Traffic Management Strategy

March 2005



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The Vision

1.1 Introduction

The overall vision for Essex is set out in the County Council's policy document "The Essex Approach 2001-2005" and is a clear statement of how the County Council aims to make Essex a better place to live and work. The Essex Local Transport Plan (LTP) is being developed in parallel to ensure that works on the highway contribute to the County Council's vision during the subsequent period 2006-2011.

Fundamental values in seeking to attain the goals in this Traffic Management Strategy come from the "Essex Approach", namely we

- Put people at the heart of what we do and value their views
- Are committed to fairness and enable equal access to opportunities for all
- Respect the environment for today and tomorrow
- Make best use of all resources, and seek to get better all the time
- Develop and support our staff and recognise their achievements
- Work with others to improve what we do.

This document contains Essex County Council's Traffic Management Strategy for Essex roads for the next twenty years. We would like to provide the people of Essex with the opportunity to choose the most appropriate form of transport, the infrastructure to enable their safe journey and the services for a convenient trip.

For shorter journeys, for example of less than one mile, walking, cycling or the bus will be the first modes of choice, rather than the last. For longer journeys, we would like the bus or train to be a realistic option. If after considering all the alternative modes of transport the only or preferred option is the car we want to provide a safe, free flowing, managed road network.

The **Essex Approach** declared the County Council's clear agenda for the four year period to 2005 and will, of course, be updated for the next four year period. Central to traffic management will continue to be the county's pledge to "get Essex moving again, tackling road congestion and road safety, and improving public transport".

The road network in Essex does not currently function as efficiently as it could. In keeping with the **Essex Approach** (and any subsequent revised document), the Traffic Management Strategy provides a framework to deliver improvements by providing a network which is clear, consistent and understandable to all road users so that the road network can be used in a way that is appropriate and considerate to all.

1.2 Congestion Reduction

Classically congestion is "unwanted" journey time which suggests that there is a ratio of acceptable to unacceptable journey times. Congestion represents that point where the ratio of theoretical free flow to saturated travel conditions reaches an unacceptable level, with variation either in absolute terms (journeys takes a lot longer in peaks) or in terms of unpredictability (peak journey times can be acceptable but on occasion are significantly longer).

The congestion reference flow can be calculated for inter-urban or rural links and gives a numerical value which can be compared with the actual flow. Where a ratio of 1.0 is approached the road is said to be operating at the limit of its practical capacity and will experience unpredictable journey times, congestion in peaks and be susceptible to problems caused by incidents or accidents. The long term aim is to ensure that all County Routes function with a ratio of below 1.0.

However, most congestion is caused by inadequate junction capacity so this calculation cannot be used in urban areas. Here it is better to calculate individual junction capacities. Peak spreading tends to mean that junction calculations need to be carried out for a number of hours in the peak period and modeling via a simulation package can be useful. It is our intention to monitor these peak hours and determine the average journey times for selected feeder routes into town centres. The stability of these journey times will determine the type and amount of congestion relief works that are required. Targets will be set for journey time reliability.

We will also work on a range of new initiatives intended to reduce the short-term pressure on the County's overloaded transport system. In particular, we are developing proposals for integrating transport considerations into the thinking of all our services. We recognise that, as an employer on such a large scale, and as a service provider to such a large client group, the County Council can have an important effect on travel patterns in Essex through its employment practices, opening hours and patterns of service provision.

We are also examining ways in which we can encourage partner organisations and Essex's private sector employers to take steps to limit or reduce their own contributions to congestion in the county. Already committed to a programme of Area Reviews of public transport and the introduction of park-and-ride schemes in Chelmsford and Colchester, we want to go further in encouraging the take up of public transport in order to achieve modal shift and reduce pressure on the roads.

Without action on congestion, Essex's transport system is unsustainable. Our roads are overloaded now, and things are forecast to get worse if nothing is done to slow the growth in traffic. Essex County Council's (ECC) 38,000 employees contribute a large number of vehicle movements a day to the traffic on Essex's roads and our impact is acute in some areas. In Chelmsford, the county town, for example, ECC employees play a major role in generating peak-hour traffic.

Therefore, ECC will encourage its employees to use alternative modes of travel to the car, introduce more flexible working hours and discourage travel altogether by encouraging more use of modern telecommunication facilities, for example video conferencing. We will also be re-launching the safe driving during work campaign. We will work to reduce congestion in partnership with borough, district, town and

parish councils, schools, the police and Highways Agency, Primary Care Trusts and hospitals, Essex universities, major private sector employers, the NHS and other major public sector employers. We also want to work more closely with private sector employers to help to influence travel patterns to achieve our goals.

In addition to this Essex will seek out new developments in technology to benefit the travelling public. We will implement further route management strategies and install equipment to relay delay, congestion and safety messages to car users.

We will continue to promote, where necessary, the creation of additional road space to accommodate both public transport links and to relieve areas of severe congestion.

1.3 Passenger Transport

Public and community transport is a priority in Essex for several reasons. First, it has an important part to play in reducing congestion; the more attractive public transport is with users, the easier it is to encourage modal shift. Secondly, Essex is still in large part a rural county; decent, accessible public transport where economically practicable has an important role in promoting social inclusion for people who live in remote areas. Thirdly, the ability of older people to be able to travel around underpins the ability to stay independent, and as car use declines with age it is important that public and community transport is available and accessible. Lastly, public transport is important for young people who need to access further education, local employment opportunities and leisure facilities.

We believe better take-up of public transport is a central objective both because it will accelerate modal shift, but also because it will lead to more efficient use of the public money that is spent on subsidizing public transport, releasing more resources for promoting accessibility and social inclusion. ECC will continue to lobby central government for additional funding for all passenger transport services including rail.

Essex has requested that it becomes one of the pilot authorities for trials of new initiatives outside existing legislative constraints for school service transport. This would be a combined initiative between Passenger Transport, Safer Journeys and bus/coach operators.

1.4 Large Goods Vehicles

We have an unusually large number of Large Goods Vehicles (LGV formally heavy goods vehicles) on our roads (22% of all LGVs in the East of England are registered in Essex). These vehicles cause by far the most damage to our highways and compound the problem of congestion by occupying up to three times as much space as a car in a lane.

A Large Goods Vehicles section, as an addendum to the Traffic Management Strategy, will be developed during 2005 which will include specific route guidance to ensure efficient freight distribution and possibly timing restrictions to relieve the pressure on the network during the peak hours. This would require the cooperation

of all freight distributors either operating from within the county or others passing through Essex. The County Council will work with the Highways Agency and freight operators to develop this section. A section on freight signing and routes will also appear in the revised Essex Signing Policy and Practice.

1.5 Sustainable Travel

The "Getting Around" theme of the community strategy sets out the vision "of an Essex where we can travel safely, sustainably and on time, and where things can be done without the need to travel far".

As detailed in the Essex Walking Strategy the objective is to create an environment which encourages walking by considering the needs of pedestrians and their safety. Similarly detailed in the Essex Cycling Strategy we wish to create an environment within Essex where people of all ages and all abilities feel able to cycle safely, conveniently and pleasantly.

ECC will continue to work in partnership with stakeholders and police to ensure that problem areas for vulnerable road users are addressed.

The County Council's Safer Journeys to School team has already demonstrated that a significant shift in mode of transport to school can be achieved and sustained. This effect can be extended by encouraging employees of other large public and private institutions to use alternatives to private vehicles travelling to and from work, and by highlighting alternative means of transport for business journeys, a desired reduction in private car use is more likely to be achieved.

Travel Plans identifying patterns and modes of travel will ultimately be completed by all schools, businesses and local authorities. The result of these will be identification of alternative methods of travel, engineering measures if required and other options available such as car clubs. As an incentive to complete and implement the plans, businesses will be advised on the benefits and ECC will investigate whether they may be given an incentive to both implement and monitor their travel plans.

The Law

2.1 The Traffic Management Act 2004

The Traffic Management Act received Royal Assent in July 2004. It is intended to provide the basis for better conditions for all road users through the proactive management of the national and local road network. New powers now exist to deal with certain moving traffic offences and tighter controls on street works. We will where possible apply for these powers to ensure that we have the necessary tools to fulfill our obligations under the Traffic Management Act and provide a well managed highway network.

The definition of traffic is set out in the Traffic Regulation Act 1984 and includes pedestrians and cyclists as well as motorised traffic.

2.1.1 Network Management on Local Roads and Traffic Managers

- 2.1.1.1 Part 2 of the Act places a network management duty on local authorities to keep traffic flowing, taking account of their other duties and responsibilities, and to co-operate with other authorities to the same end. **The network management duty commenced on 4 January 2005**.
- 2.1.1.2 As part of the arrangements for delivering the network management duty, the Act requires that all traffic authorities appoint a **traffic manager**. The authority will need to exercise all of those functions that have an impact on traffic flows in a more co-ordinated way but the precise duties and responsibilities of the traffic manager will be for the authority to decide.
- 2.1.1.3 The Secretary of State in England will be issuing guidance to all local traffic authorities on the network management duty.
- 2.1.4. If it can be demonstrated that an authority is failing with regard to its network management duties, then the Act provides for the Secretary of State for England to appoint a **traffic director** for that authority. The intervention levels can be tailored to match the circumstances in each case and once normal network management operating levels have been reached, the intervention order can be reversed.

2.1.2 Road Works by utilities and highway authorities

- 2.1.2.1. The Act seeks to tighten the existing regulatory framework within which utility companies gas, electricity, water and telecommunications are permitted to dig up local roads, giving authorities more powers to co-ordinate works effectively with the aim of minimising disruption. It also provides for additional duties on highway authorities so that all works on the road are better managed and co-ordinated. Essex welcomes these new powers to provide better control over works in the highway.
- 2.1.2.2. Part 3 of the Act provides for the creation of **permit schemes** under which utilities, highway authorities (and others) wishing to dig up particular roads would have to apply for permission to carry out works. Those operating permit schemes (eg highway authorities, such as county or unitary councils) would be able to attach conditions to the grant of a permit (such as the dates during which works could

take place) with a view to reducing the disruption and inconvenience which works cause. Local authorities would have to treat their own works on an equal footing to those carried out by others in deciding whether to issue a permit and what conditions to attach. The details of how permit schemes would operate would be set out in regulations following the Act. Essex will operate a permit scheme and will encourage the government to issue the necessary regulations as soon as possible.

