorded to different modes:
 - people on foot or with disabilities
 - cyclists
 - other motorised vehicles

3. REGIONAL CONTEXT

Regional Transport Strategy

- 3.1 The Regional Transport Strategy is contained in Chapter 8 of the Regional Spatial Strategy (RSS), the East of England Plan.
- 3.2 Its objectives are derived from national policy:
 - to improve opportunities for all to access jobs, services and leisure/tourist facilities
 - to enable infrastructure programmes and transport service provision to support both existing development (addressing problems of congestion) and that proposed in the spatial strategy
 - to reduce the need to travel
 - to reduce the transport intensity of economic activity, including freight
 - to minimise the environmental impact of transport provision and travel
 - to improve safety and security
- 3.3 To achieve these objectives, the RTS seeks to:
 - widen travel choice by increasing and promoting opportunities to use sustainable modes, improving seamless travel through quality interchanges, and raising travel awareness
 - promote the carriage of freight by rail and water and encourage environmentally sensitive distribution
 - stimulate efficient use of the existing transport infrastructure
- 3.4 In the draft Plan, Dacorum is not a growth area, so there is little direct reference to the Borough. Regional Interchange Centres (RIC) which will have a significantly enhanced level of public transport provision are identified. The nearest to Dacorum are Watford and Luton/Dunstable. In the neighbouring South East Region, Aylesbury and Milton Keynes are identified as transport hubs. Hemel Hempstead is seen as a key centre (Policy SS2).
- 3.5 Table 8.1 in the draft Plan contains definitions of accessibility levels. Once these are met in the RICs and other urban centres, parking standards will be no higher than 70% of PPG13 standards. It will be for local authorities to identify current levels of accessibility and apply the framework locally.

Table 1: Definition of minimum accessibility levels by public transport services levels (relates to bus route or rail station within 400 metres – except for rural areas)

Area Type	Minimum accessibility level
Urban Regional Interchange Centres (Basildon, Bedford, Cambridge, Chelmsford. Colchester, Harlow, Ipswich, King's Lynn, Luton/Dunstable, Norwich, Peterborough, Southend, Stevenage and Watford)	Quarter-hourly service during day for 90% of households/jobs plus half-hourly evening services
Other urban centres	Half-hourly during day for 90% of households/jobs plus hourly evening services
Peri-urban areas	Hourly daytime service (and 2 in peak) for 75% of households/jobs plus limited evening service
Market towns	Up to five services (including 2 in peak) per day for 50% of households/jobs
Rural areas	Hourly daytime service within 13 minute walk of x% of households/jobs (% to be added once current situation known (national base figure is 35%)

Table 2: PPG13 Maximum Car Parking Standards

Land Use	Maximum parking standard	Threshold above which standard applies
Food retail	1 space per 14 sq m	1,000 sq m
Non-food retail	1 space per 20 sq m	1,000 sq m
D2 including cinemas And conference facilities	1 space per 5 seats	1,000 sq m
D2 including leisure	1 space per 22 sq m	1,000 sq m
B1 including offices	1 space per 30 sq m	2,500 sq m
C2 including hospitals	General guide: 1 space per 4 staff + 1 space per 3 daily visitors	2,500 sq m
Higher and further education	1 space per 2 staff + 1 space per 15 students	2,500 sq m
Stadia	1 space per 15 seats	1,500 seats

- 3.6 In the longer term, demand management through road pricing will need to be introduced on the strategic road network. The multi-modal studies demonstrated that the widened strategic networks would not be able to cope with the increasing demand unless area-wide charging was introduced. This would need to be integrated with public transport improvements so as not to divert traffic pressure onto local routes.
- 3.7 The only projects in Dacorum are M1 widening (junctions 6A 10), West Coast Main Line modernisation, and M25 widening.

EiP Panel Report (June 2006)

- 3.8 The draft Regional Plan has been examined by a Panel of Inspectors. Their report was published in June 2006 and submitted to the Government. The Government will consider what Alterations to make to the draft Regional Plan in the light of the Panel Report. If the Panel Report is followed there would be some significant changes to the RSS.
- 3.9 The Panel would change Policy T1 to give a clearer priority to reducing traffic growth and emissions and increasing transport by more sustainable transport modes, while reflecting the functionality required of the region's transport networks in support of the Spatial Strategy.
- 3.10 The principal objective would be
 - to contribute to a reduction in the region's climate change emissions by reducing traffic growth, and ultimately achieving an absolute reduction in traffic on the region's road system.
- 3.11 Other objectives would be:
 - to increase the proportion of the region's movement carried by public transport, walking and cycling;
 - to provide access to areas of new development and regeneration;
 - to provide safe , efficient and sustainable access between homes and workplaces, schools, town centres and other key destinations;
 - to provide for efficient movement of passengers and freight through the region from the international gateways; and
 - to reduce the transport intensity of economic activity.
- 3.12 New policies T2 and T3 would aim to provide a strong framework for a programme to change travel behaviour in the region, and for considering road user charging.
- 3.13 Hemel Hempstead would be identified as a Key Centre for Development and Change. Recommended Policy T4 states that LTPs, Local Development Documents and other measures should seek to bring about a significant shift away from car use to greater use of public transport, walking and cycling. Suggested measures (any or all of which could be employed) are:
 - ensuring that urban extensions and other major development are linked from the outset into the existing urban structure through safe, welldesigned pedestrian and cycle routes and a high standard of modern public transport;

- capitalising on opportunities provided by new development to achieve area-wide improvements in public transport services, footpaths and cycle networks;
- promotion of public transport use through Quality Partnerships and other measures to provide enhanced services, improved interchanges, access, visibility and travel information and traffic measures prioritising road space for buses; and
- improvements to local networks for walking and cycling, including increasing the attractiveness and safety of the public realm.
- 3.14 T9 would be an amplified policy for walking and cycling. It would envisage the completion of the National Cycle Network in the region by 2010.

4. COUNTY CONTEXT

County Structure Plan

- 4.1 The County Structure Plan 1998 is still extant, but will be replaced by the Regional Spatial Strategy. The main strands of the strategic approach are:
 - the aim to direct development in such a way that fewer and shorter journeys are possible, and that passenger transport, walking and cycling are more attractive and viable options;
 - programmes to increase public awareness and encourage greater use of alternatives to the car;
 - a more balanced and integrated approach to all transport investment; and
 - programmes to improve the provision for and the reliability, image and safety of passenger transport, walking and cycling.
- 4.2 The transport strategy is aimed at not only influencing travel patterns directly through its own policies and by working with others, but also ensuring that people will be able to access the places and services they require even when cars can be used with less freedom than they are today.
- 4.3 New development is considered in sustainability terms with the formulation of an appropriate sustainable access package. Larger proposals must be assessed for passenger transport accessibility. Existing large-scale employers are expected to produce commuter plans to minimise car use and such plans will also normally be required for new developments.
- 4.4 New road construction should normally be limited to meeting the needs for existing levels of traffic to achieve environmental benefits or improve safety.
- 4.5 Other policies cover enhancement of accessible modes, Environmental Traffic Zones and the role of maximum parking standards. The only Dacorum transport scheme listed is A414 Breakspear Way/Buncefield Roundabout, Hemel Hempstead.
- 4.6 Key aspects of the parking policy are as follows:
 - All non-residential development with significant parking implications should be in locations with good access to means of travel other than the car;
 - The parking standards for these developments should be expressed as maxima, the main emphasis being on minimum provision to meet operational and customer requirements;
 - The travel needs of employees should be catered for either by public transport or, to the extent that car usage is necessary, by cars being shared with other users.
- 4.7 Following adoption of the County Structure Plan, the County Council developed a range of parking policy:

- Car Parking Management in Hertfordshire
- Supplementary Planning Guidance (SPG) to Structure Plan Policy 25 Car Parking: Parking Provision at New Development
- Best Practice Guide: Parking Provision at New Development (March 2003)
- Draft policy on maximum parking standards on residential development (HCC).
- 4.8 The SPG implies that:
 - (a) For off-street car parks:
 - Parking spaces should be within an acceptable walking distance of shopping centres and dedicated to short stay parking
 - Medium and long stay parking should be accommodated in car parks further away from shopping and employment centres
 - The supply of long stay car parking supply used by employees should be restricted if acceptable transport alternatives exist.
 - (b) For on-street car parking:
 - Priority should be given to residents' parking needs
 - Short stay parking associated with shopping and business visitors in streets within easy walking distance of the shopping centre, should be permitted.
- 4.9 Parking charges should be structured to reinforce these objectives. The strategic approach to management should ensure that the building of new development and/or introduction of new parking controls (controlled parking zones) do not cause parking displacement elsewhere.
- 4.10 Parking restraint at non-residential development is further applied according to its accessibility. A zonal approach was advocated:

Zone 1	0-25% of the standard
Zone 2	25-50% of the standard
Zone 3	50-75% of the standard
Zone 4	75-100% of the standard

Zone 1 is the most accessible location, typically being a major town centre well served by public transport such as Hemel Hempstead. Dacorum defined its zones in separate supplementary planning guidance (adopted on 24 July 2002 and incorporated into the compendium of Area Based Policies – Supplementary Planning Guidance published in May 2004).

