

# 7 Cycling Schemes



# 1. Introduction

Cycling is important to Essex. It is more than just a pastime for a dedicated few or a cheap mode of transport; it can be a solution to the problem of congestion in our towns and poor health in our society. The demand for cycling in Essex has really increased within the last few years, and with this increase we have seen more requests for provisions to assist people who cycle.

The highway network in the UK has evolved over time but is constrained by the width of the roads through our Essex towns and villages. This generally means that there is limited space within the existing highway boundary to add extra provision for people who cycle without taking it from other road users or from privately owned land. When investigating how to redistribute the space, it is important to understand the total numbers of the different user groups so as not to create a negative impact.

The ECC vision is that we want to see more people cycling in Essex, more safely, more often.

## Our Objectives are to:

- **Double the number of cycling trips in Essex from 2014 levels by the year 2025 at our monitored counter sites and other key routes.**
- **Cultivate a mind-set that sees cycling as a normal, enjoyable and everyday activity for the majority of short journeys.**
- **Establish cycling as an enjoyable participation activity for health gain and a popular competitive sport.**

To help to achieve the objectives a cycling strategy has been developed for the County which can be viewed at the following web page:

<http://www.essexhighways.org/getting-around/cycling/cycle-strategy.aspx>

ECC has developed relationships with outside bodies such as Sustrans and Cycling UK. These organisations work to increase the number of people who cycle and improve the cycling environment. Sustrans lead on the National Cycle Network of which several routes come through Essex. Cycling UK have local representatives who champion cycling in Essex.

## Cycling Action Plans

Cycling Action Plans have been developed for each Borough/District while Local Cycling and Walking Infrastructure Plans have been developed for our major urban areas. These are designed to provide an overview and framework of existing and proposed cycling infrastructure and help prioritise the requests for schemes. These will include measures that are potentially deliverable within the LHP budget and larger schemes that would need to be funded through the Major Schemes capital budget.



## 2. Typical Problems

**'It is not safe to cycle through town'**

**'We need a cycle path'**

**'I don't like the shared-use cycle paths'**

**'I need somewhere to secure my bicycle'**

**'The cycle path signs are not adequate'**

- People who are inexperienced or new to cycling may request a mixture of off-carriageway routes, priority crossings at side roads and segregated or unsegregated crossings, toucan crossings and Parallel. People who have cycling experience may prefer on-carriageway routes with improvements such as mandatory cycle lanes, cycle bypasses at bus stops or advanced stop lines at traffic signal junctions to give them protection from other vehicles. Providing facilities to satisfy both these groups can be difficult and sometimes expensive.
- Cycling in general can be divided into commuter or utility cycling (including cycling to school) and leisure cycling which can have very different requirements. In terms of the Traffic Management Strategy, all routes will need to be coherent, direct, safe, comfortable and attractive for all users of the network.
- There may be requests to create traffic-free routes away from the carriageway which may require PROW conversion orders, land purchase and/or permissive rights to cycle. This sometimes means creating a Traffic Regulation Order which is a legal process and requires consultation.
- For all routes, even where the land is all existing highway, there may be utility equipment that needs to be relocated. This can be very costly and needs to be a consideration early in scheme development.
- There may be requests to upgrade a footway to a shared use or segregated path. ECC aims to limit the use of footway conversion/shared use paths and engineers and designers should first consider alternative options that follows the government cycling guidance document. The conversion of footpaths and footways to permit cycle use is not regarded as a general or area-wide remedy, but has been confined to specific links and locations. It is recommended that where footpath conversion and/or footway conversion to shared use is considered then further studies are undertaken to demonstrate that alternative options have been discounted and that clear benefits can be derived. In such situations, it is vital that the benefits to the people who cycle are balanced against the increased risk and inconvenience to pedestrians.
- There are recommended guidelines governing the width of cycle provision (both segregated lanes and shared use between cyclist and pedestrians) and any departures from these minimum widths needs to be agreed by Essex Highways. – below is a brief summary:

Cycle flows	Minimum width
Up to 300 cyclists per hour	3.0m
Over 300 cyclists per hour	4.5m

## 2. Things to Consider

Cycle Route Type	Direction	Peak hour cycle flow (either one way or two-way depending on cycle route type)	Desirable minimum width* (m)	Absolute minimum at constraints (m)
Protected space for cycling (including light segregation, stepped cycle track, kerbed cycle track)	1 way	<200	2.0	1.5
		200-800	2.2	2.0
		>800	2.5	2.0
	2 way	<300	3.0	2.0
		>300-1000	3.0	2.5
		>1000	4.0	3.0
Cycle lane	1 way	All – cyclists able to use carriageway to overtake	2.0	1.5

\*based on a saturation flow of 1 cyclist per second per metre of space. For user comfort a lower density is generally desirable.