- 2.1.2.3. Part 4 of the Act includes a range of other new **measures to control utility works**. At present, authorities can direct utilities not to carry out works at particular times of day. The Act provides authorities with further powers to direct utilities not to carry out their planned works on particular days, and where appropriate, to tell them that their works should avoid certain routes where it is reasonable to do so.
- 2.1.2.4. Currently, authorities can place a 12 month embargo on any more works taking place (with certain exceptions, such as emergencies) on a road on which major road works have just been carried out. The Act will allow authorities to apply similar embargoes after major utility works, and will allow the maximum length of the embargo to be changed through regulations (eg increasing it to 3 years). **Essex will operate an embargo system after all major works.**
- 2.1.2.5. The Act will allow authorities to direct utility companies, in certain circumstances which would be set out in regulations, not only to resurface the parts of the road that they had dug up, but to resurface the entire lane or width of the road. This would address the problem of the appearance and surface of some roads being scarred, and the structure weakened, by a series of trenches. This initiative is welcomed and will be applied.
- 2.1.2.6. The Act will allow a more effective regime to be developed for inspecting the works carried out by utilities. The aim would be to target poor performance so as to improve the quality of works and reduce the amount of remedial works and repairs and the unnecessary disruption that they cause.
- 2.1.2.7. The existing enforcement regime is only of limited effectiveness. The Act raises the levels of fines payable by utility companies who commit offences related to their street works (such as failing to reinstate the road to the prescribed standard, or failing to heed an authority's directions not to carry out works during particular hours). At the moment the maximum fines are £1,000 the Act will raise these levels, in some cases to £2,500, and in others to £5,000. The Act also allows for authorities to issue offenders with **Fixed Penalty Notices** (FPNs). Whilst the fines payable under FPNs are likely to be lower than those in the courts, the system would make it much easier for authorities to take action against offenders and to collect fines. **Essex will issue FPN to offenders and will pursue utility companies through the courts if they repeatedly re-offend.**
- 2.1.2.8. The Act provides for **additional responsibilities for highway authorities**. It will allow statutory guidance to be issued to authorities for safe working in the road and will make it possible for authorities to be required to keep records of their apparatus in the road. This will bring highway authorities into line with the existing requirements on utilities. The duty on authorities to co-ordinate their own and utility works is extended to encompass other activities which occupy the road.
- 2.1.2.9. The Act also allows "lane rental" and overstaying charging powers (under which, subject to regulations, utilities can be required to pay a daily charge

every time they dig up the road, or if they take too long) to be extended to the owners of skips, scaffolding and other items (such as building materials) that are left in the road.

2.1.3. Civil Enforcement of Driving and Parking Offences

- 2.1.3.1. Part 6 of the Act enables the consolidation, by making of regulations, of civil traffic enforcement legislation covering parking, bus lanes, some moving traffic offences and the London night time and weekend lorry ban. It extends the scope for local authorities to take over enforcement of traffic contraventions from the police. It enables authorities outside London to be given civil enforcement powers to cover a number of moving traffic offences (such as ignoring the rules at box junctions and banned turns) currently only available to London authorities under the London Local Authorities and Transport for London Act 2003. Enforcement of moving traffic contraventions under the 2003 Act powers began in London on a pilot basis in June 2004. Essex will pursue civil enforcement, firstly by means of camera technology and possibly in the future through enforcement officers.
- 2.1.3.2. Building on London experience the Act will enable authorities outside London to issue parking penalty charge notices by post, to use cameras to detect parking contraventions and issue penalty charges for parking within the area of a pedestrian crossing. The Act also creates specific offences to deal with double parking and parking at dropped footways within a local authority civil enforcement area. Regulations to be made under the Act will enable authorities to challenge the veracity of statutory declarations so they cannot be used as a way of avoiding payment of parking penalty charges.
- 2.1.3.3. Section 87 of the Act enables the Secretary of State and the National Assembly for Wales to publish **statutory guidance to local authorities about any matter relating to their civil traffic enforcement functions** which may be conferred on them under Part 6 of the Act. In exercising those functions authorities must have regard to any such guidance.
- 2.1.3.4. To encourage greater take up of parking enforcement powers by local authorities the Act includes a reserve power to enable the Secretary of State or National Assembly for Wales to direct authorities to apply for civil parking enforcement powers. Essex has now completed the countywide decriminalised parking enforcement programme.
- 2.1.3.5. To prevent abuse of the Blue Badge scheme, which gives parking concessions to disabled people, Section 94 of the Act gives the police, police traffic wardens and local authority parking enforcement officers the **power to inspect Blue Badges**.
- 2.1.3.6. Section 95 of the Act gives local authorities the **additional freedom to spend surpluses from their on-street parking account** on local environmental improvements as well as parking facilities, road improvements and provision of public passenger transport services. It also enables the Secretary of State or the National Assembly for Wales to give prescribed authorities complete freedom in how they spend any surplus. **Any surplus in the On Street Parking Accounts in Essex may be used as described above with the approval of the County Council**.

2.2 Disability Discrimination Act (DDA)

- 2.2.1 The DDA 1995 makes it illegal to discriminate against disabled people in terms of access to goods, facilities and services. As providers of a highway and transportation infrastructure we have to ensure that we take into account the needs of all users. As of October 2004 service providers may have had to alter the physical features of premises if the service continues to be impossible or unreasonably difficult for disabled people to use.
- 2.2.2 Where a service provider offers services to the public, it has a legal duty to take such steps as is reasonable in all the situations described below. This duty is referred to in this document as the duty to make reasonable adjustments.
- 2.2.3 The duty to make reasonable adjustments comprises a series of duties falling into three main areas:
 - changing practices, policies and procedures;
 - providing auxiliary aids and services;
 - overcoming a physical feature by
 - o removing the feature; or
 - o altering it; or
 - o avoiding it; or
 - o providing services by alternative methods.
- 2.2.4 The duties are being introduced in two stages. From 1 October 1999, a service provider has had to take reasonable steps to:
 - change a practice, policy or procedure which makes it impossible or unreasonably difficult for disabled people to make use of its services;
 - provide an **auxiliary aid or service** if it would enable (or make it easier for) disabled people to make use of its services;
 - provide a reasonable alternative method of making its services available to disabled people where a physical feature makes it impossible or unreasonably difficult for disabled people to make use of the services.
- 2.2.5. **Since 1 October 2004**, where a **physical feature** makes it impossible or unreasonably difficult for disabled people to make use of services, a service provider will have to take reasonable steps to:
 - remove the feature: or
 - alter it so that it no longer has that effect; or
 - provide a reasonable means of avoiding it; or
 - provide a reasonable alternative method of making the services available.

- 2.2.6. An invitation to the public to make submissions and to attend a public inquiry indicates that any reasonable adjustments will be made on request if this will assist disabled people to make submissions or to attend the inquiry. This helps to ensure that the public inquiry is accessible.
- 2.2.7. A service provider owes a duty of reasonable adjustment to "disabled persons" as defined by the Act. This is a duty to disabled people at large, and applies regardless of whether the service provider knows that a particular member of the public is disabled or whether it currently has disabled customers.
- 2.2.8. For this reason, employees should be made aware that they may be discriminating unlawfully even if they do not know that a customer is disabled and they should be reminded that not all impairments are visible. As explained in this chapter the duty of reasonable adjustment is best met by the service provider trying to anticipate the types of problems which could arise, and by training its employees to enquire rather than act on assumptions. The aim should be that, when disabled customers request services, the service provider has already taken all reasonable steps to ensure that they can be served without being put to unreasonable difficulty.
- 2.2.9. Therefore, although not named as being exempt from the Act, nor specifically included in it, Highways and Transportation can play an important part in the services disabled people can access, their level of independence, in their quality of life and how all people interact within the boundaries of the highway.
- 2.2.10 The services Essex provides as a Highway Authority include:

Written material

- Public inquiries or exhibitions
- Publications timetables, maps, user information etc
- Displays bus timetables, town maps, information signs

Physical features

- Roads humps and tables
- Bus stop layouts
- Crossing points
- Traffic signals
- Footways, ramps, stairs etc
- Dropped kerbs
- Tactile paving

Any of the above could have an impact on the ability of disabled people to access the highway or comment on the service and as a service provider Highways & Transportation must be aware and take steps to minimize alienating any particular group of users intentionally or unintentionally.

The Policy

The Traffic Management Strategy contains a set of guidelines for all personnel delivering Traffic Management schemes, whether they work for ECC Highways & Transportation, Partnering Contractor, consultant or developer. The strategy defines:

- how the Network will be managed and operated
- how it will satisfy national targets for congestion relief
- and how it will identify specific local targets.

New powers will be given to the Traffic Authority under the Traffic Management Act 2004. It will be our responsibility to ensure the safe and expeditious movement of traffic along the highway. The Act will also place a duty on the authority to ensure that users of all modes of travel are able to complete their journeys in a safe and timely manner.

In accordance with the **Local Service Agreements (LSA)** between ECC and the districts, roads have been allocated to a network, in a traffic management context, depending on whether they fulfill a strategic (Priority one) or distributory (Priority Two) traffic function (County Routes) or largely only serve local needs (Local Roads).

3.1 Objectives

The objective of the Traffic Management Strategy is to detail the work that will be undertaken in order to:

- 1. Achieve a clear, consistent, understandable road network.
- 2. Facilitate the efficient and safe movement of people and goods whilst protecting and enhancing the quality of life within communities.
- 3. Facilitate the appropriate use of the different types of road and environment.
- 3.1.1. The agreed hierarchy for highway management will be supplemented by network hierarchies for individual modes of travel which will be contained within their respective policies and strategies.
- 3.1.2. Where the networks are in conflict with each other the County Council will seek to implement measures to reduce or remove the conflict, but on the County Route Network (as well as Trunk Roads Network) priority will be given to the motorized road user.
- 3.1.3. As part of the identification of the current and potential routes for mode hierarchies, **Essex will undertake user audits and capacity audits on any new schemes**. The audits will asses the network facilities for accessibility for all users and intended users.

3.2 Special Environmental Areas

- 3.2.1. Areas around woodland, forests, county parks and designated areas of special interest may be regarded sympathetically, as far as traffic management is concerned.
- 3.2.2. The areas have currently been identified as: Belhus Woods, Cudmore Grove, Danbury Country Park and Common, Dedham Vale, Lee Valley Park, Hainault Park, Hatfield Forest, Epping Forest and Thames Chase and the corridors of the Flitch Way and Blackwater Rail Trail.
- 3.2.3. These areas may have their own traffic management strategies compiled by the local Area Office in consultation with local residents, park ranger service, public rights of way team, parish or town councils, user groups and any local businesses that derive income from the forest or park.
- 3.2.4. Any measures implemented must be sympathetic and in keeping with the surrounding area, consistent throughout the area and be obvious to drivers as to why they are there. Ideally entry treatments or signs should be erected to make people aware they are entering a special environmental area.