- 4.11 The County Council's SPG considered that commuted payments in lieu of parking were no longer acceptable, and introduced the concept of accessibility charges; a fixed charge per unit which would be used to contribute towards provision for non-car modes of transport.
- 4.12 The residential element of the SPG required review because it failed to comply with Government advice in PPG3 on the average standard of 1.5 car parking spaces per dwelling (maximum). Following policy development work, revised standards were devised and have been incorporated in the Dacorum Borough Local Plan 1991-2011.

Developing A Green Travel Plan: A Guidance Note

- 4.13 This guidance prepared by the Hertfordshire Technical Chief Officers Association (HTCOA) supports Structure Plan Policy 25. The purpose of a Green Travel Plan (GTP) is for an organisation to examine the transport movements that are made to and from its premises, by its employees, clients and customers, and promote the use of sustainable transport measures for the carrying out of those movements. A GTP should be tailored to the particular characteristics, specific problems, issues and opportunities for the site, and would not require implementation of all the possible measures listed, although they should be assessed for appropriateness.
- 4.14 The overall requirement of a GTP is adoption of a package of measures that will lead to agreed targets, performance measures and a monitoring regime in respect to sustainable modes prior to the commencement of the development. The targets should be aimed at reducing the number of trips made by car in favour of other modes, and where applicable, improving the transport efficiency of the organisation's delivery fleet.
- 4.15 The guidance sets out criteria for when a GTP will be required in connection with a planning application:
 - Food retail, non food retail, cinemas and conference facilities, Places of Assembly in Use Class D2, including leisure, over 1,000 sq m gross floor area (GFA)
 - Business uses (including offices), hospitals, higher and further education over 2,500 sq m GFA
 - Stadia over 1,500 seats
 - Factories and warehouses over 5,000 sq m GFA

These figures are a guide and a GTP may be required for smaller developments, which would either have a significant transport, impact or are in a sensitive area.

4.16 The targets adopted must be achievable and clear linkages must be made between the proposed measures and targets. Procedures must be internally consistent and an audit trail will be required. Monitoring should demonstrate that progress is being made towards the targets, or allow review if some elements are unsuccessful. Encouraging sustainable modes can involve physical measures (on and off-site) and financial measures and promotion. The developer or occupier should appoint a Green Travel Plan Co-ordinator.

Local Transport Plans

4.17 The Local Transport Plan 2001/02 – 2005/06 still has a few months to run. Its successor, the provisional Local Transport Plan 2006/07 – 2011/12 will be finalised in July 2006. Under the Transport Act 2000, Annual Progress Reports have to be produced.

Local Transport Plan 2001/02 - 2005/06

4.18 Its objectives are:

- to improve safety for all by giving the highest priority to minimising the number of collisions and injuries occurring as a result of the transport system.
- to reduce the need for the movement of people and goods through integrated land use planning, the promotion of sustainable distribution and the use of telecommunications.
- to obtain best use of the existing network through effective design, maintenance and management.
- to develop a transport system, which provides access to employment, shopping, education, leisure and health facilities for all, especially including those without a car and those with impaired mobility.
- to minimise any adverse effect of the transport system on the built and natural environment and thereby improve personal health.
- to ensure that the transport system contributes towards improving the efficiency of commerce and industry and the provision of sustainable economic development in appropriate locations.
- to work in partnership with transport providers and users to achieve an efficient, affordable and enhanced transport system, which is attractive, reliable, integrated and makes best use of resources.
- to raise awareness and encourage the use of more sustainable modes of transport through effective promotion, publicity and information.
- 4.19 The framework for delivering schemes comprises three categories:
 - area plans
 - maintaining existing service levels
 - countywide themes
- 4.20 Dacorum is in the West Hertfordshire area, the only area programmed to have its Area Plan prepared outside the LTP period (2006/07 2007/08). However the Hemel Hempstead Transportation Plan had been produced in the mid 1990s, and provided the basis for expenditure on bus infrastructure, cycling facilities, parking (Controlled Parking Zone) pedestrian facilities, safe routes to schools and traffic management. There were also some limited road junction improvements on the main road network.
- 4.21 Work has commenced on preliminary plans for Tring and Berkhamsted. Other studies commenced under the Area Plan were the Green Bus Corridor Feasibility Report (Draft for Discussion May 2003), and the A4251 London Road/Box Lane Strategy Study (2002) which resulted in new traffic signals and works to the Station Road roundabout.
- 4.22 The County Council is also involved with the Central Chilterns Area Traffic Management Project which borders Tring.
- 4.23 The County's Rail Prospectus identified the needs for improved station interchange facilities.

- 4.24 A number of transport problem areas were identified for long term measures, i.e. outside the LTP period
 - Water End village
 - High Street/New Road, Northchurch
 - Bovingdon
 - Pix Farm Lane to A4251
 - Wingrave Road junction, Tring
 - Brook Street, Tring
 - Bulbourne Bridges and Approaches

Railway Terrace, Kings Langley was also listed but is actually in Three Rivers.

- 4.25 Some bridges in Dacorum were listed for refurbishment
 - Baldersons, Hemel Hempstead 2002/03
 - Durrants Hill Canal (615), Apsley 2005/06

or strengthening

- Dudswell (1271) 2004/05
- Cherry Tree Lane (1338) 2005/06
- 4.26 Four of Hertfordshire's fifteen implemented 20 mph zones are in Dacorum: St. John's Road, Boxmoor; Berkhamsted Town Centre; Shrublands, Berkhamsted and Tring Town Centre.
- 4.27 Dacorum was also consulted on rural transport issues. Over 90% of rural households in Hertfordshire have cars, compared with 84%, in England. They make the same numbers of journeys as those in urban areas but travel 1.4 times the distance and make more car journeys. Too many cars, commercial vehicles and heavy goods vehicles (HGVs) use rural roads, especially at peak times. The dispersed settlement pattern means that few rural and bus services are commercially viable. Other issues are speeding, car parking, congestion and road maintenance. The Sustainable Transport in Rural Area Project (STRAP) seeks to provide a model for dealing with rural issues.
- 4.28 Cycling schemes included in the LTP were Miswell Lane, Tring and Station Road Phase IV, Tring Figure 5.14(1) shows a route along the Gade and Bulbourne Valleys from Watford to Tring, the Nicky Line to Redbourn and Harpenden, and links to St. Albans and the A5183.
- 4.29 Interchange schemes at Hemel Hempstead Station, the Moor End Bus Link, Hemel Hempstead Bus Precinct had been completed, and one was proposed for Tring Station. Hemel Hempstead Bus Station was also listed as a major interchange. Surprisingly Berkhamsted Station was not included.
- 4.30 The Highways Agency proposed to detrunk the A41, passing maintenance and other responsibilities to the County Council. The A5 however remained as a trunk road. Improvements were proposed to four at-grade pedestrian crossings of the A41 bypass.

- 4.31 The County Council was to work with British Waterways to explore the possibility of transferring freight to the Grand Union Canal.
- 4.32 The LTP also sets out the road hierarchy:
 - Primary routes (A41, A5, M1, M25)
 - Urban and rural main distributor roads (A4251, A414, A4146, A4147, Chesham Road)
 - Urban and rural secondary distributor roads (Queensway, Redbourn Road, Box Lane, Icknield Way, Brook Street, New Road, Northchurch
 - Urban and rural local distributor and access roads
- 4.33 The Road Traffic Reduction Act 1997 required local traffic authorities to carry out an assessment of current and future levels of traffic on their road network and then to establish targets for the reduction in actual flows or the rate of traffic growth. Hemel Hempstead was selected as one of 6 areas having urban transport plans. It had the highest base level of road-based journeys made by car (69.9%), to be reduced to 60.7% by 2011.