Requests may be made for off-carriageway routes which may require creating a shared-use pedestrian/cycle path. This means creating a Traffic Regulation Order which is a legal process and requires consultation. It is not uncommon to get objections from pedestrians to the creation of a shared-use path.

There are a number of active cyclist lobby groups across Essex who have very clear ideas about what should be provided. This may be at odds with the request and may not be deliverable within the available budget.

## 3. Typical Measures

There are a wide variety of engineering initiatives that can assist people who cycle ranging from speed and traffic management or simple signage, to more complex solutions such as dedicated cycle paths, hybrid cycle tracks and parallel crossings (that enable people who cycle to cross next to pedestrians on a zebra crossing). Members should refer to Section 6 of this Members' Guide which contains descriptions of other crossing types.

The important thing is to identify the key concerns. Once you have done that, you should discuss this with the relevant HLO for the area to identify possible measures. When investigating what new infrastructure is required, it is important to identify the problem and the group of users making the request, then to ask the question "does this request fit or conflict with the Cycling Action Plan priorities?"

## 3. Typical Measures Continued

### Commuter cycling

Cycling infrastructure is often requested for a particular route; often to the station or town centre. Commuter cyclists want secure parking at their destination, lighting on traffic free routes and a direct route with extra provisions to help them across busy junctions.

### Cycle routes to schools

Cycle routes to schools are often requested for younger or less-experienced cyclists. The request may be from parents or from the school itself. In the past there has been dedicated funding for Safer Routes to School, government are looking at funding this through ATF and calling them 'School Streets'. The LHP budget can however fund improvements associated with Safer Journeys to School Projects including improved cycle routes and cycle storage facilities. Shared-use footway/cycle paths are often the preferred choice, but may not be feasible within the available road space. Alternatively, traffic free routes may be requested across parks or other non-highway land that are completely separate from other traffic, although PROW conversion orders, land purchase and/or permissive rights to cycle may be required.

### Leisure Cycling

The leisure cyclist wants routes that are quiet and take in places of interest. They are often requested to support weekend and family cycling. Some of the requests may be for off-road routes through the countryside, parkland or "quietways", whereby the cyclist has priority over the road users.



## Safer Roads

The Road Safety Team carry out investigations into sites where there is a recorded pattern of personal injury road traffic collisions. For those areas where people who cycle have been involved, recommendation may be made to provide additional measures which could improve road safety for people who cycle.

## Cycle Parking

Good practice for cycle parking facilities can be summarised as follows: visible, accessible, safe and secure, consistently available, covered, easy to use, fit for purpose, managed and well maintained, attractive, coherent and linked to other needs of cyclists. Access to safe and secure cycle parking is a major contributor to encouraging cycling. Key locations for cycle parking include:

- The town centre, to access shops and businesses.
- Railway stations, to enable people to cycle to and from the station as part of their journey.
- Leisure attractions, to encourage cycling and reduce car use.
- Businesses, to encourage cycling to work.
- Schools and Colleges.

## 4. Scheme Investigation

The scheme investigation will depend on the nature of the cycling scheme request. A key factor will be to establish current cycle usage and to identify which category of cyclist the initiative is aimed at.

The engineer will consider the available highway space and how it can be used. If shared pedestrian and cyclist provision is being proposed, then it will also be important to understand the pedestrian footfall along the route.

Members should refer to the “Validation and Feasibility Design” section of the “Members’ Guide Introduction” for further details on scheme investigation.

## 5. Costs and Timescales

The Essex County Council contract with Ringway Jacobs is a target cost contract and not a fixed price contract. This type of contract was chosen as the best type of contract to deliver savings and efficiencies and also to promote partnering between ECC and Ringway Jacobs.