3.3 Strategic Networks

- 3.3.0.1 All routes are important to the user in arriving at their destination and therefore are strategic to the user. Where there is a pattern of a large number of people using the same route this then becomes a strategic route for that mode. **Strategic routes for all modes will be clearly identified** and measures will be taken to minimize delays and address points of conflict between different modes.
- 3.3.0.2. The strategic networks for each mode will be examined to highlight areas of conflict. Ideally all strategic mode routes will have an uninterrupted passage but where two networks of different modes cross, the Authority will determine which one has priority and what measures will be put in place to control the conflict. At some conflict points a compromise will be required to ensure safe travel for all modes. In general, County Routes and Trunk Roads will take precedence over all other networks.
- 3.3.0.3. The strategic networks for each mode of travel, other than for motorized users, will be identified in partnership with the District Councils, by ECC. They will form the basis of the accessibility plans and traffic management plans which will be contained in the Local Transport Plan.
- 3.3.0.4. The strategic networks for each mode will not always share the same route or road. For instance, the strategic walking routes will consist mainly of footways leading to and linking town centres, shops, railways and principal bus stops, health services, local employment and education. Whereas the strategic cycling routes will include the same destinations as walking but may take a different route and extend further away from town centres and include routes from town to town.

 Cycle and pedestrian routes will be categorised using similar criteria as to whether they are strategically important, local access or leisure routes.

- 3.3.0.5. Local roads will comprise both urban and rural roads, which will be treated in different ways depending on their function within the area. **Measures on this network will balance the needs of local traffic with the needs of non-motorised road users** whilst aiming to provide adequate capacity to cater for all modes. **Policies will be reviewed to take account of the different roles of local urban roads and local rural roads** in the travel and leisure functions within the wider environment.
- 3.3.0.6. Drawings to depict typical layouts and infrastructure for each category of road can be found in Appendix B. These drawings provide the basic level of installation or materials for each category of road.
- 3.3.0.7. For the purpose of this Traffic Management Strategy, the County Routes and Local Roads are shown as one Functional Route Management Hierarchy in Appendix C.
- 3.3.0.8. These definitions in terms of the LSA will determine who will make decisions on each type of road. On the County Routes the County Council will make the decisions whilst on local roads the District or Borough Council will make the decisions. The core maintenance and accident prevention functions however, will remain with the County irrespective of the type, location or status of the road. All works will be implemented through the local ECC Area Office.
- 3.3.0.9. The Traffic Management Strategy applies to all roads regardless of who is making the decisions. Therefore any District or Borough Council decisions for local roads should be in accordance with the Traffic Management Strategy.
- 3.3.0.10 The management and delivery of the service will be coordinated through centres of excellence at area offices.
- 3.3.0.11. The Traffic Management Strategy recognises that whilst the Trunk Roads and County Routes provide the main traffic distribution function in and through Essex, the local roads will, in the main, carry only local access or tourist traffic. All users will be expected to share the road space in a safe and appropriate way.

3.3.1 County Routes

- 3.3.1.1. The County Council's **Speed Management Strategy and Policy (SMS)** was approved in May 2003 following wide consultation with stakeholders and user groups. It supports the objective of the Traffic Management Strategy, to provide a clear and understandable speed management system that gives priority to the movement of traffic on the County Routes, but also supports the needs of local communities and non-motorised users on the Local Roads.
- 3.3.1.2. The strategic traffic management network as defined in the **SMS** is all A and B Class roads. **The Functional Route Management Network as defined by the Traffic Management Strategy will replace this definition** and can be found in Appendix C.

- 3.3.1.3. Trunk roads are maintained by the Highways Agency. They provide the fast, higher capacity links to other counties and cities and are therefore central to the movement of goods and vehicles from and to Essex. They are the most attractive and quickest routes for long distance journeys by car or freight. In Essex the Trunk roads are as follows:
 - M11
 - M25
 - A12
 - A120

The County Council will encourage the Highways Agency to maintain and manage these roads to the very highest standards.

- 3.3.1.4. Priority One County Routes have been identified as the high volume traffic routes which are essential to the economy of Essex. They provide the main arteries for the movement of people, goods and through traffic wishing to access the Trunk Roads. These roads will be upgraded as necessary and maintained to the highest standards, subject to funding.
- 3.3.1.5. Certain features of these routes and roads may be unique to them in Essex and the driver can expect to become aware of these standards as they drive along the route. As an example white lining will be visible during rain fall and 360° road studs could be provided. These standards will be provided by the Suitable Streets plans in context of the type of road in Appendix B.
- 3.3.1.6. The County Routes can be divided into two types according to function and use. The colours on the corresponding map in Appendix C are shown in brackets:

Priority 1 – All Trunk roads (blue) and

- Inter-urban routes routes which link towns and cities together and to the Trunk Road network, for example A130, A120, A414, A127 (Green) These routes will carry large volumes of high speed traffic through and around Essex. It is essential that traffic on these routes remains free flowing, that they are maintained to the highest standards, and that unnecessary obstructions are removed promptly.
- Radial-feeder routes final journey route into or out of town centres, for example, A129, A1016, A138, A1114, B1008 (Red)

 These routes feed traffic to and from the inter-urban routes (to their final destination) and carry large volumes of traffic during the peak hours when people are trying to access/leave town centres. They will normally be developed areas in towns and village centres. It is essential that traffic on these routes remains free flowing, that they are maintained to the highest standards, and that unnecessary obstructions are removed promptly. They will normally have car park guidance systems and traffic signals to aid the flow of traffic and manage areas of conflict between the different modes and hierarchies. Therefore it will be necessary to check and, if required, adjust the systems regularly.

Priority 2 -

- The remaining County Routes as defined in the LSA. (Magenta) Although not as important as the Priority 1 routes, the Priority 2 routes still perform an essential traffic management distributory function between the local network and Priority One County Routes. They will be accessed by a number of different types of user including local buses. Therefore, motorised vehicular traffic will generally take precedence over the other modes on these routes.
- 3.3.1.7. The inter-urban and radial-feeder routes will be treated differently as they provide a similar function but differ both in the make up of traffic and surrounding environment. Due to the importance to the economy and prosperity of Essex, the County Routes will be closely monitored in terms of congestion, journey times, roads works and accidents to minimise delays and disruption. Each PR1 County Route will be assessed to identify possible capacity and safety improvements.
- 3.3.1.8. Strategic routes for non-motorised users will be identified and promoted, along with prohibitions where appropriate. Although strategic routes for cyclists and pedestrians will normally be contained within the local roads, Essex will seek to restrict cyclists from dual carriageways where alternative safer facilities exist. This strategy will be implemented for all Priority One County Routes once alternative measures have been identified and installed.
- 3.3.1.9. Within the SMS, detailed consideration is given to the continued use of traffic calming measures, particularly road humps. We will, as outlined within the SMS, keep the identified Priority One County Routes free from physical speed reducing measures unless required to reduce the speed of vehicles through towns and villages, but only with the approval of the Cabinet Member for Highways & Transportation. We will however, allow road narrowing traffic calming on Priority Two County Routes where it will not cause unnecessary congestion or delay. We will provide clear and consistent speed limit management along the Priority Two County Routes in line with current policy.
- 3.3.1.10. The Traffic Management Strategy is consistent with Development Control policies and guidance. In order to minimize the impact of new developments on the Priority 1 County Routes, no new development will normally be allowed direct access along these corridors. In special circumstances the developer will first agree to fund measures which maintain or improve capacity or an identified safety problem on these roads.
- 3.3.1.11. Agreements negotiated by Development Control will ensure that the road infrastructure is adequate to accommodate all new users resulting from the development. Ideally, the traffic network should be in place before the development is completed so that unnecessary congestion is not allowed to grow due to a concentration of housing and lack of facilities and capacity. All new developments, over a certain size, will have facilities for buses, walking and cycling to encourage local residents to use more sustainable forms of transport. These will also have to be in place before the majority of the development has been sold.

3.3.2 Congestion Relief

- 3.3.2.1. Tackling congestion is one of our top priorities. We have, on average, more than one registered car per household in Essex, and car ownership is set to continue to grow by 2% per year. Currently 11% of key transport links are over capacity and by 2020 that figure will be 47%. Furthermore, the extra housing agreed by the Regional Assembly will translate into more than 1 million extra trips every day on Essex's roads.
- 3.3.2.2. In this year's budget, Essex County Council announced a "war on congestion". The county faces a major infrastructure deficit and a shortfall in road space which simply cannot be addressed in the short- to medium-term.
- 3.3.2.3. Many of ECC's working practices also help to determine the travel patterns of many of our citizens. For example, another important contributor to peak-time congestion is the school run, whose timing ECC helps to determine by the patterns of school opening hours we encourage. Opening hours of our offices and care facilities also impact on citizens' decisions about how and when to travel.
- 3.3.2.4. While we have made reducing our own contribution to congestion a specific priority, that will not be enough on its own to make a major impact on reversing the trend in traffic growth. We will work with partners, using whatever mechanisms of influence we possess, to encourage individuals and employers throughout Essex to join us in helping tackle congestion. Reducing congestion is inevitably about influencing behaviour, and so ECC sees its role as overwhelmingly one of providing incentives, encouragement and leadership, as well as providing solutions directly.
- 3.3.2.5. Part of congestion relief will be the introduction of Travel Plans. These will identify journeys that can be made by alternatives to private cars, highlight routes for cycling and walking and promote car sharing and public transport.
- 3.3.2.6. **Essex will** identify areas suitable for additional capacity or congestion reduction initiatives and **produce a "blue print" of improvements for each of the major towns**. These will be with regard to journey times, capacity, safety and non motorized users.
- 3.3.2.7. Essex will provide up to date traffic information to in-car satellite navigation service providers and ensure that any travel directions provided by these systems take into account the County Route and Local Road split and avoid known areas of congestion

3.3.3 Traffic Control & Information Systems

- 3.3.3.1. **Traffic signal controllers will be linked** via Urban Traffic Control (UTC) or installed with Microprocessor Optimised Vehicle Actuation (MOVA) and existing systems upgraded or linked **to Urban Traffic Management and Control (UTMC).**
- 3.3.3.2. These systems will give real time information and provide a useful tool in tackling congestion and delays. The UTMC system will pull together existing sources of information from traffic controllers, cameras, variable message systems,

car park guidance systems and bus systems to provide a powerful tool for informing road users, managing traffic flows and detecting congestion and pollution.