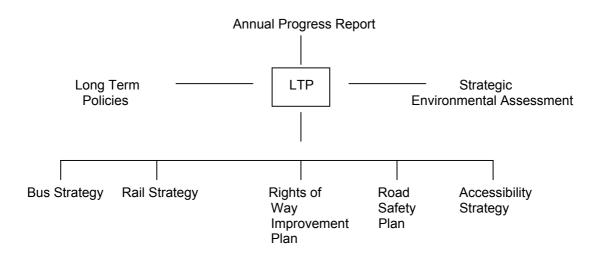
LTP Annual Progress Reports

- 4.34 The reports in 2001 and 2002 were very general and related to the county as a whole.
- 4.35 In 2002/3 the main projects were road improvements, local safety schemes and the Hemel Hempstead Old Town enhancement.
- 4.36 In 2003/04, Safer Routes to Schools in Tring and Hemel Hempstead, bridge refurbishments in Hemel Hempstead and Berkhamsted, 16 local safety schemes and 2 principal road refurbishments were implemented.
- 4.37 In 2004/05, the following items were delivered:
 - Pedestrian crossing upgrades for people with disabilities
 - Kings Langley 20 mph Home Zone (West)
 - Hemel Hempstead Safer Routes in School Scheme (including Adeyfield, Broadfield JM, Hobletts Manor Infant and JM Schools).
 - School Crossing Patrol Improvements
- 4.38 Hertfordshire LTPI Delivery Report 2001/02 2005/06 (July 206) is mainly at the County level. Some of its successes are:
 - making the roads safer (Killed & Seriously Injured down 43%, child KSI down 63%).
 - slowing the increase in traffic growth and congestion (overall growth kept at less than 1% over the 5 years)
 - increasing the number of children walking and cycling to school and contributing to improved health (66% of children travelling by sustainable means)

- urban modal car split reduced from 83.6% to 82.2%
- children's cycle training increased by 21%.
- 4.39 Local successes include a 30% increase in cycling on the A4147 link road cycle way in Hemel Hempstead. Bus service 52 (from Hemel Hempstead to Amersham/Chesham) benefited from additional funding and new vehicles. Increased patronage of 5-7% resulted. Travel plans at St. Cuthbert Mayne and South Hill Schools saw a 16% shift from car use to more sustainable modes.
- 4.40 Although the Bus Strategy (2002/03 2005/06) had a target of delivering substantial increases in Park and Ride, this was not a key priority in LTP1. The reasons were that the settlement pattern and relatively short journeys are not conducive to such measures; there are few suitable Green Belt locations where facilities can be located; and any schemes are likely to increase inter-urban car journeys and congestion across the County.
- 4.41 Regarding Area Plans, the County Council is seeking to streamline the process whilst retaining the benefits of increased participation. The current review will seek to strengthen the links with the district Local Development Plan process and align the plans to delivery of the county-wide targets.
- 4.42 The importance of transport infrastructure improvements around Maylands/Three Cherry Trees Lane is recognised.
- 4.43 The bus patronage target, to reverse the decline in bus use and recover to 2000/01 levels was not achieved, and passenger numbers continued to decline consistent with areas outside London. This was put down to the impact of congestion and fare increases. However UNO (serving the University of Hertfordshire) has increased patronage by 29%.

Local Transport Plan 2006/07 – 2010/11 (LTP2)

4.44 The second round of Local Transport Plans consists of a suite of documents:



- 4.45 The vision for the future of transport was the next 20 years is to provide a safe, efficient and affordable transport system that allows access for all to everyday facilities. Everyone will have the opportunity and information to choose the most appropriate form of transport and time of travel. By making best use of the existing network we will work towards a transport system that balances economic prosperity with personal health and environmental well-being.
- 4.46 Congestion is a key priority and concern. In Dacorum, the M1, A5 and the Chesham Road junction with the A41 are classed as congested. The A41, A4251, A414 and A4146 are identified as being congested at peak times. The route along Breakspear Way, Maylands Avenue, Swallowdale Lane and Redbourn Road is identified as a congestion hot spot. HCC advocates a holistic approach to the problem.
- 4.47 The eight objectives of the first LTP have been retained, some with slight alterations, and a new objective added around the growth of transport:
 - to manage the growth of transport and travel volumes across the county, and thereby secure improvements in the predictability of travel time.

West Hertfordshire Area Plan

4.48 The West Hertfordshire Area Plan is now been worked on. Exhibitions have been held in Berkhamsted and Tring. Arup have been appointed to carry out a desk top study covering existing information and current and emerging issues to set the framework for the development of the Urban Transport Plan strategies and a time frame for their production. Forums will be set up including transport stakeholders, local members and a cross-section of the community. An officer steering group has been established. The outcome of the desk study could be reported in October 2006.

Road safety

4.49 Numbers killed and seriously injured (KSI) have fallen, but there has been little change in number of slight collisions. Hemel Hempstead was identified as an area with high child KSI collisions and safety training is being provided.

Pollution

- 4.50 Districts provide annual statements showing their commitment in delivering the Hertfordshire LTP. Dacorum has no Air Quality Management Areas (AQMAs), but pollution levels are continuously monitored.
- 4.51 The number of noise complaints has fallen on average. 1.5% of the total relates to road transport, and 1% to air and rail.

Indicators and locally relevant targets

4.52 Highway authorities are required by the Department for Transport (DfT) to include 17 mandatory indicators and up to 20 locally developed indicators. These must reflect the overall transport objectives, and in the majority of cases must show 'outcomes' (e.g. reduction in road casualties) rather than "outputs" (number of safety schemes installed).

Mandatory Indicators

Maintenance

- 4.53 The County is setting a target to achieve a 'steady state' on the following indicators:
 - Principal Road Condition percentage of network with negative residual life (new baseline to be established – data being collected)
 - Non-principal classified road condition percentage where structural maintenance should be considered (19.44%)
 - Unclassified Roads percentage where maintenance should be considered (19.29%)
 - Footway condition percentage where maintenance should be considered (52%).

This will ensure that maintenance will be maintained at current levels, i.e. deterioration will be halted.

Road Safety

- 4.54 The targets are as follows:
 - Total KSI on roads in County reduce by 40% to no more than 600 casualties per annum.
 - Children KSI reduce by 50% to no more than 56 casualties per annum.
 - Total slight casualties no increase.

Passenger Transport

- 4.55 The key criteria to improve bus use are cost, frequency and reliability. The County Council has no control over the 55% of services provided on a commercial basis.
 - Number of bus journeys (i.e. boardings) p.a. maintain 2003/4 level to halt the decline of 9% over the past 5 years.
 - Percentage bus passengers satisfied with local provision of passenger transport services increase from 55% (2003/4) to 60% (2009/10).
 - Percentage of buses keeping to schedule (for services at intermediate timetabled points) 80% by 2010/11. The Traffic Commissioner's minimum punctuality target has been set at 70%.

Accessibility

4.56 The target is to reduce the percentage of people who find it difficult to travel to a local hospital from 29% to 24% by 2010/11. This could potentially be affected by changes in health service provision.

Change in area-wide traffic mileage

4.57 Change in area-wide traffic mileage (vehicle kilometres per day) – baseline 20.7 million (2004/05), target 22.4 million. Under national growth forecasts the figure would be 23.5 million vkpd, so the target represents a slowing of growth.

Cycling trips

4.58 The target is to increase the number of cycling trips by 11% across the authority (based on 18 monitoring sites, two of which are in Dacorum).

Mode share of journeys to school

- 4.59 The indicator is:
 - the percentage of pupils who travel to school using sustainable modes age 5-10 increase from 49% to 51.5%, 11-16 increase from 64% to 66.5%.

Congestion

4.60 Hertfordshire is not required to set a congestion projection for this plan. A new indicator is to be developed from data to be supplied by DfT. The measures needed to deliver journey time reliability will be delivered through the County Council's Congestion Plan.

Air Quality

4.61 A new indicator is to be developed if an AQMA is declared.

Non-Mandatory indicators (set by the County Council)

- 4.62 These are:
 - percentage of users satisfied with local provision of passenger transport information to increase from 39% to 50%.
 - percentage of total length of footpaths and other rights of way that were easy to use by members of the public to increase from 61% to 80%.
 - percentage of schools with School Travel Plans to increase from 14% (2003/04) to 83% of all schools.
 - percentage level of compliance with 30 mph speed limit to increase from 56% to 60%.

The final indicator is to double the annual number of journeys on the Abbey Line between St. Albans and Watford, a national pilot Community Rail Partnership.

- 4.63 Section 12 sets out the Five Year Implementation Programme, based on the provisional indication of the levels of LTP funding that the County will receive over the Plan period. It is split into Integrated Transport and Maintenance schemes. Delivery will also be funded from other sources including HCC, external partners, developers (s.106) and Government initiatives.
- 4.64 The new format of LTPs means that a number of "daughter" documents are produced which set out the strategies in more detail. These are:

- Bus Strategy
- Rail Strategy
- Rights of Way Improvement Plan
- Road Safety Plan
- Accessibility Strategy.