An explanation of the process can be found in Appendix 1: Section 1.7 – Cycling Schemes.

## 7. Glossary of Terms

<b>Advisory Cycle Lane</b>	A cycle lane bounded by a broken white line which enables motor traffic to enter the lane when legal to do so.
<b>Cycle</b>	Types of Cycle include standard cycles, solo tricycles, hand-cranked cycles, tandem cycles, recumbent cycles, trailer cycles (tandems with a hinge, usually with the rear seat to carry a child), cycles towing trailers, cargo cycles and cargo tricycles.
<b>Cycleway</b>	A cycleway is a road, route, or path for people who cycle.
<b>Cycle Lane</b>	A lane in the carriageway for use by people who cycle.
<b>Cycle network</b>	A set of connected cycle routes that can be legally used by cycles.
<b>Cycle Route</b>	Any infrastructure that can be legally used by cycles, including roads, bridleways, cycle tracks, hybrid cycle tracks, cycle lanes, light segregated cycle lanes and carriageways.
<b>Cycle Track</b>	A track separate from the main carriageway for use by people who cycle. Cycle tracks may be newly constructed or created through conversion of a footway or footpath and where there is shared use between people who cycle and pedestrians (either segregated or unsegregated).
<b>Hybrid Cycle Track</b>	This is a not shared use cycle track that is adjacent to the carriageway often constructed at an intermediate height between the carriageway and the verge or footway.
<b>Light Segregated Cycle Lane</b>	A mandatory cycle lane that is separated from the carriageway by intermittent physical objects
<b>Mandatory Cycle Lane</b>	A cycle lane bounded by a solid white line which excludes motor traffic.
<b>Non Shared Use Cycle Track</b>	A track separate from the main carriageway for use only by people who cycle. Cycle tracks may be newly constructed or created through conversion of a footway or footpath.



## 7. Glossary of Terms continued

<b>Segregated Footpath/ Cycle Track</b>	Facility used by pedestrians and people who cycle with some form of infrastructure or delineation in place designed to segregate these two modes (2).
<b>Those that cycle</b>	It is believed that using the term 'cyclist' has negative connotations and is potentially restrictive in the promotion of cycling as an alternative mode of transport. Therefore the recommendation is not to refer to 'cyclists' but to use 'people who cycle' or 'people cycling' instead e.g The Broomfield road sustainable travel corridor will include provision for people who cycle.
<b>Unsegregated Footway/ Cycle Track</b>	Facility used by pedestrians and people who cycle without any measures of segregation between modes. It is designed to enable pedestrians and people who cycle to make use of the entire available width of the path (2).
<b>Quietway</b>	A network of interconnected cycle routes on quiet residential streets, where priority is given to people who cycle and pedestrians over motorised traffic.
<b>References</b>	<a href="#">(1) Highways England Definitions</a>
	(2) Sustrans Segregation of Shared Use Routes Technical Information Note No. 19 April 2014

<b>AVL</b>	Automatic Vehicle Location (similar to RTPI)
<b>CMA</b>	Cabinet Member Action
<b>CMB</b>	Cabinet Member Briefing
<b>EA</b>	Environment Agency
<b>ECC</b>	Essex County Council
<b>EH</b>	Essex Highways
<b>LHP</b>	Local Highways Panel
<b>NEPP</b>	North Essex Parking Partnership
<b>PP</b>	Parking Partnership

<b>RTPI</b>	Real Time Passenger Information
<b>S106</b>	Section 106 (Money provided by a Developer to County Council to implement infrastructure as an obligation of the planning permission)
<b>S278</b>	Section 278 (Infrastructure required to be implemented by the Developer as an obligation of the planning permission)
<b>SERP</b>	Safer Essex Roads Partnership
<b>SID</b>	Speed Indicating Device
<b>SEPP</b>	South Essex Parking Partnership
<b>SLO</b>	Speed Limit Order
<b>SSSI</b>	Site of Special Scientific Interest
<b>TRO</b>	Traffic Regulation Order
<b>TSRGD</b>	Traffic Signs Regulations and General Directions
<b>VAS</b>	Vehicle Activated Sign