- 3.3.3.3. The Essex Traffic Control Centre will monitor congestion, providing real time travel information to road users and improved co-ordination with Highways Agency on trunk road and motorway operations. It will monitor congestion and traffic flow to identify problem junctions which will subsequently be reassessed to maximize capacity for the County Routes. Traffic flow and journey time data will be used to produce indicators for congestion relief.
- 3.3.3.4. Whilst the introduction of new technology and measures will aim to be of use in co-ordinating traffic activity, the network is sensitive to change and new schemes will require careful fine tuning to achieve maximum efficiency. However, with the Intelligent Transport Systems (ITS) being implemented in Essex, traffic flow should become more stable and more reliable journey times will be achieved.
- 3.3.3.5. A comprehensive review of current traffic control strategies will be carried out in order to maximize performance and operation of systems to ensure priority is given to the County Routes where necessary.
- 3.3.3.6. In addition to incident management, part of the Traffic Control Centre's role will be to provide route management. In the foreseeable future, **technology will be used for diverting traffic off one strategic road onto another during times of congestion or delay by means of variable message signing, text messaging and public announcements.**

3.3.4 Traffic Management of Unplanned Incidents

- 3.3.4.1. During the course of a normal year incidents will happen that are unplanned. These could include:
 - Sudden weather changes (ie snow, high winds or flooding)
 - Broken down vehicles
 - Accidents
 - Other obstructions in the highway
- 3.3.4.2. In these circumstances it will be important to restore the Priority One County Routes to full capacity as quickly as possible. This could be achieved in a number of ways:
 - Police accredited personnel intervention to direct traffic at major junctions until either the congestion has subsided or the obstruction removed.
 - By providing road-side assistance during peak hours, so that broken down vehicles could be towed off the highway.
 - By Civil Enforcement Officers taking action to keep routes clear and reporting incidents directly to the Police or other emergency service and the Traffic Control Centre so that response times are quicker and the incident is relayed to as many people as possible so that they seek alternative routes, which the Traffic Control Centre can then manage.
 - By the use of Closed Circuit Television (CCTV) and Closed Circuit Television (CCTV) as a means of monitoring traffic flows and progression along the strategic radial feeder routes.

3.3.4.3. In order to achieve a coherent and comprehensive action plan for unforeseen events a **new partnership between Essex Police**, **Highways Agency and Essex County Council** must be sought. Any incident that will impact on all County Routes must be removed or resolved as quickly as possible. New methods of working or new technologies could provide the tools for expeditious removal of the obstructions.

3.3.5 Emergency Services

The emergency services provide an important and valuable role on our highways. Coordination and cooperation with these services will enable Essex to:

- Respond quickly to incidents
- Respond and aid at scenes of accidents resulting in less closure time on the network
- Provide effective traffic management for planned or unplanned events
- Promote good practice and common sense
- Enable these services to respond quickly by keeping routes clear and accessible

Therefore, greater interaction between all emergency services, satellite navigation providers, various automobile organisations and the County is required to inform the travelling public of the problems and which routes to take to avoid the problems.

3.4 Local Roads

- 3.4.1 Local roads will comprise all roads not being County Routes. These roads will be diverse in nature and use but will fall into one of the following descriptions:
 - Developed normally residential roads. These roads will be in towns and some residentially developed parts of villages. Their functional use is similar. i.e. mixed priority use, carrying local traffic only, routes leading to amenities and through residential areas.
 - Rural all other roads will be in this category. They will generally be
 unclassified roads linking small areas of development such as hamlets,
 farms and tourist attractions to each other and the strategic vehicle routes.
 Their use will be local in a transportation function but these roads are likely
 to form parts of important cycling, horse riding or walking leisure routes.
- 3.4.2. Local traffic will generally use local roads or rights of way. The function of these roads is to carry local access, tourist and recreational traffic and they will be promoted as such. They will be less suited than County Routes to the high traffic flows and large vehicles. However, it must be accepted that some large vehicles will be required to use these roads for access to local premises. Whilst facilitating local trips the use of the routes will be controlled to enhance quality of life.

- 3.4.3. The traffic makeup will be a mix of cyclists, horse riders, pedestrians and vehicles. The motorised vehicles on these roads will not be given priority over the other road users, and will be expected to share the road space. **Alternative forms of transport to the car will positively be promoted**. The road layouts will be sympathetic to the presence of cyclists, pedestrians and horse riders through cycle lanes and protected verges.
- 3.4.4. On the rural network, the roads may provide important links between PROW, farms, small villages and hamlets, and country parks. Where appropriate a network of Quiet Lanes will be developed in accordance with guidance issued by the Department for Transport (DfT). Excessive speed will be discouraged and physical measures may be required to alter the appearance of the road.
- 3.4.5. Certain features of these roads may be unique. It should be clear from the layout and appearance of the road that other users may be present and that speeds should be low. For example there will be no centre line marking as standard on these roads. These standards will be in accordance with the Suitable Streets based on the type of road, use, speed limit and carriageway features.
- 3.4.6. Decisions about the use of local roads will generally be made by District or Borough Councils within the overall framework of the Traffic Management Strategy.
- 3.4.7. Traffic will be encouraged to use and stay on the County Routes, rather than use local roads as short cuts, by giving the County Routes priority. To discourage the use of residential streets as short cuts, physical measures such as traffic calming and controlled crossings or in some cases prohibiting certain turning movements or use by motorised vehicles, could be implemented.

3.5 Speed Management

- 3.5.1. We will plot all speed limit and traffic regulation orders onto the County's GIS database. We will also digitally map, through the Confirm system, all sign related street furniture.
- 3.5.2. We will carry out a systematic review of all speed limits and traffic regulation orders to ensure the written information matches the site infrastructure. Where anomalies are found a programme of rectification works will be prepared.
- 3.5.3. As part of these reviews Essex will evaluate the location and necessity for the sign(s). In the case of speed limits, routes will be assessed for compliance to CR1/93, or subsequent amendment; or the scoring system to make sure whole routes or areas are signed consistently and appropriately.
- 3.5.4. We will complete the trial of trailer mounted variable message signs (VMS) and produce policy guidance by the end of May 2005.
- 3.5.5. Essex will encourage Parish and Town Councils to buy and operate their own Speed Indicator Device (SID) within the guidance contained in TPN60.

- 3.5.6. Essex will continue to support the SIDs on police community buses and look to further the good relationship between ECC and Essex Police.
- 3.5.7. Essex will identify and encourage police enforcement at targeted areas where either there is a high level of accidents or recorded speeding problem.
- 3.5.8. Essex will determine where passive safety products shall be used and issue guidelines forthwith. As a matter of course any chevron signs, bollards or marker posts that have been repeatedly knocked down due to a road traffic accidents will be replaced with the equivalent sign and spring loaded hinged post(s).

3.6 Powered Two Wheelers (PTW)

- 3.6.1. Motorcycling is one of the most accessible and sustainable forms of motorised transport. However its image, together with the rising number of motorcyclists killed on Essex's roads each year can be a major factor in peoples' perception and hence reluctance to use this form of transport.
- 3.6.2. Therefore, **Essex will continue to support a Motorcycle Forum** as a means to addressing accidents, training and motorcycle awareness campaigns.
- 3.6.3. Essex will seek new and innovative products to enhance the road infrastructure and make it safer for powered two wheelers.
- 3.6.4. We will investigate clusters of PTW accidents, identify improvements and implement the measures in a concerted effort to reduce the numbers of killed and seriously injured motorcyclists.
- 3.6.5. We will provide adequate and suitable parking for PTW where or near as possible to where it is required. This could be in town centres, at interchanges or near local shopping centres.
- 3.6.6. **Essex will allow motorcyclists to use bus lanes** as set out in paragraph 3.7.12.
- 3.6.7. Essex will continue to work with stakeholders and the police to target speeding or nuisance caused by PTW riders through enforcement and education.
- 3.6.8. Essex will investigate the implementation of allowing PTW to use advanced stoplines at traffic signal controlled junctions.

3.7 Passenger Transport

3.7.1. Improving public transport has featured as a high priority in every opinion poll or consultation exercise in recent years in Essex, both at county and at district levels, and including all forms of consultation on the draft community strategy. The draft strategy envisages "an Essex where we can travel safely, sustainably and on time".

- 3.7.2. In 2001, only 15% of people in Essex travelled to work by public transport. Two-thirds of journeys to work were by car. Modal shift is necessary if the growth in traffic is to be contained.
- 3.7.3. Various opinion polls have highlighted transport for elderly and disabled people as a problem in Essex. In the Mori Shaping the Future of Essex 2003 study, getting around for older people was highlighted as a problem, with 41% saying the facilities on buses were poor. The Community Strategy consultation also highlighted transport as a key issue.
- 3.7.4. Essex will work with the borough and district councils, public transport providers and the voluntary sector to deliver improvements.
- 3.7.5. Essex will develop a system of providing bus real-time information through mobile phones and WAP technology.
- 3.7.6. With the introduction of Park and Ride the radial feeder routes will require adequate capacity to ensure fast and reliable bus journey times from the car park to the town centre. This is essential to establish a viable, well used service. Without modal shift it will be impossible to achieve the most efficient use of the existing network. Bus priority and bus lanes are useful tools in enabling public services to achieve timetable compliance. The compliance of a service to the published time table is vital in providing reliable passenger transport. Bus patrons rely on the timetable information to ensure they arrive at their destination on time. If the timetable is wrong or the bus can not attain timetable compliance, bus patronage will reduce.
- 3.7.7. Bus lanes and gates will be enforced through the use of cameras. Late running buses will be given priority at traffic signals. Bus lay-bys and new ticket systems will be introduced to minimize traffic congestion at bus stops.
- 3.7.8. In order to achieve a better service we have promoted and entered into Quality Bus Partnerships (QBP) with passenger transport providers. The County in partnership with the Boroughs and Districts have installed a large number of new raised kerbs, bus shelters and real time passenger information signs (RTPI), thus keeping the travelling public informed and making it easier for them to access the busses. In return the bus operators have increased the number of modern easily accessible busses. These improvements have been, in the main, in the urban environment.
- 3.7.9. We will where appropriate enter into QBP with as many operators as possible to facilitate a better passenger transport system for all residents of Essex. We will also strive to find innovative ways to improve public use of the services available.
- 3.7.10. The bus services on the inter-urban routes will benefit from the congestion relief plan. In the same way as on the radial feeder routes, their journey times will be more reliable and constant. Any improvements to Passenger Transport will increase patronage and the number of vehicles using our roads. Therefore, we will support and implement measures to improve access, reliability and thus patronage to public services.