Bus Strategy

- 4.65 The Bus Strategy recognises the decline in the number of passengers (averaging around 2% per annum) since the 1990s. The principles of the deregulated approach in the Transport Act 1985 remain. Operators are free to register services which can be run without public revenue support, and the County Council has to consider the needs not met by this network and arrange any additional services required. The measures to stop the decline will involve improved bus infrastructure and passenger facilities, improved information systems, local bus priority measures, and partnership working with operators under the Intalink programme.
- 4.66 Bus punctuality is a new requirement with targets being set by the Traffic Commissioner.
- 4.67 The comprehensiveness and accessibility of the network will be judged against maximum walking distances to a bus stop of 200m in town centres, 400m in urban residential areas and 800m in rural residential areas. A network review will be undertaken in 2006/07.
- 4.68 The County Council is also involved in school transport planning and providing specific services. Demand responsive schemes are being investigated in rural areas.
- 4.69 Hemel Hempstead is one of the areas where a Bus Punctuality Improvement Partnership will be set up, involving bus operators, the local authority and the Police. They will monitor services at selected points and use available operator information to determine what action is needed.
- 4.70 Automatic Vehicle Location will enable improvements in reliability and punctuality. The County Council has identified 100 key bus corridor/business where it is evaluating specific issues.

Rail Strategy

- 4.71 The Railway Act 2005 brought about a major review of the structure of the industry, with strategic planning and franchising functions passing back to the DfT, and Network Rail assuming a wider planning role in addition to its prime function as manager and maintainer of network assets.
- 4.72 Integration with other forms of transport has not always been carried out to the best effect. The county has a dense network of stations and journeys to stations are relatively short which should encourage access by bus, taxi, cycling and walking. HCC will prioritise stations where access needs to be improved.
- 4.73 The route strategy for the West Coast Main Line refers to concerns about the effect on Hertfordshire's capacity arising from development further north. The

service roles are employment access (Hemel Hempstead), and local economic and social viability (Hemel Hempstead, Berkhamsted and Tring). The PlusBus scheme (through ticketing) will be expanded to all stations with a local bus service. Watford and Hemel Hempstead are identified as important growth sites for business relocation and contra-peak commuting.

- 4.74 Proposals include the "Gateway" station at Tring, which will improve sustainable access; Disability Discrimination Act access to the island platform at Berkhamsted, and all platforms at Hemel Hempstead (priority location). Feasibility and funding will need to be established. Upgrades of cycle parking and Computerised Information System improvements are also proposed.
- 4.75 The strategy provides annual usage figures for stations and their national rankings. The busiest stations in Hertfordshire are St. Albans (2.7 million rank 33) and Watford Junction (1.9 million rank 50). Figures for Dacorum are as follows:

Table 3 Annual Station Usage					
	Entries	Exits	Rank		
Hemel Hempstead	624,879	648,461	225		
Berkhamsted	518,665	523,743	277		
Tring	208,748	213,203	582		
Kings Langley	170,026	173,292	673		
Apsley	123,064	124,457	833		

Source: Office of Rail Regulation (2002/03)

Rights of Way Improvement Plan

- 4.76 The purpose of the Rights of Way Improvement Plan is to help address sustainable transport and road safety issues, taking into account wider agendas such as biodiversity, community safety, culture and tourism, economic regeneration, health and social exclusion. It is the prime means by which highway authorities identify the changes and improvements to local rights of way networks in order to meet the Government's aim of better provision for walkers, cyclists, equestrians and people with disabilities. It has two parts: the Assessments and the Statement of Action.
- 4.77 Overall Hertfordshire has over 3100 kilometres of Public Rights of Way 71% public footpaths; 20% public bridleway; 51 Byways Open to All Traffic (BOATs); 4% Roads Used as Public Paths (RUPPs). The average distance from a stable or livery yard to a bridleway is 1 kilometre.
- 4.78 The main shortcomings of the network are:
 - Its disjointed nature
 - Perceived barriers
 - Type and consistency of surfacing
 - Unco-ordinated approach to provision of information
 - Lack of specific provision and allowance for people with disabilities.

- 4.79 Hemel Hempstead is one of the towns with the most direct off-road links to the surrounding countryside. Three parishes in Dacorum, Tring Rural, Nash Mills and Markyate have no bridleways.
- 4.80 Actions in the county are to be concentrated in nine project areas. The West Herts Area (Berkhamsted, Tring, Hemel Hempstead and the AONB) is due to have plans prepared in 2007-08.
- 4.81 Twelve Core Actions are proposed:
 - Develop a range of routes that cater for the needs of people with limited mobility and visual impairment*
 - Develop the network from significant public transport connections*
 - Reduce the number of unnecessary physical barriers on the network
 - Promote Hertfordshire's countryside to residents and visitors
 - Develop appropriate, well-maintained links into the countryside for use by local people
 - Create and develop off-road routes linking communities with places of work, schools and other local facilities*
 - Extend the network currently available to cyclists and horse-riders*
 - Help people wishing to improve or maintain their health by developing a range of circular off-road routes
 - Ensure that opportunities to protect, extend and enhance the off-road network are included in proposals for new developments
 - Where the off-road network is affected by busy transport routes, work to ensure that appropriate measures are taken to improve the safety and attractiveness of the routes for users*
 - Address problems of fly-tipping, litter and dog-fouling in partnership with appropriate local and regional agencies
 - Identify and address potential demand for access to the countryside amongst those who currently do not use the network*
 - * Action with direct relevance to LTP objectives and performance indicators

Road Safety Plan

- 4.82 The average fatal road casualty has a cost to society of £1.57m (Government figures). The Road Safety Plan sets out the means by which Hertfordshire's casualty reduction targets will be met through a range of prevention and reduction measures. Significant progress has been made with KSI and child KSI, but not slight casualties.
- 4.83 Road accidents are recorded and where there is concentration they are included in the Hazardous Sites Report which feeds into the Integrated Works Programme (IWP). Problems can sometimes be resolved by physical alterations to the road layout. Other proposals involve education, training and publicity (for both adults and children). The severity of accidents is often increased by the failure to wear seat belts. The Police contribute to accident reduction through enforcement, and safety cameras and traffic calming help to reduce speeds.
- 4.84 Specific schemes in the Draft IWP for Dacorum are St. Johns Road, Boxmoor; Bennetts End Road; A41; B4506 at Ringshall; M25, Junction 20;

A414; Two Waters Road; Plough Roadabout; A4251 junction with Durrants Hill Road.

Accessibility Strategy

- 4.85 The Social Exclusion Unit Report "Making the Connections" (2003) highlights the fact that poor access to key services contributes to social exclusion. Barriers include inadequate passenger transport, lack of access to private transport, and the prohibitive cost of fares.
- 4.86 To maintain their independence and contribute to quality of life, residents of the county should be able to access all facilities within reasonable time, with reasonable ease and within reasonable cost.
- 4.87 The objectives of the Accessibility Strategy are:
 - to support those who are disadvantaged to achieve their potential and to access sustainable employment.
 - to work in partnership with transport providers to achieve an efficient, affordable and enhanced transport system.
 - to develop a transport system that provides access to employment, shopping, education, leisure and health facilities for all, including those without a car and those with disabilities.

Each district will need to address the issue of accessibility in the local development framework and local area agreements.

- 4.88 The audit includes hospitals (acute, community & diagnostic, intermediate care), GPs, dentists, opticians, primary and secondary schools, FE Colleges, Libraries, Employment (over 50 employees) and food shopping. Access to pharmacists, chiropodists, mental health facilities, post offices, rural tourist facilities and leisure facilities will be added to the list on later updates. The strategic audit for facilities used the "Accession" mapping software that was commissioned by DfT, which involves access by train or bus within 60 minutes or 30 minutes.
- 4.89 The main areas with poor access in Dacorum are:
 - Hospitals Tring environs, Gaddesden, Ashridge, Markyate
 - Dentists Long Marston, Wilstone
 - Opticians Long Marston, Wilstone
 - FE Colleges Tring and surrounding area, Gaddesden, Markyate, Kings Langley. Accessibility in the Tring area is likely to be improved by the addition of FE colleges in Buckinghamshire
 - GPs Long Marston, Wilstone, strip to SW of Tring
 - Libraries Long Marston, Wilstone
 - Primary Schools Ashridge
 - Secondary Schools– Long Marston
 - Supermarkets Long Marston
 - Employment Long Marston

School Travel Plans

- 4.90 20% of morning peak hour traffic is concerned with journeys to school. Every year fewer children walk or cycle to school and more travel by car. This means children have fewer opportunities to develop travel habits benefiting their health and independence. Meanwhile road dangers, congestion and pollution increase due to the sheer number of vehicles concentrated around schools.
- 4.91 A school travel plan can provide a planned approach to the hundreds of school journeys made each day. HCC has 4 school travel advisers available to support schools, funded by the Department for Education and Skills and the Department for Transport. Their role is to develop travel plans and to review, monitor and evaluate existing plans. They work closely with schools to help them through the process from setting up their forum group and establishing baseline information from a travel audit, to establishing their objectives and writing an action plan.
- 4.92 Schools with approved travel plans are eligible for a capital grant of £3,750 and £5 per pupil for primary schools, and £5,000 and £5 per pupil for secondary or special schools. The grant may be used for capital on-site measures that support the aims and objectives of the travel plan eg. cycle shelters, covered waiting shelters, footpaths and fencing.