- 3.7.11. Buses serving the local community that require access on to County Routes will be managed to minimise delay. To encourage the use of Passenger Transport it is important for it to become an attractive option for local people. If the bus is held up in the same queue as their car would have been, there is no perceived advantage in using the bus service. In some areas the junction with the County Route will provide an opportunity to give buses priority over car access.
- 3.7.12. We will allow powered two wheelers and cyclists to use bus lanes in Essex and ensure that every bus lane is a minimum of 4.0m wide, to accommodate the additional users on new-builds.
- 3.7.13. Taxis (Licenced Hackney Carriages) will also be allowed to use bus lanes and the operators will be encouraged to achieve the Quality Taxi Partnership standards. Their cabs must be easily identifiable to aid enforcement.
- 3.7.14. On converted roads if, due to existing road width, a 4.0m lane can not be accommodated, then a risk assessment must be carried out to evaluate whether the narrower bus lane will put powered two wheelers and cyclists at risk. However, bus lanes will only be accommodated where there is no reduction in traffic capacity. Otherwise, new bus and guided bus lanes must be installed off carriageway. Key routes will need bus priority to ensure reliable journey times.
- 3.7.15. Bus lanes will be signed accordingly so that there is no confusion for users as to whether they can legally use the lane or not. **Bus lanes will not be colour surface- dressed due to the on-going maintenance cost of these installations.**
- 3.7.16. Road humps will only be used on bus routes with the support of bus companies and waiting restrictions will always be implemented with cushions, where there is a parking problem, to ensure buses and larger vehicles can use the cushions as intended.

3.8 Large Goods Vehicles (LGV)

3.8.1. The draft Freight Distribution Strategy aims to encourage freight onto rail or water. However, for that remaining on the road, the intention of a signed LGV route network is to provide a good, clear network for the distribution of goods and to encourage lorries to use the roads designated as County Routes, as these will be maintained to a higher standard than local roads. If LGV drivers are provided with informative, accurate and consistent signing to their destination along routes which are intended to accommodate higher volumes and speeds than local roads, it is more likely that they will use these routes rather than seek alternatives. Once these routes are developed, Traffic Regulation Orders can be implemented to further protect communities and local roads if required, although options for effective enforcement of such regulations will need to be explored including the use of physical barriers. However, physical barriers in the rural environment will not always be viable due to the need to facilitate access for large farm vehicles and alternative measures should be found. It must be accepted that some large vehicles will continue to require access to premises on the local roads.

- 3.8.2. The county will develop LGV routes in accordance with the draft Freight Distribution Strategy with the aim of keeping lorries on County Routes for the majority of their journey and travelling at appropriate speeds. The majority of large goods vehicles can be classified as through traffic and as such will mainly use the County Routes. By ensuring this network remains as congestion free as possible and together with clear, consistent positive signing, the freight operator will be able to plan deliveries with more accurate journey times. We will also encourage distribution centres to provide accurate addresses for the LGV drivers so that they don't head for a suburb or village rather than the industrial area. Essex will work with the police and freight distributors to help alleviate the problem of unnecessary LGV movements along inappropriate or banned routes once they have been identified.
- 3.8.3. The local roads should only provide for LGV traffic at the start and destination of the journey. These will be short journeys to or from the County Routes and hence should not be a burden on the local community. **Signed routes to retail parks and industrial estates should not, if at all possible, be signed through the local residential areas.** However, it is recognised that some local roads may provide an important link between two County Routes. In these areas the needs of the local community should be balanced with that of the LGV traffic. On the rural network LGV will be signed by the most appropriate route. Traffic calming measures can be installed to prevent LGV from using unsuitable roads as short cuts. However, in the rural environment physical measures may not be appropriate due to large farm vehicles requiring access.

3.9 Cycling Network

- 3.9.1 In order to create a conducive environment for cycling, the Cycling Strategy highlights the need for an improvement to cycle facilities, increasing the number of cycle routes as part of this. In terms of the Traffic Management Strategy, these routes will need to be consistent, continuous and clear to the network user.
- 3.9.2. The strategic cycle routes will not be the same as the County Routes, although it is likely that they will overlap and cross. It is likely that strategic cycle routes will coincide mainly within the local roads, or be on dedicated cycle tracks or joint use (with pedestrians) footways.
- 3.9.3. We will continue to develop new routes and programme the creation of new cycle lanes and tracks to link the smaller villages to towns and their nearest RIC (Regionally Important Centre) or transport interchange. By completing whole routes cyclists will be able to complete their journey without unnecessary delay or diversion.
- 3.9.4. **All new development** whether residential or industrial, will make provision for all modes of travel. This **will include cycle parking and the provision of cycle lanes**, either on or off road, which link to existing cycle routes. These existing routes may lead to the nearest town, transport interchange or leisure facility.
- 3.9.5. On County Routes, cyclists will be accommodated either on-road with suitable enhancements and engineering measures or, wherever possible, off-road on signed cycle routes to enhance their safety. By designing for and

accommodating the cyclist along this network, the flow of traffic will be uninterrupted by slower moving users whilst the safety of cyclists will be enhanced.

3.9.6. On the local roads, cyclists will be accommodated and protected, especially as ECC will be promoting these roads as the preferred routes for cyclists. However, consideration should be given to the fact that there may be young cyclists due to the Councils drive for modal shift away from the car. It is likely that there may be a high proportion of cyclists around schools. On the local roads the speed of vehicles will be managed in areas of conflict (ie outside schools) to help prevent accidents and should an accident occur, the severity will be reduced.

3.10 Pedestrian Network

- 3.10.1. The overall objective of the Walking Strategy is to promote and encourage walking as the most environmentally and socially sustainable form of transport. In order to make the environment more conducive to this, a network of routes consisting of footways or Public Rights of Way that will be appropriately lit and sign posted as necessary.
- 3.10.2. For the purpose of the Traffic Management Strategy it must be realised that, whilst the needs of the pedestrian coming first may be appropriate on the local roads, this may not always be attained on the County Routes. It is likely that there will be conflict between the County Routes and any pedestrian network.
- 3.10.3. **All new developments** whether residential or industrial, will make provision for all modes of travel. This **will include footways** which link to existing pedestrian routes. These existing routes may lead to the nearest town, transport interchange or leisure facility.
- 3.10.4. On County Routes facilities must be provided for the safe and convenient passage of pedestrians across the road, where a need has been identified. As with the cycling network, the strategic pedestrian routes will not necessarily be the same as the County Routes.
- 3.10.5. The local roads will be promoted as the preferred routes for pedestrians. However, pedestrians require the most direct and convenient route to a town or facility and therefore will use footways along and across the County Routes.
- 3.10.6. In built up areas the speeds of vehicles should be managed to enhance pedestrian safety. Where there is a large demand for pedestrians to cross the road formal facilities should be provided.
- 3.10.7. On strategic pedestrian routes the pedestrian facilities will be enhanced where appropriate. This may mean widening footways, installing better lighting, providing more dropped kerbs, installing litter bins and benches and other aesthetic measures such as planting trees, shrubs and flower beds.
- 3.10.8. Once routes have been identified for pedestrians they should be signed and promoted. This already happens on PROW and footpaths through

parks and shopping centres, but at present there are few dedicated signed walking routes from local residential areas to town centres, railways and bus stations until the town centre has been reached. In order to promote and encourage walking it is essential that residents are aware of the direct pedestrian links to the town centres and public transport.

- 3.10.9. Consideration should be given to providing footways or walkable verges in rural villages. They may provide an important link between two Public Rights of Way or other signed routes and provide a catalyst for more villagers to enjoy and benefit from their environment.
- 3.10.10. However, against this is the overall character of the village. **Asphalt footpaths and concrete kerbing** may not enhance the village and may make the area look more "urbanised". In these cases the design and construction materials should be in-keeping with the surroundings and these **measures should only be implemented with the support of the Local Council and Local County Councillor.**
- 3.10.11. Signing should be provided to warn of the presence of pedestrians where PROW cross the road network. This can either be by installing signs from "The Traffic Regulations and General Directions 2002" Schedule 1, or by providing finger and directional posts so that they are visible to both pedestrians and traffic. The network of PROW available throughout Essex provides users with a safe environment in which to pursue their leisure activity. This safety should not be compromised if they have to cross a County Route. However, not all crossings need to be formal in nature. The volume and speed of traffic and the number and frequency of users wishing to cross the road needs to be considered.
- 3.10.12. In more rural areas users are more likely to join roads to complete their journey. In these areas conflict with traffic is going to be greater and to some extent more dangerous due to the higher speeds involved. Any stretches of road that require treatment because of regular use by pedestrians, cyclists or equestrians should be investigated in consultation with the Public Rights of Way team and treated in accordance with advice given in relevant literature such as that provided by the British Horse Society.

3.11 Journeys to School

3.11.1. During peak hours it is important to encourage modal shift away from the car. The term-time morning peak is noticeably more congested than the school holiday period. Essex County Council currently transports 23,000 pupils to school and home again a day, which vastly reduces the congestion during the morning and afternoon peak periods. We have encouraged the students to behave appropriately on the buses by entering into behaviour agreements. However, there are still thousands of students being driven to school by parents or carers. In order to reduce children's dependency on the private car the Safer Journeys to School initiative has been taken up by nearly 180 schools. Highway or traffic engineering improvements have been completed or are planned at most of them. We are on target to have 40% of schools signed up to the aims of Safer Journeys by 31 March 2006.

- 3.11.2. **All schools will be encouraged to write travel plans**. In return they will receive a travel plan grant from the Department for Transport (DfT) in June 2004. From May 2004 travel plan assistants have been employed to help schools write their plans so that sixty percent of schools will have completed them by March 2006. As part of this process schools will be encouraged to include travel planning as part of their teaching curriculum and students likewise encouraged to provide plans for their families and other journeys they undertake.
- 3.11.3. All new schools will complete a draft travel plan which will be integrated into the design of the school. The school, six months after opening, will complete the travel plan in consultation with ECC.
- 3.11.4. There are currently 262 school crossing patrol sites in Essex. The SCP officers have recently extended their role to provide closer links with the school and the local community by participating in the Safer Journeys to School working groups and, where possible, in road safety projects. Some also support the development of walking bus schemes. They also have an important role in detecting any environmental and safety problems occurring around the school-crossing site.
- 3.11.5. School crossing patrols remain the safest means of children crossing the road. A concerted effort is made to raise the profile of the job, to recruit and retain staff.
- 3.11.6. There have been a number of reported 'failure to stop' incidents at school crossing patrol sites. Essex County Council participates in the regional 'Stop Means Stop' campaign that is aimed at this problem. Essex Police provides regular liaison and a trial of Open Circuit Television (OCTV) at problem sites is underway to strengthen the evidence against violators.
- 3.11.7. Where controlled crossings are installed at existing school crossing patrol sites, the continued need for a patrol person must be assessed. In some cases, especially at signal controlled crossings, a patrol person will not be required.
- 3.11.8. All primary schools on County Routes will have flashing amber lights to warn motorists of the location of children crossing. Where there is a school crossing patrol person or large numbers of pupils crossing the road a variable speed limit may be implemented during school start and finish times to lower the speed of traffic down to 30mph.
- 3.11.9. School safety zones may also be implemented along the stretch of road immediately outside the school if the school directly accesses a County Route. Consideration should be given to moving the entrances away from the main road onto a local road if feasible.
- 3.11.10. On Local roads a shift from private car use for the school run to more walking to school has already been registered. With cycle security and other cycling facilities in schools being improved it is anticipated that the numbers of pupils cycling to school will also start to increase. More children are joining walking buses for their journey to school with a total of 32 walking buses in operation in Essex. Cycle clubs and trains should be encouraged as an alternative to the car. These will be implemented with the support of the Safer Journeys and Walking

and Cycling Teams and may lead to tighter parking controls in the immediate vicinity.

- 3.11.11. To further encourage this modal shift 20mph zones could be implemented outside schools on local roads, although research has shown that these offer no significant reduction in casualties.
- 3.11.12. In all locations, whether on County Route or Local Road, zig-zag markings will be supported as necessary by a Traffic Regulation Order (TRO) and parking restrictions enforced.

3.12 Parking

- 3.12.1. Decriminalised Parking Enforcement (DPE) has now been implemented across Essex. Boroughs and Districts have prepared enforcement policies that pay due consideration to the strategic vehicle routes and the pledge to get Essex moving.
- 3.12.2. With the advent of Park and Ride, the County Council will enter into a new partnership agreement with the Boroughs and Districts to ensure that parking restrictions and enforcement protect the route of the buses and local residents from overflow or indiscriminate parking.
- 3.12.3. Parking and loading restrictions will be reviewed, introduced and enforced to ensure as far as possible that County and important throughroutes remain congestion free, particularly at peak traffic times. The reviews will be carried out by the County Council with the enforcement carried out by the borough or district council.
- 3.12.4. Commuters and other drivers requiring long stay parking will be encouraged to use appropriate long stay car parks, freeing town centre short stay spaces and residents zones for drivers who need them.
- 3.12.5. To ensure the uninterrupted passage of traffic on County Routes, clearways may be implemented where conflict is caused by drivers wanting to park or load. As part of implementation on County Routes, alternative loading arrangements must be found for the businesses it will affect.
- 3.12.6. On local roads enforcement can be aimed at the needs of the local community including taxi ranks, disabled bays and outside schools or parades of shops to improve safety and ease congestion. It will not be critical on local roads to implement parking restrictions as parked vehicles can provide a form of traffic calming. On local roads it will generally be the local council's responsibility to identify parking restrictions.

3.13 Maintenance and NRSWA

- 3.13.1. Maintenance functions form a crucial role in keeping the highway network useable and safe. Effective proactive maintenance of the network will ensure it is safe, serviceable and sustainable.
- 3.13.2. Under the new Traffic Management Act the County will be required to notify and be notified of all works on the highway. This will include all maintenance works carried out by or on behalf of the County. In addition to this, the County will be required to issue permits to all contractors wanting to carry out works within the highway. The extent of these permits will far outreach the current system of notices and licences under the New Roads and Street Works Act (NRSWA) in that permits will be required for litter picking and road sweeping, for example.
- 3.13.3. In order to make these new powers and responsibilities less onerous on the Authority, **the permits will probably be issued from the four Area Offices.**Notification and issuing of permits will be undertaken electronically.
- 3.13.4. The coordination of street works, planned events and accidents will provide the driver with the necessary information to avoid congested routes and the Authority to set up diversions if necessary. Therefore, it is essential that the New Roads and Street Works Act (NRSWA) coordinator, the traffic control centre supervisor and Police share the information they have. Procedures and protocols need to be put in place to ensure the sharing of, and action upon, information.
- 3.13.5. Monthly meetings will take place to identify future works/delays to the strategic network and a plan of action will be developed to minimise congestion. The Traffic Control Centre will provide the centre for this coordination and implementation. The results of these meetings will be monitored and plans of action agreed by the Traffic Manager.
- 3.13.6. Essex County Council will proactively monitor, check and inspect at least 30% of all streetworks to ensure compliance with the Code of Practice for the Safety of Street Works and Road Works. Failure to comply will be dealt with through the courts.
- 3.13.7. The County has a rolling programme for implementing a new IT system for the management of the road infrastructure. It is known as "Confirm" and will be a valuable tool for records of assessments, inspections and managing the County's roads. It will provide accurate position and photographic details of the highway infrastructure. This will enable the County to keep an inventory of street furniture, detail fault reporting and inspection frequency and dates and provide customer service and enquiry facility.
- 3.13.8. It is important to balance the needs of the users with the timing of maintenance work. **The County Routes should be kept clear of all obstructions especially during the peak periods**. At times emergency repairs will coincide with the peak period and may result in disruption on this network. This event should be a rarity rather than an everyday situation. The contractor will make the defect safe causing as little disruption as possible in the shortest time span.

- 3.13.9. No planned works or obstructions by Statutory Undertakers will be allowed on this network between 07:30 09:30 and 15:30 18:30 and no planned works will last for more than one month unless they are carried out during lowest traffic volumes and with the approval of the Traffic Manager for Essex.
- 3.13.10. Statutory Undertakers and other licensed contractors will be charged for unreasonable prolonged occupation of the highway under the current statutory instrument.
- 3.13.11. Local roads will be inspected less frequently than County Routes due to lower flows and lower priority in the hierarchy. However, if a serious defect is reported it will be repaired with the same urgency as the strategic vehicle routes. The maintenance plan for local roads needs to reflect the different uses. For example, cyclists and pedestrians have different needs and requirements to vehicles. Therefore, road sweeping and pavement repairs may be a high priority. Street furniture should be kept clean and be in character with the surroundings. More benches and two wheeled vehicle facilities should be provided and maintained, with appropriate lighting and landscaped areas for residents/users to enjoy where appropriate.
- 3.13.12. A system of reporting maintenance problems will be set up. Residents and road users will be able to report defects to a central telephone number, via the internet or to an e-mail address which will then forward the details to the relevant contractor or agent. The caller will be given a unique report reference so that they can track the progress of the defect via either the internet or telephone. This system will be provided for the whole highways infrastructure and not just road and pavement defects.

3.14 Action Planning

- 3.14.1 The performance of local authorities will be judged using a set of key performance indicators (KPIs) set by central Government. The Traffic Management Act states that these criteria will be fair and transparent but may be based on journey times for different modes of transport. However, such criteria are unlikely to be developed until the Act has been operational for 1 to 2 years. In the mean time it is likely that performance will be judged on processes and on the structure of service delivery.
- 3.14.2. If an authority fails to meet the performance standards the Secretary of State could appoint a Traffic Director. It is therefore important that ECC has as much involvement as possible in setting the standards and then set a clear plan as to how achieve them.
- 3.14.3. This does not preclude the authority from setting its own additional performance indicators providing that the data collected are meaningful and useful to the authority in improving its level of service.
- 3.14.4. The following table contains an action plan for implementation prior to statutory targets being set under the Traffic Management Act.

	Network	Action	Target Date
1.	County	Establish average vehicle speed during peak times New SP9 & 11	July 2005
2.	County – Radial Feeder	Establish average journey times for feeder routes into/out of Area strategy centres during peak hours for vehicles. (PSA 2)	Sept 2005
3.	Whole Network	Percentage of scheduled services one minute early to five minutes late.(LTP 5)	March 2011
4.	County Routes	All Priority One County Routes to have a route management strategy	March 2014
5.	County – Radial Feeder	Establish the feasibility of a car park guidance system for all remaining area strategy centres (Colchester, Harlow, Braintree)	March 2006
6.	Whole Network	Establish & publicize county and local Traffic Management roads for Essex	August 2005
7.	Local - Developed	Each Area Office to provide a district based local traffic management programme and prepare plan of action for ECC approval. This will include carrying out a "use/user audit" of this network and identify improvements to environment/road layout	March 2009
8.	County – Inter-urban	Upgrade all dual carriageway A roads to Quality Plan standard (A133, A131, A127, A13, A414, A1114)	March 2015
9.	County– Inter-urban	Upgrade all single carriageway A roads to Quality Plan standard	March 2025
10.	County – Inter-urban	Upgrade all B roads to Quality Plan standard	March 2025
11.	Whole Network	All school to have zig-zag markings for parking restrictions and appropriate TRO and be enforced.	March 2006
12.	Whole Network	Provide consistent, continuous signed walking and cycling routes within the urban areas of Chelmsford, Harlow, Basildon and Colchester.	March 2011
13.	Whole Network	Identify conflict points between strategic routes of different modes within the above urban areas	Aug 2006
14.	Whole Network	Programme and implement management of conflict points identified in 13. above.	March 2011
15.	Whole Network	Identify walking and cycling routes that are severed at the Essex border and implement a plan of action to complete route.	March 2008
16.	County Routes	Review all speed limits on Priority One County Routes in relation to the new guidance (Circular Roads 1/93 replacement)	March 2011

3.15 Monitoring and Performance Review/Auditing

3.15.1 The Essex Local Transport Plan (LTP) was published in July 2000 and the third Annual Progress Report (APR) was published in July 2004 explaining how Essex is progressing with the implementation of that plan.