Table 4 Progress with School Travel Plans in Dacorum

Town/Area	Junior	Middle	Secondary	Special
Berkhamsted	1 (5)	2 (0)	0 (1)	N/A
Hemel Hempstead	15 (20)	N/A	4 (2)	1 (2)
Tring	1 (3)	N/A	0 (1)	N/A
Remainder	1 (11)	N/A	1 (0)	N/A
			S	Source: HCC

- NB. Figures in brackets are schools without plans.
- 4.93 Four junior schools have submitted travel plans that do not meet current DfES/DfT criteria.
- 4.94 School Travel Plans are a comparatively recent initiative, and their implementation and monitoring will be crucial. The DfES grant for School Travel Plan Advisors has been secured until 2008.

Long Term Strategy (July 2005)

- 4.95 The longer term vision is contained in 30 policies/strategies which cover a 20 year period. They can be classified into four categories:
 - Area plans (covering 10-15 years)
 - Maintaining existing service levels
 - Countywide themes
 - Supporting policies

West Hertfordshire Area Plan

- 4.96 The Area Plan is targeted for completion between 2006 and 2008. During the five year period of LTP1 a number of transport schemes were carried out following local consultation, including pedestrian improvements, cycling and passenger transport schemes and Park & Ride studies for Hemel Hempstead. Traffic calming also took place along the A4251 and in Kings Langley. The local programmes will be enhanced by having an Integrated Transport Plan.
- 4.97 Development of the plan will concentrate on the following:
 - Cycle facilities (development of cycling strategy)
 - Passenger Transport Infrastructure, particularly the interconnections between the towns to improve access, investigation of use of passenger transport and its integration with other transport systems
 - Parking (keep under review)
 - Pedestrian Facilities (improve existing routes in A41 corridor, develop new links and additional crossing facilities within towns
 - Safer Routes to Schools (take up of initiative to date has been poor)
 - Traffic management (further work on A41 as drivers still tend to use A4251)
 - Town plans:

Hemel Hempstead – links to Old Town; safety measures with particular major urban road junctions; links with rail and access to airports; review Park and Ride; passenger transport strategies; Bus Punctuality Improvement Plan; develop transport planning for major housing and industrial developments; look at local market.

Berkhamsted – similar to Hemel Hempstead, with addition of Gravel Path; Safe Routes to Schools with all 11 schools; local tourist attractions; cycling facilities.

Tring – similar to Hemel Hempstead, with addition of countryside; A41; tourism; cycling.

4.98 Long term objectives include reducing A41 noise levels; major public transport integration between all settlements (not just towns) stratifying market type in the three towns to achieve better economic integration; improving tourism.

5. DACORUM BOROUGH COUNCIL CONTEXT

Hemel Hempstead Transportation Plan (1995)

- 5.1 The Transportation Study which provided the basis for the Plan was carried out in the early 1990s. It made use of a traffic model developed by the consultants, Wootton Jeffreys. The Hemel Hempstead Transportation Plan identified the following problems:
 - Congestion particularly on the A414 at peak periods
 - air quality
 - poor access to the railway station
 - improvement needed to bus services linking the railway station, residential, employment, education and leisure areas
 - need to improve pedestrian access
 - need for an integrated cycle network
 - commuters parking in residential areas
 - imbalance in parking provision
 - rat running and speeding traffic
 - lack of travel information
- 5.2 Work to resolve these included improvements to bus stops and shelters and refurbishment of the bus station; developing the cycle route network; development of managed parking; improved pedestrian facilities; safety measures and safe routes to schools; traffic calming to reduce vehicle speeds; urban safety management schemes.
- 5.3 A northern bypass was included amongst the options for reducing congestion and relieving residential areas. Its indicative alignment went from the A41 near Bourne End. Passing close to the northern edge of Hemel Hempstead and joining the M1 where it crosses Redbourn Road (see Diagram 1). The option would have provided a satisfactory traffic solution, but was one of the more costly, did little to encourage the use of public transport, and had significant adverse environmental impacts. It was comprehensively rejected at the consultation stage.

Dacorum Borough Local Plan 1991-2011

5.4 The Borough Plan sets out generic transport policies and proposals. Parking standards are set out in Appendix 6. The policies reflect the emphasis on sustainable modes contained in higher tier documents, with priority being given to walking, followed by cycling, passenger transport, powered two wheel vehicles and finally other motor vehicles. Supplementary Planning Guidance on Accessibility Zones was produced in 2002 in accordance with advice from the County Council.

- 5.5 Policy 49 sets out the transport planning strategy. Its main principles are to:
 - reduce the need for movement of people and goods through careful location of new development
 - reduce traffic, especially in peak periods
 - only support road schemes which meet safety, environmental or local access requirements
 - control car parking so as to discourage unnecessary car use and encourage a more efficient use of land (where parking provision is reduced development should contribute to alternative travel modes and if appropriate parking management)
 - encourage transport measures which improve facilities for passenger (public) transport, walking and cycling
 - give priority to more sustainable modes of travel in designing new development (e.g. walking is the first priority).
- 5.6 The Plan contains policies relating to roads and highway management (52-55), and encourages walking, cycling, access for disabled people, passenger transport and use of rail and canal for freight carriage (61-66).

Roads

- 5.7 Policy 52 sets out the main Road Hierarchy and is shown in Diagram 2. The purpose of the hierarchy is to ensure traffic is concentrated onto roads appropriate for its journey purpose, particularly heavy goods vehicles which should be kept away from local roads. The hierarchy consists of:
 - primary routes motorways, trunk roads
 - main distributor roads principal, non-principal
 - key local distributor roads transition, local collector and local spur roads
- 5.8 The road improvement strategy is set out in Policy 53. Improvements to the network will be designed to channel long distance through traffic onto the motorways and trunk roads (M25, M1, A5, A41). Within Hemel Hempstead improvements to the A414 will be limited to those primarily designed to meet local access and movement needs and/or improve highway safety. A new north eastern local traffic relief road linking the M1/A414 with the A4146 will be developed incrementally. For the remainder of the Borough only small scale improvements designed to solve significant local environmental and safety problems will be considered.
- 5.9 DBLP transport proposals are listed below. They will need to be updated and reviewed.

Transport Proposals

Part 1 Short Term Schemes

T1 M1 widening. Work has commenced and is due for completion in 2008. The M10 is to be downgraded to form a continuation of the A414, and the proposal allows segregation of local traffic from M1 traffic. A cycle lane will adjoin the new dual carriageway, terminating

at the Breakspear Way/Green lane roundabout, which will be revamped as part of the proposal.

- T2 A41 Aston Clinton Bypass. Completed. Includes advisory cycle lanes
- T3 Improvements to A414 Maylands Avenue Roundabout
- T4 Junction Improvements to increase capacity of A414 Breakspear Way roundabout. See T1.
- T5 Widening and junction improvements on Swallowdale Lane (from Three Cherry Trees Lane to Redbourn Road
- T6 Widening and junction improvements. A4147 Redbourn Road (Cupid Green to Queensway).
- T7 Widening and junction improvements to complete North East Relief Road (line of existing Three Cherry Trees Lane). Developer contributions.
- T8 Moor End Bus Link Completed. Replacement bus/cycle link related to Riverside development.
- T9 Berkhamsted Railway Station Safeguarded.
- T10 Maylands Avenue Industrial Area Lorry Park Safeguarded.
- T11 Tring Railway Station Safeguarded – Gateway proposals (see para).
- T12 Hemel Hempstead Bus Station Safeguarded.
- T13 Canal Fields Car Park, Berkhamsted Completed.
- T14 Hemel Hempstead Railway Station Safeguarded
- T15 Bourne End Service Area
- T16 Parking Management Schemes Implemented – possible extension to Hemel Hempstead Controlled Parking Zone.
- TWO WATERS AND APSLEY
- TWA11 Car park on filterbeds site, opposite Frogmore Mill, Durrants Hill Road Implemented.