- 3.15.2. Strategic Performance Indicators and Targets are outlined in the LTP and assessed within the APR on the basis of data from a range of sources. These documents incorporate performance targets which transportation, road safety and traffic management are working towards. The current best value performance indicators (BVPI), Public Service Agreements (PSA) and strategic performance indicators are listed in the LTP. However, these will change throughout the life of this document since the next LTP is due to begin in April 2006.
- 3.15.3. In the same way the Traffic Management action plan will be monitored and reported on to the Cabinet Member with responsibility for Highways and Transportation annually. The performance indicators when set by the government will be combined with local traffic management indicators and reported on quarterly.
- 3.15.4. In addition to the monitoring for the APR, the works partners and consultants can provide information and monitoring to confirm compliance with these action plans and KPIs. Customer surveys will be undertaken to establish key information such as:
 - Do they know what the County Council is trying to achieve?
 - Can they tell the difference between the different types of road, and do they know why this has been done?
 - Are they aware of the traffic management improvements being undertaken by ECC?
 - Has there been any difference in their approach to how they travel?
 - Do they know where to get travel information from?
- 3.15.5. This information could be provided from the new ECC Community Strategy which is shortly to be published with an action plan. This document highlights the concerns of the Essex people, of which congestion is a high priority. We will publish all findings and monitoring data so that the Essex people can make an informed answer to the above questions.
- 3.15.6. All monitoring will determine whether Highways &Transportation is fulfilling its requirements for both Essex targets and the new Traffic Management Act.

3.16 Coordination and Best Value

- 3.16.1. By combining the resources of Maintenance, Road Safety Engineering and Traffic Management more can be achieved. The coordination of the different departments would lead to whole routes or roads being upgraded to the "Essex Standard" rather than isolated links and junctions. By looking and treating a whole road the disruption to users will be all at once, the same contractor can complete the whole works, combining any AR sites with planned maintenance works, and the stretches in between can be upgraded as the works progress.
- 3.16.2. Through the Local Programme Manager the coordination of all works on the highways will be improved.
- 3.16.3. The County should save money by economies of scale, time and continuity. Depending on the workload of each team, the overall project management can be

given to one team to oversee, but not necessarily the same team each time. This would free up valuable resources at County Hall and in the Area Offices.

3.17 Delivery

- 3.17.1 The delivery of the Traffic Management Strategy will be through the four Area Offices in Chelmsford, Colchester, Rayleigh and Great Dunmow. The delivery will be coordinated from County Hall via the Local Programme Manager and based on schemes identified by the policy holders.
- 3.17.2. Where schemes cross Borough or District and Area boundaries, a project manager will be appointed to coordinate the overall works.
- 3.17.3. All schemes will be subject to adequate funding provision from the Government, or other sources available to ECC.

Appendix A

Relationship Diagram

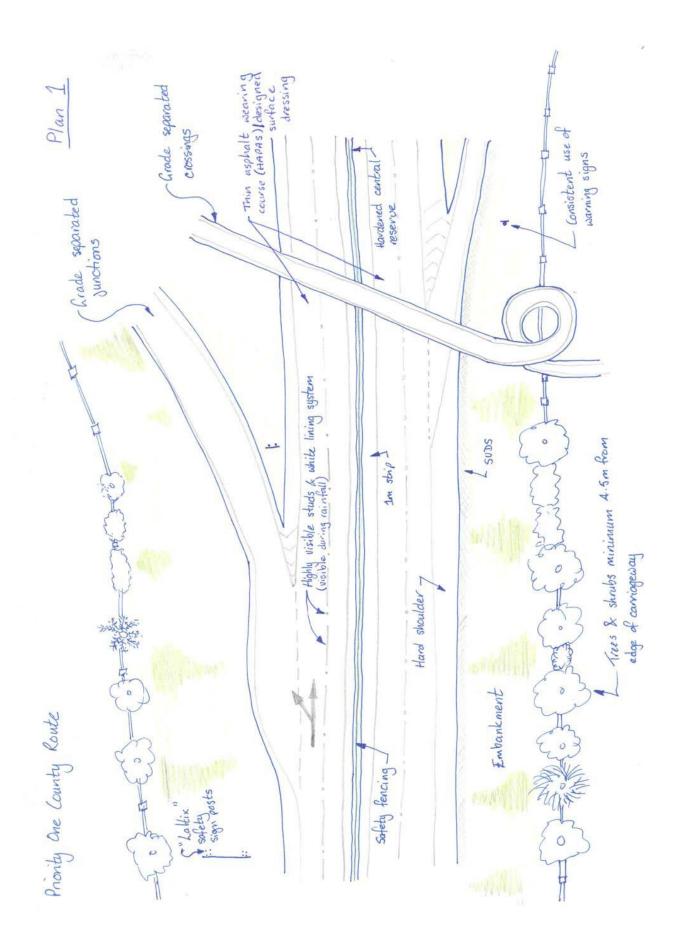
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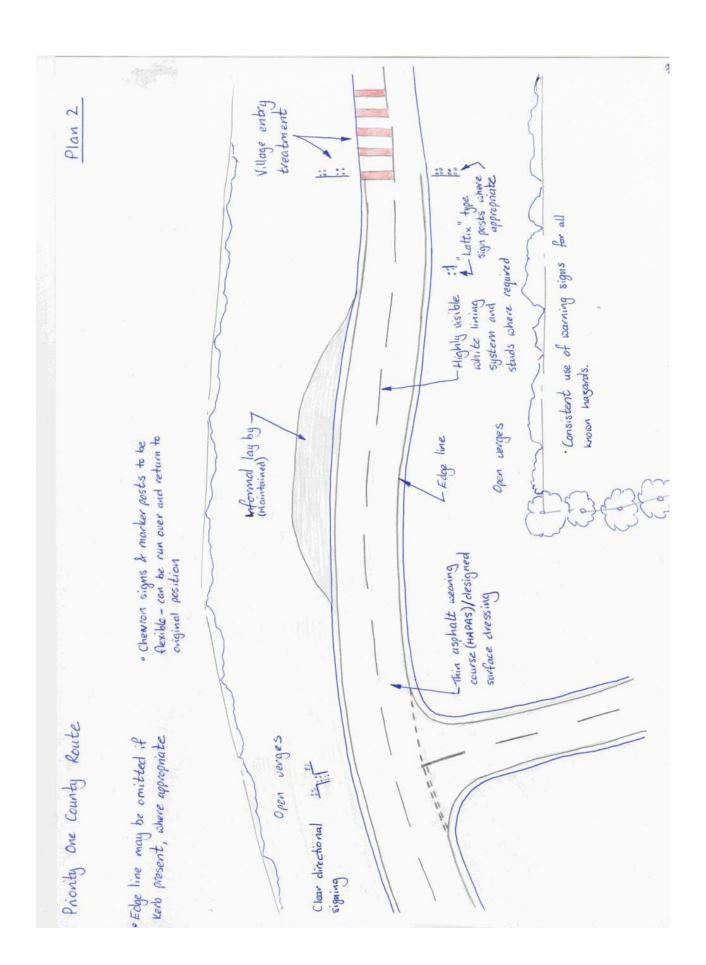
Appendix B

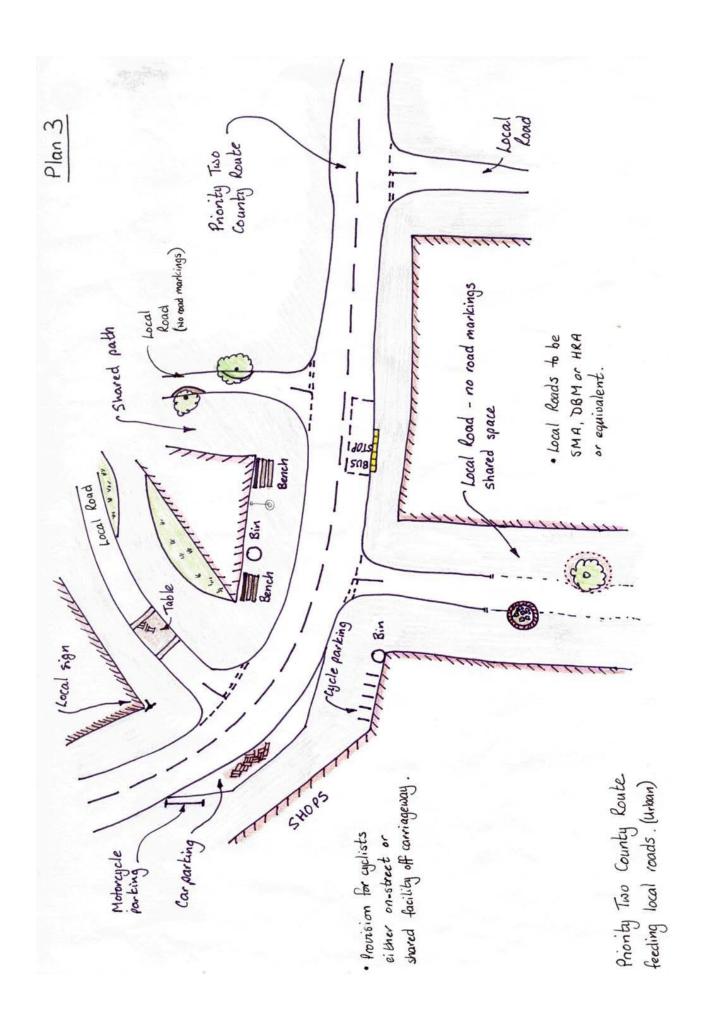
Suitable Streets

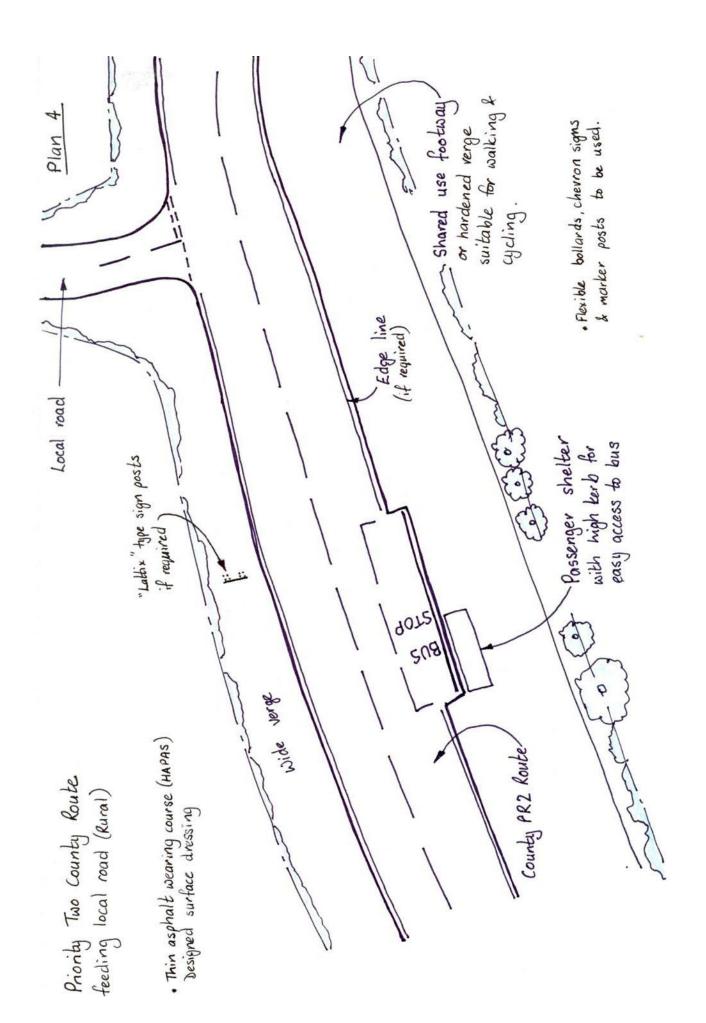
Suitable streets provide a visual illustration of the minimum standards and layouts for each type of road within the Functional Route Hierarchy. All products used, especially on the Priority One County Routes, should be based on a whole life cost, taking into account the initial purchase and installation costs, right through to maintenance and replacement in future years.