- TWA12 Improvements to Durrants Hill Road limited carriageway widening and new footpaths involving bridge widening or new footbridge Implemented.
- TWA13 Signalisation of Durrants Hill Road/London Road junction Implemented.
- TWA14 Improvements to Featherbed Lane and junctions with London Road. Dependent on developer funding for Manor Estate proposal. Involves a new railway bridge and junction improvements/widening.
- TWA15 Demolition of 235 and 237 London Road and widening of Featherbed Lane/London Road junction. Dependent on developer funding for Manor Estate.
- TWA16 Apsley Railway Station Safeguarded.
- TWA17 Duplicates T12.
- TWA18 Cycle route between Two Waters, Apsley and Nash Mills .
 Series of connecting links creating a dedicated cycleway wherever possible and using shared surface paths and relatively quiet roads otherwise.
 Partly implemented. Issue of HCC failure to adopt.
- TWA19 Improvements to footpath network Set of miscellaneous improvements – creating links, enhancing the environment and convenience of existing paths and allowing shared use with cyclists where appropriate – footpath Ebberns Road/Mills Street; railway bridge and approaches Edward Court – Weymouth Street (TWA4 Manor Estate); Salmon Meadow footpath r/o Sainsbury's; Stationers Place/London Road and new bridge to Dickinson Quay and Belswains Lane; London Road (opposite Apsley Station); Red Lion r/o Sappi Graphics, Kingfisher Drive, Swan Mead/Teal Way.

Part II Long Term Schemes

- Ti New single carriageway Water End Bypass No detailed line. LTP1 long term problem area. Not referred to in LTP2. Nature conservation issues
- Tii Further footway improvements A416 Kings Road Detail to be decided. Unprogrammed.
- Tiii Tunnel Fields, link to New Road, Northchurch and associated work to junction of New Road/A4251.
 Will provide through link to Billet Lane via Springfield Road. Impact on Wildlife Site. Unprogrammed.

- Tiv Widening to dual carriageway of NE Relief Road Follow up to T7. Unprogrammed.
- Tv Hemel Hempstead cycle network Advisory routes and crossing improvements. Details to be decided. New Borough-wide strategy in preparation.
- Tvi Hemel Hempstead Pedestrian Route Network Advisory routes and crossing improvements. Details to be decided.
- Tvii Hemel Hempstead Area Safety & Traffic Calming Schemes
- Tx Tvii Adeyfield/Highfield Tviii Grovehill/Woodhall Farm Tix West Hemel Hempstead Tx A4251 Corridor, Apsley Implemented.
- Txi Hemel Hempstead Park and Ride Schemes Gadebridge Park – operational and enhanced. Breakspear Way
- Txii Station Road cycle route, Tring Completed.
- Txiii Miswell Lane cycle route, Tring Less of a priority with Tring Cycle Campaign.
- Txiv Construction of works to improve street environment Berkhamsted High Street Eastern section.
- Txv Additional public off street car parking by further decking of Water Gardens north car park Part of Civic Zone. Reference to commuted payments should be deleted.

Parking

- 5.7 Local parking is addressed in Policies 57-60 and standards contained in Appendix 5. Following the Inspector's Report on the Local Plan Inquiry (2000/01), cycle and new lorry parking standards were introduced.
- 5.8 The policies cover:
 - a general strategy for parking
 - provision and management of private parking provision
 - public off-street parking
 - lorry parking
- 5.9 The general strategy adopts maximum demand based standards, with provision reduced below these levels in more accessible areas ("Accessibility Zones for the Application of Car Parking Standards" adopted on 24 July 2002). Long stay commuter parking is discouraged by limiting space and managing demand. Short stay visitor and shopper parking will be managed to

reduce dependence on the car, while supporting viability of local/town centres.

- 5.10 New development with a significant parking requirement will only be permitted if:
 - parking provision is minimised;
 - measures are taken to address problems arising from parking demands (i.e. traffic generation, congestion and on-street parking); and
 - if appropriate, encourage alternative modes of transport.

Additional restraint should be applied to non-residential development, including a green travel plan for major developments. For residential development, parking needs will normally be met on site.

- 5.12 Overall, the consultants Harrison Webb, working for HTCOA and the County Council concluded that the recommended standards broadly met the requirement of Government policy in PPG3 that parking should not exceed an average of 1.5 spaces per dwelling. Car ownership in Dacorum in 2001 was 1.37 cars per household, slightly below an average standard of 1.5 parking spaces per household.
- 5.13 The Local Plan refers to specific proposals for car parking at Canal Fields, Berkhamsted (improvement and management - T13, implemented), Durrants Hill Road, Apsley (new public car park – TWA11, implemented) and the long term scheme for a possible additional deck at Water Gardens North (Txv – affected by Civic Zone proposals).
- 5.14 In October 2003, Controlled Parking Zones were introduced to the three main towns, together with charges for town centre car parks. The measures included:
 - the introduction of length of stay designations and charges in the Council's off-street public car parks in Hemel Hempstead and Tring, and some changes to the charging structure in the Council car parks in Berkhamsted;
 - the introduction of on-street charges in Berkhamsted;
 - the introduction of residents parking schemes in the Cotterells and the Hospital area of Hemel Hempstead, and a small scheme by Tring Station; and
 - the introduction of decriminalised parking enforcement.

The zone boundaries are to be reviewed in Hemel Hempstead due to the displacement of parking outside the zone.

Park and Ride

- 5.15 Of the three Park and Ride schemes proposed in the Hemel Hempstead Transportation Plan, the Gas Board site in London Road, Apsley was deleted following the Local Plan Inquiry, though the possibility of reconsidering it in future was not ruled out.
- 5.16 The service from Gadebridge Park to the town centre has relatively low usage and is subsidised by the Borough Council. Lighting and CCTV cameras have

recently been introduced to improve safety. Viability of the service is related to the severity of parking charges in town centre car parks and other factors.

- 5.17 Hertfordshire County Council, through its agency Hertfordshire Highways, has commissioned two feasibility studies into developing park and ride using land on the north side of Breakspear Way. The first report by Mouchel concluded that a scheme serving the Maylands Avenue industrial area would be feasible. The second by Mouchel Parkman concluded that a scheme serving Hemel Hempstead Town Centre would not be viable as a stand alone scheme because charging in the town centre car parks was relatively low, and estimated demand was also low, compared to the operational costs of a bus service. Linking the two potential services from Breakspear Way would still not make a town centre service viable.
- 5.18 Since these studies, the Riverside development has opened, which might make town centre trips more attractive. Currently the only feasible scenario for a town centre link is for a company (or companies) to fund a bus to the station which could pass through the town centre.
- 5.19 The Local Plan contains Area Proposals for town centres.

Berkhamsted Town Centre Movement Strategy

- 5.20 The Movement Strategy forms part of the Town Centre Strategy and is largely implemented. The main aims were to reduce traffic speeds; improve access to the main car parks; facilitate short stay on-street parking; increase the space available to pedestrians and improve crossings and routes into and around the town centre; facilities for other special user groups; and controlled servicing for business premises.
- 5.21 The County Council and Hertfordshire Highways have been working with Berkhamsted Town Council to prepare an Urban Transport Plan.

Tring Town Centre Strategy

- 5.22 This referred to car park management and promoting walking and cycling links between Tesco and the town centre.
- 5.23 The County Council and Hertfordshire Highways have been working with Tring Town Council to prepare an Urban Transport Plan.

Hemel Hempstead Town Centre Strategy

5.24 The strategy refers to a lunchtime shuttle bus between the town centre and Maylands; converting Moor End car park to open space (depending on parking demand); a tram-type service to the Old Town (and rail station if successful); and strengthening links between the town centre and surrounding areas; pedestrian route diagram; development of modern transport interchange.

Dacorum Cycling Strategy (Draft 2005)

5.25 The Draft Strategy was the subject of public consultation in summer 2005. It is currently being revised and an aspirational cycle network is being added with the assistance of local cycling groups.

Dacorum 2015 – A Better Borough

- 5.26 Dacorum Borough Council has transport-related priorities in its community plan:
 - creating a cleaner and healthier environment calls for more people cycling and walking, and maintaining and seeking to improve public transport to reduce atmospheric pollution.
 - ensuring easy access to local employment includes the objective of encouraging the best conditions for businesses in terms of infrastructure – logistics, transport and utilities.

Hemel 2020 and Civic Zone Development Brief (SPD) (2005)

- 5.27 Hemel 2020 is the vision for long term future of Hemel Hempstead, building upon the new town master plan to ensure that the town continues to prosper well into the second half of the twenty-first century and beyond. A key aspect is to create a "more exciting, thriving, safe and clean town centre" with, inter alia, improved pedestrian areas.
- 5.28 The Civic Zone offers a major redevelopment opportunity. The development brief reiterates some of the transport aims of the Town Centre Strategy, such as improving pedestrian access, and also seeks to address wider traffic circulation to improve town centre functioning. The vision also includes giving improved priority to pedestrians, cyclists and passenger transport; improving highway design; and enhancing traffic flows, and public transport accessibility.
- 5.29 Development proposals in the Civic Zone should seek to achieve:
 - a good relationship between houses, jobs, services and passenger transport accessibility
 - reduction in traffic volume and impact particularly at peak periods
 - restriction of the main volume of traffic to primary road networks
 - discouragement of the use of the private car
 - encouragement of the use of alternative modes of transport
 - provision of a better bus station

A key priority is to improve the permeability and legibility of the area. There may be an opportunity to rationalise bus movements and promote 'bus ports' (public transport hubs where a number of bus stops are grouped together); to create a pedestrian/cycle friendly spine; to remove barriers to pedestrian movement; to address safety issues for car parks and footpaths; and to reduce the dominance of the car.

Transport Statistics

5.30 Hertfordshire has one of the highest rates of car ownership in the country. Dacorum has the fourth highest level in the county, with nearly 9% of households owning three or more cars.

% households with					
	No car	1 car	2 cars	3+ cars	Cars per household
Dacorum	17.3	40.7	32.7	9.2	1.37
Herts	18	42	32	9	1.34
East of England	20	44	28	8	1.27
England	27	44	24	6	1.11

Table 5 Car Ownership

Source: Census 2001

5.31 However there are wards where over a quarter of households do not have a car:

Adeyfield East, Bennetts End	24.9%
Hemel Hempstead Central	25.7%
Adeyfield West	26.3%
Highfield & St. Pauls	28.2%

- 5.32 In contrast the rural wards have relatively few households without cars: Ashridge (6.3%), Bovingdon, Flaunden and Chipperfield (8%), Aldbury & Wigginton (8.9%), Tring West (14.5%). There is still a potential problem regarding access to services for these people.
- 5.33 The car is the dominant mode for travel to work, with Dacorum having the second highest proportion in the county. However there are some differences between towns, e.g. the higher proportion commuting by train from Berkhamsted, using the bus and walking in Hemel Hempstead (above the County and Regional figures), and the high proportion working from home in the villages and rural areas (13.4%).

%	people a	aged 16-74 in (employr	nent who	ousually	travel to	work by	
	Car	Rail/ Underground	Bus/ Coach	Motor Cycle	Walk	Cycle	Other	Works at Home
England	61.0	7.4	7.5	1.1	10.0	2.8	1.0	9.2
East of England	64.7	6.9	4.0	1.1	9.1	3.9	0.9	9.4
Hertfordshire	64.4	10.9	3.2	1.1	8.8	1.8	0.8	9.4
Dacorum	67.4	6.4	3.8	1.0	9.6	1.2	0.7	9.7
Hemel Hempstead	69.2	8.1	5.0	1.1	10.3	1.5	0.8	8.1
Berkhamsted	59.4	15.1	2.1	0.7	10.1	0.6	0.5	11.3
Tring	67.5	7.5	2.6	1.0	9.6	1.0	0.5	10.3
Rest of Dacorum	67.1	8.1	1.9	0.9	7.0	0.8	0.7	13.4

Table 6 Travel to work to mode share (2001 Census)

5.34 The annual County Council's Traffic and Transport Data Reports have a rolling programme of traffic counts at cordon points on main routes into towns. There is only data for Berkhamsted and Tring at present. Since the survey is on the roads there is no data on rail passengers. Variations (particularly for walking and cycling) may be due to time of year and weather, but are generally very small.

		% Travelling by					
Town	Year	Car	Bus	Motorcycle	Foot	Bicycle	Car Occupancy
Berkhamsted	2001	81.9	7.8	0.5	9.1	0.7	1.26
	2004	82.2	7.9	0.4	8.6	0.9	1.27
Tring	2001	85.6	10.8	0.5	2.4	0.6	1.21
	2004	83.9	10.4	0.5	4.6	0.6	1.20
Hemel Hempstead	2002	86.6	10.4	0.6	2.2	0.3	1.28
	2005	89.3	7.8	0.6	1.9	0.5	2.19

Table 7 Travelwise Mode Split Data

6. NON-CAR TRANSPORT MODES

Introduction

6.1 This part of the report examines the measures taken to enhance and encourage use of sustainable modes of transport.

Bus

- 6.2 Arriva is the predominant commercial operator in Dacorum. Smaller operators include Red Rose, which runs the Chiltern Rambler service on Sundays and Bank Holidays during the summer (supported by Hertfordshire County Council). Special school buses serve schools within and beyond the Borough. The Borough Council subsidises the Gadebridge Park and Ride service.
- 6.3 Dacorum Council for Voluntary Service (CVS) runs Community Wheels, which has nine 13-16 seat minibuses, seven of which can accommodate wheelchairs. They can be hired by groups affiliated to the CVS and are concerned with the welfare of elderly, disabled and young people. Community Wheels also provides timetabled bus services from outlying villages to Hemel Hempstead and Tring on market days, and to Woodwells Cemetery, Hemel Hempstead on alternate Sundays. These services are supported by the County and Borough Councils.
- 6.4 Businesses on the Maylands employment area, e.g. the People building, have their own (executive) minibus service to the station and the town centre.
- 6.5 There is a dense network in Hemel Hempstead and frequent interurban links. Hemel Hempstead also has an hourly (approximately) service to London, Monday to Saturday, frequent services to Luton and Heathrow Airports as well as Gatwick and Stansted). Uno has introduced an express service from Hemel Hempstead to the University of Hertfordshire, the Galleria and Stevenage. Markyate and Flamstead have a more frequent service from St. Albans than from Hemel Hempstead.
- 6.6 In line with targets in the Bus Strategy 2002/03 2005/06, considerable progress has been made in upgrading the fleet and provision of bus shelters, as well as introduction of low platform vehicles and raised kerbs to improve accessibility. The Park and Ride site in Gadebridge Park is being made more secure by lighting and CCTV coverage.
- 6.7 Special provision for buses is made in Hemel Hempstead Town Centre the bus only link to the Plough Roundabout from Riverside, the bus and taxi area on Marlowes/Bridge Street, and the bus/cycle lane heading north along Waterhouse Street.
- 6.8 To encourage trips by public transport, the PlusBus scheme operates from Apsley and Hemel Hempstead stations. One ticket covers the rail journey and, for an additional set amount, unlimited bus travel at either end of the journey within a set area. Season tickets are available.
- 6.9 The Dacorum Borough Local Plan 1991 2011 Policy 64 on Passenger Transport seeks to improve services and waiting and interchange facilities.

Bus route network and improvement strategies for the main settlements would be prepared in conjunction with the Highways Authority.

- 6.10 The Plan also seeks to safeguard the bus station, and the bus garage at Whyteleaf Road, Hemel Hempstead. Provision of additional Park and Ride facilities was considered at Two Waters (deleted from the Plan) and at Breakspear Way. The latter was found to be potentially viable to serve the Maylands Employment Area, but not the town centre.
- 6.11 In the Bus Strategy, the standard access to a bus stop is 400 metres from the journey origin in business, residential and industrial areas, and less than 200 metres at schools, railway stations and in town centres. The Accessibility Strategy takes 800 metres as the standard.
- 6.12 As part of the Civic Zone scheme, the bus station could be relocated and brought up to date.

Rail

- 6.13 Dacorum lies on the West Coast Main Line (WCML). The Strategic Rail Authority published a strategy for the line in June 2003. It was designed to provide increased capacity for long distance passenger and freight services, as well as preserving and where possible increasing and improving the provision for peak commuter services and other inter-regional links. The WCML is Britain's longest, busiest mixed traffic railway and takes 43% of England's rail freight.
- 6.14 The Strategy envisages 80% more long-distance passenger train paths and 60-70% more trunk freight paths with capacity for longer 775 metre trains and increased gauge clearance. This has the potential to remove 5000 lorry movements from the M1/M6.
- 6.15 Concern was expressed about the effect on local and regional services particularly around busy urban centres. The solutions were to increase the maximum speed on the slow lines and platform lengthening to take 12 car units which has been completed at all four stations in Dacorum. Other infrastructure improvements that have been completed are the capacity improvement at Bourne End and the centre platform turn back facility at Tring Station which enables trains to reverse without conflicting with through traffic. This means that Tring can be a start point and terminus at peak times.
- 6.16 The specified frequency of passenger trains per hour is as follows:

Table 8 Passenger Tra	ain Frequency Peak	per hour Off Peak
Kings Langley Apsley	2 2	2 2
Hemel Hempstead	4	4
Berkhamsted	4	4
Tring	3	2

6.17 Silverlink (the Train Operating Company – TOC) has introduced new trains, and later running to Tring. Punctuality has improved and the company is one of the top performers. Improvements to Dacorum's stations, apart from the

increase in platform length include new waiting shelters at Apsley and Berkhamsted, easier stepping distances from platform to train at Berkhamsted and Hemel Hempstead, a new footbridge at Apsley, and additional cycle storage at Berkhamsted. The refranchising process is getting underway and the outcome will be known in autumn 2007.