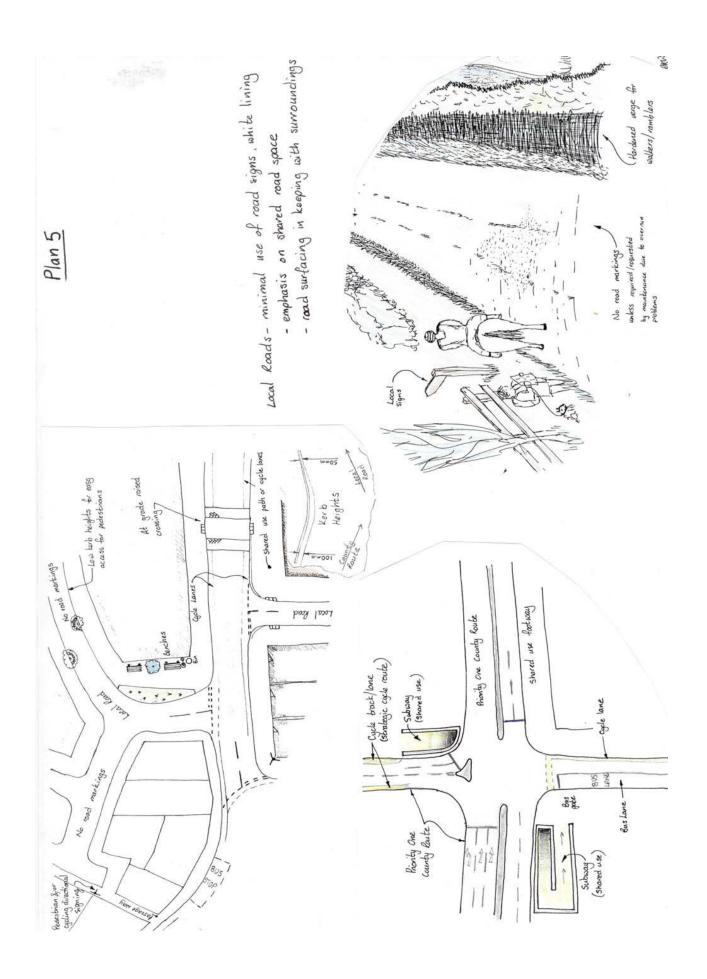
For the Local Roads it is more important that the layout gives a feeling of sharing the space rather than providing exclusively for one mode or another. This will be most apparent in built up residential areas and on very rural roads. On these roads any products used should be in keeping with the surrounding environment. For example instead of highly visible white lining system and associated signs, basic road surfacing and finger posts could be used in a rural environment.



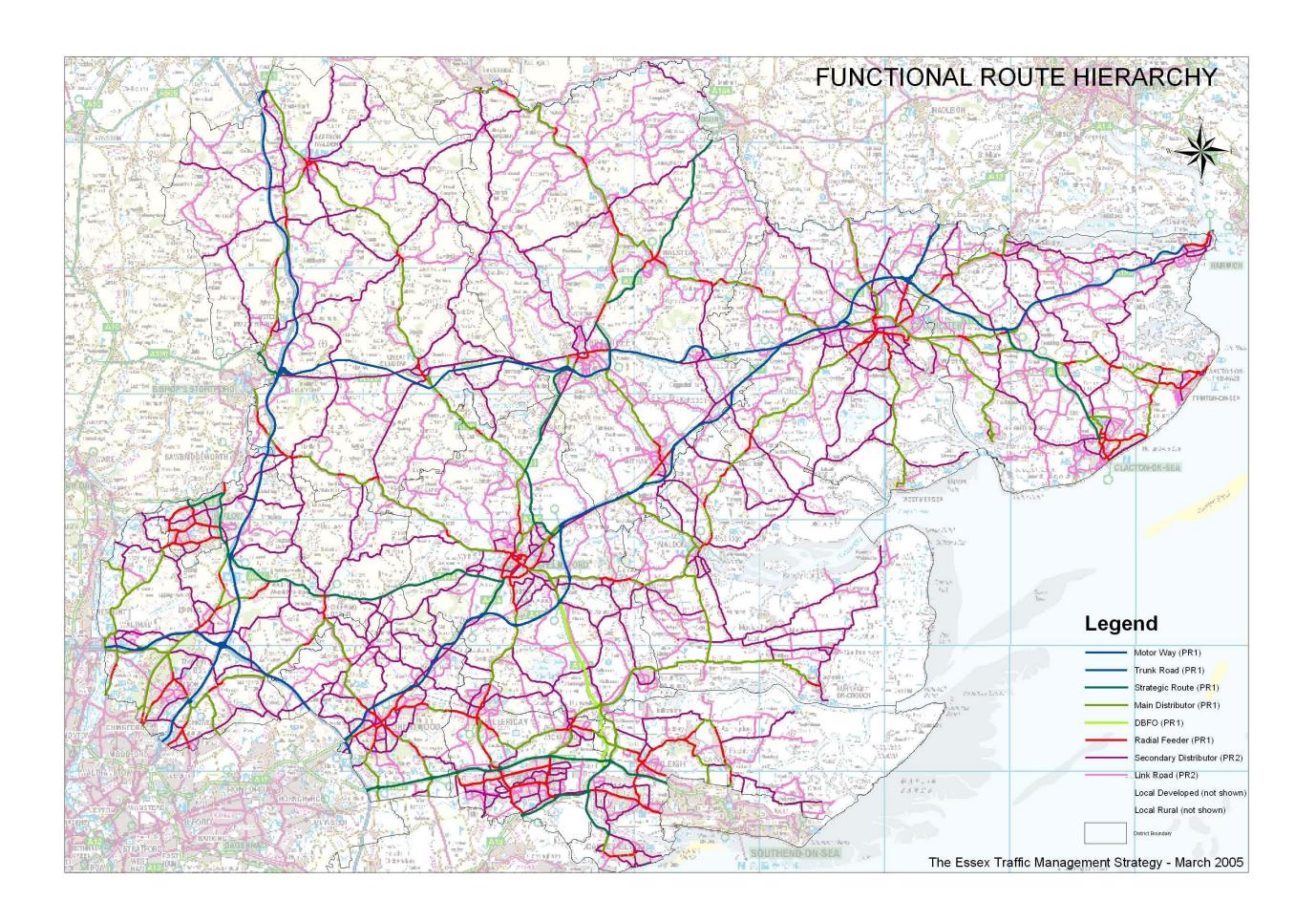








Appendix C Functional Route Network



Appendix D

Further Information

LIST OF ABBREVIATIONS

AR Accident ReductionI
APR Annual Progress Report
CCTV Closed Circuit Television
DDA Disability Discrimination Act
DfT Department for Transport

DPE Decriminalised Parking Enforcement

ECC Essex County Council

ETCC Essex Traffic Control Centre ITS Intelligent Transport Systems KPI Key Performance Indicators

LTP Local Transport Plan

MOVA Microprocessor Optimised Vehicle Actuation

NRSWA New Roads and Street Works Act

Open Circuit Television OCTV Public Right of Way PROW **PTW** Powered Two Wheelers **Quality Bus Partnerships QBP** Regionally Important Centre RIC SCP School Crossing Patrol **Speed Indicator Devise** SID Speed Limit Order SLO TRO Traffic Regulation Order

UTMC Urban Traffic Management and Control

VMS Variable Message Signs
WAP Wireless Application Protocol

ESSEX COUNTY COUNCIL DOCUMENTS

Designing for Cyclists – Guide to Good Practice

Designing for Pedestrians – Guide to Good Practice

Essex Cycling Strategy

Essex Highways Maintenance Plan, Policies and Standards

Essex Sustainable Strategy: Consultation Draft

Essex Walking Strategy

Local Transport Plan and Annual Progress Report

Officers Technical Manual and Policy for the Maintenance of Public Rights of Way

Parking Policy

Power Two Wheeler Strategy

Public Rights Of Way

Public Street Lighting Plans and Policy

Road Safety Audit Procedures and Checklists

Safer Journeys to School – Toolkit 2000

School Crossing Patrol Service Policy Statement

Signing Policy
Signing Practice

Speed Management Strategy

The Essex Approach

The Essex Design Guide for Residential and Mixed Use Areas Traffic Signal and Pelican Crossing Design Code of Practice Vehicle Parking Standards
Walking and Cycling Review – A Guide to onsite surveys in Essex
Road User Audit
Winter Maintenance Plan. Policies and Standards

NATIONAL DOCUMENTS

Walking and Cycling: an action plan (DfT) Tomorrows Roads: Safer for Everyone (DfT)

LEGISLATION

Disability Discrimination Act 1995
New Roads and Street Works Act 1991
Traffic Signs Regulations and General Directions 2002 (available online http://www.hmso.gov.uk/si/si2002/20023113.htm)
The Traffic Management Act 2004
Road Traffic Regulation Act 1991

WEBSITES

www.essexcc.gov.uk www.tagish.co.uk (links to other authorities) www.dft.co.uk www.essexpolice.co.uk (details of Speed Indicator Device locations and Community Bus Operators)

CONTACTS

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Pedestrian queries: walking.stategy@essexcc.gov.uk

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