- 6.18 Rail Travel also comes under Local Plan Policy 64. Network Rail has replaced the Strategic Rail Authority as the infrastructure provider.
- 6.19 As with the bus facilities, the four railway stations are safeguarded. In Berkhamsted the vast majority of passengers walk to the station. The forecourt at Hemel Hempstead station has been enhanced, resulting in improved provision for buses and pedestrians.
- 6.20 The main additional scheme is for improved access to Tring Station by sustainable modes, and a new station building. The project was initiated by the Tring Tourism and Transport Partnership and the concept developed through the Countryside Agency's Gateway Stations project. Although improvements to the track have been completed, the station building lacks basic infrastructure (e.g. toilets, disabled access and a waiting area) and information links and directions. The station is in the Green Belt and the Chilterns AONB, so the impact on the countryside will require careful consideration.

Cycling

- 6.21 Cycling is constrained by perceived traffic dangers, the relative lack of safe routes and the hill and valley topography (notwithstanding the use and availability of multiple gears). However it has the potential in many areas to replace short car journeys and contributes to health objectives. The proportion cycling to work in Dacorum is on a par with other parts of Hertfordshire.
- 6.22 The network diagram in the Local Plan has been partly implemented (advisory routes from Leverstock Green to Nash Mills, Hemel Hempstead Town Centre to Maylands, and Queensway to the Industrial Area). However the network only relates to Hemel Hempstead and was prepared as part of the 1995 Hemel Hempstead Transportation Plan. A cycle strategy for the Borough as a whole is being prepared with local cycling groups, and is due for completion in 2006. Consultants are currently engaged in preparing a countywide Cycling Strategy and the two documents will need to be consistent.
- 6.23 Part of the cycling groups' contribution is to identify potential routes, mainly using existing roads. However the strategy will also have to be aware of the possible extension of routes through planning proposals and applications. These might vary from sections of shared paths to the creation of a traffic-free cut-through.
- 6.24 Provision of cycle parking is required for new developments, but existing buildings often have no or unsuitable facilities. A major area of the strategy will be to upgrade existing provision, and 'retrofit' provision in other cases.
- 6.25 The Countryside Management Service has installed Sheffield stands at locations on the Tring and Berkhamsted leisure rides: Tring Museum, Mead's

Farm Shop (Wilstone), Half Moon PH (Wilstone), Angler's Retreat PH (Marsworth), White Lion (Marsworth), New Mill (Tring), Valiant Trooper (Aldbury), Dolphin Square (Tring), Bluebell Café (Marsworth), Greyhound (Wigginton), and Berkhamsted Station. Additional provision is proposed at Tring Station.

6.26 The information in the Cycle Strategy will provide leverage to obtain s.106 monies from relevant planning permissions and Local Transport Plan funding. For example, the County Council is committed to helping implement the National Cycle Network Route 57 which crosses Dacorum.

Walking

- 6.27 Dacorum has an excellent "Healthy Walks" programme, but the main aim of planning should be to encourage and enable walking as part of day to day activity.
- 6.28 The pedestrian network for Hemel Hempstead, like the cycle network, stems from the Hemel Hempstead Transportation Plan, when it was realised that the needs of cyclists and pedestrians for safe crossings overlapped. The pedestrian network therefore overlaps the cycling network to a considerable degree.
- 6.29 Measures have been put in place to improve crossing safety and accessibility, such as dropped kerbs and raised crossings. However the walking network diagram needs to be revisited, and extended to the other towns (and perhaps large villages). As with cycling, the potential for new or extended routes through planning proposals and applications will need to be recognised.

Canal

- 6.30 Carrying freight by canal has several potential advantages for bulky, nonperishable goods:
 - reducing road congestion
 - reducing numbers of HGVs
 - reducing fuel consumption (a barge uses less than half the fuel per ton mile)
 - less noisy
- 6.31 Until the 1960s the Grand Union Canal was used for freight unloaded from boats on the Thames. Products as diverse as grain, sulphur (for Coopers in Berkhamsted) and tomato puree (HP sauce factory in Birmingham) were moved by canal. With efficient crewing a boat could travel from Hayes, Middlesex to Marsworth in a day.
- 6.32 Nowadays the canal is used for recreation boating. There are no regular freight trips apart from pre-bagged coal and fuel sales to canal boat residents and canal-side properties. Occasionally it is used for one-off publicity trips e.g. carrying beer (Millennium brews).

- 6.33 The main problems regarding waterborne freight in Dacorum are the number of locks up to Tring Summit and the declining number of wharves. "Freight on Water" (Freight Study Group March 2002) identifies waterways with most potential for water-borne freight, and the local stretch of the Grand Union Canal is not included.
- 6.34 However, there are opportunities in other areas. On the lock-free section to the west of London, the canal is being increasingly used for the transport of aggregates for major building projects.
- 6.35 On the River Lee Navigation, the Edmonton Incinerator is partly fed by boatborne material. The barges connect with specially designed dustcarts. When the scheme is fully implemented, 1/3 million vehicle miles per annum could be saved.
- 6.36 In Dacorum two household waste sites and two supermarkets adjoin the canal. There may be potential for removing recycleable material by boat. The Paper Trail is also looking to transport paper by canal. A firm in Rickmansworth has boats available for trial runs. Other possibilities for regular use of the canal could involve the social inclusion agenda e.g. 14-19 years old from special schools, rehabilitation for road accident victims, and drug users.

7. AIR TRAVEL

- 7.1 Dacorum has good access to several airports. London Luton Airport is the nearest. The airport served 9.1 million passengers in 2005, 21% more than 2004.
- 7.2 The White Paper "The Future of Air Transport in the UK" supports the growth of Luton up to the maximum use of a single full-length runway (around 30 m ppa). In common with other airport operators, London Luton Airport submitted a Draft Master Plan to illustrate how the principles of the White Paper would be achieved. The draft Master Plan outlines proposals for a replacement runway with associated facilities.
- 7.3 Luton Airport Parkway station opened in November 1999, with passengers being transported to the terminal by shuttle bus. The proposed Translink guided bus way between Luton and Dunstable should link up to the Parkway station, and a tracked transit system to the terminal may be built at a later date.
- 7.4 As well as passengers, freight is carried. The amount of cargo carried fell from 26,956 tonnes to 23,745, and the number of movements from 4,119 to 3,950 between 2004 and 2005.
- 7.5 Noise is a major concern. The main departures route heads across Dacorum, with Tring, Markyate and the AONB particularly affected. There are 3 permanent noise monitors two south of Luton and one to the east. The maximum recorded noise level for each departure is used. Only one departure exceeded the night time noise limit and there were no daytime noise violations during 2005. The daytime footprint affected fewer dwellings and fewer people. The nighttime footprint shows a 22% increase in dwellings affected and a 12% increase in the number of people affected due to increased movements in shoulder periods 2300 0000 and 0600 0700.
- 7.6 The Airport supports around 14,000 jobs. The Surface Access Strategy (2000) sets targets for public transport, cycling and walking to the airport. Staff car parking has remained unchanged, but the long term passenger car park increased by approximately 1,100 spaces to complete the second phase expansion.
- 7.7 The Draft East of England Plan proposes the expansion of LLA up to the maximum capacity of the existing 2,160 metre runway (while the Panel Report effectively recommends Government policy and a higher level of throughput see para 7.2 above). LTP2 proposes improvements to Luton Airport Parkway Station, and supports the proposed tracked transit system to the Airport. It also proposed a range of other measures to give better access to the Airport, particularly for employees. The Revised Airport Surface Access Strategy (ASAS) Consultation document produced in 2005 sets out proposed measures to support forecast expansion up to 23.5 mppa in 2015 and 30 mppa in 2030.
- 7.8 The Consultation LLA ASAS has found that Luton is primarily a local airport with 1/3 of passengers originating in Greater London, a third from surrounding counties and the remainder distributed throughout the rest of the country. Employees are drawn from a much smaller area: 55% from Luton, 25% from the rest of Bedfordshire, 15% from Hertfordshire and the remainder from immediately surrounding counties.

8. ISSUES

- 8.1 The main issues relate to:
 - the level of transport infrastructure required to accommodate the new development proposed in Hemel Hempstead in the town centre, the regeneration of Maylands, and the regional proposals for new housing on its fringes;
 - poor accessibility in some rural areas;
 - rat running and goods traffic on some rural roads;
 - peak time congestion;
 - parking management and control; and
 - how to encourage use of sustainable modes of transport.
- 8.2 The desk study on the West Hertfordshire Area Transport Plan will consider the need for transport modelling and updated feasibility studies for Park and Ride. The report is due in October 2006.
- 8.3 Regarding rural roads, particular concerns have been expressed about traffic generated by premises on Long Marston Airfield and use of New Road, Northchurch (B4506).
- 8.4 Congestion from through traffic might increase in future due to developments outside the Borough (e.g. Milton Keynes, Aylesbury, Luton and Luton Airport).

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