

<MOVING TO THE LIGHTSIDE>

LOW IMPACT TRANSPORT OPTIONS



If you're looking to reduce car dependency, or better still get rid of the car altogether, the last few years has seen a healthy rise in alternative transport options available in the UK and beyond. Low impact, high viz, greener and healthier than the car, the bicycle is experiencing a renaissance as a viable cargo carrying transport option.

This document is intended to give an overview of what's out there and to provide food for thought, further research guidelines and links to websites. It's not intended as a definitive guide. Much as I'd like to believe that I'm an expert, the reality is that I'm not. There's far more out there than I can cover here, so hopefully you'll feel sufficiently inspired to do more research yourself.

Enjoy the ride....

Contents:-

- **Cargo Bikes**
- **Cargo Trailers**
- **Child Carriers**
- **Electric Assist**
- **Other load carrying bikes**

CARGO BIKES>>

A cargo bike is a bicycle designed to carry loads. It's a broad definition which covers

anything from adding racks to a conventional 'short tail' bike or buying an off-the-shelf 'longtail'.

Longtail Cargo Bikes>>



The term 'longtail' has only been applied to the bicycle since the arrival of the **Xtracycle** (pic left). As you can see, a longtail is basically a long bike, designed that way to carry extra cargo (often as much as 100kg).

Though the bike looks slightly strange on first viewing, in essence it's just a normal bike elongated. There are no extra moving parts – only the cables and the chain are longer than normal. Often referred as a 'hitchless trailer', the longtail is the equivalent of

having a trailer on your bike all the time. Additional accessories are available for some longtails so that you can carry anything from kids through to kayaks.

Longtails available in the UK include:

Xtracycle (see www.reallyusefulbikes.com) – an extension to your 'normal' bike

Madsen (see www.practicalcycles.com) – available with a 'bucket' box option

Kona Ute (see www.reallyusefulbikes.co.uk) – competitive price but made of aluminium

Yuba Mundo (www.practicalcycles.com) – strong bike and good price

Cost

Longtails are traditionally more expensive than conventional bikes, but there are ways of keeping the cost down:

see my blog on the Xtracycle >> <http://b1ke.wordpress.com/workbikes/xtracycle/>

or make your own >> <http://mplsmtb.blogspot.com/2009/03/diy-longtail-part-i.html>

Short tail Adaptations>>

A short tail is basically a 'normal' bike with added extras to give additional load carrying capabilities.



The rack pictured on the left is designed to easily adapt an existing bike, giving the user the option of carrying cargo on the front of the bike. This is available through [Practical Cycles](http://www.practicalcycles.com), based in Lancashire. Payload is 15kg. Remember to check that your bike is compatible with this rack before you buy.

Rear Racks>>

Rear racks are normally designed to carry panniers. However, there are some very sturdy steel options available, either secondhand through ebay or through [SJS Cycles](http://www.sjscycles.com) who stock the Thorn Expedition rack. These racks have a recommended payload of up to 60kg depending on road surface and the size of fixing bolts used.

DIY Racks>>

Some people choose to make their own racks, having had bad experiences with off the shelf options. The pic to the right shows one of the sturdier constructions out there. The guy in question made both his front and rear racks, plus his own panniers to go on them. You can check out his site at <http://www.bicyclinglife.com/HowTo/HeavyDutyRacks.htm>.



Trailers>>

Trailers offer a versatile and often cheap option for converting your existing bike into a load carrier.

Things to be aware of...

How do they handle? People are sometimes nervous of using a trailer because they're unsure of how it will handle. A well designed trailer will track your rear wheel and follow behind very obediently. Be careful of potholes as these can sometimes overturn a trailer (particularly if unloaded) and don't take corners too tightly or too fast for the same reason.

The Bike? I've found steel framed bikes to be far more resilient than aluminium. I've had problems with the dropouts (the place where the rear wheel goes onto the frame) on aluminium frames wearing thin from the pressure of the hitches.

Bolt on axles? There can be issues with hitches that bolt directly onto the rear axle. I've known the retaining nut on a bolt-on axle come loose when a trailer is attached. Quick release wheels (with the skewer adequately attached) tend to be a better option from my experience.

Bumper Cargo Trailer



A great little budget trailer with a payload of 45kg. Available from many bike shops on the high street and online, plus can often be found on ebay.

You can find a review of my experiences with this trailer at <http://b1ke.wordpress.com/workbikes/bumper-cargo-trailer-review/>

Pashley Euro Trailer



A heavy duty trailer made from steel with quality cartridge wheel bearings, designed and built by Pashley in England to carry a euro crate. The Euro comes as a flatbed with optional plastic box. Alternatively you can add your own box to suit your needs.

A review of this trailer can be found at

<http://b1ke.wordpress.com/workbikes/pashley-euro-trailer/>

The trailer itself is available through

<http://www.bikesandtrailers.com/bike-trailers/eurobox.html>

Carry Freedom Y Frame Trailer

A lightweight but very strong aluminium frame trailer with maple top and quality wheels. The Carry Freedom is sold as a flatbed trailer, although the company itself can offer options such as aluminium boxes as an extra – have a look at www.carryfreedom.com for more on the trailer and http://www.carryfreedom.com/downloads/Y-Frame_Boxes.pdf for details of boxes etc..

If you want to know how we got on with a Carry Freedom, have a look here >>

<http://b1ke.wordpress.com/workbikes/carry-freedom-y-frame-trailer-review/>

DIY Trailer



If cash is tight, you might want to consider building your own trailer. The charity Re-cycle (www.re-cycle.org) offers plans on how to construct a trailer from old bike parts (pictured left) which can be bolted together rather than welded. The instructions are here>>

<http://www.re-cycle.org/sites/re-cycle.org/files/Trailer.pdf>

Other trailers to have a look at:

Bob Yak (http://www.bobgear.com/trailers/trailer.php?product_id=10) single wheeled trailer.

Burley Nomad (http://www.bikesandtrailers.com/bike-trailers/burley_nomad.html) twin wheeled fabric covered trailer with option luggage rack.

Carrie M2 (http://www.bikesandtrailers.com/bike-trailers/roland_carrie_m.html) modular cargo trailer.

CHILD CARRIERS>>

My only experience of these trailers is a budget one in which I used to transport my dogs. Some child carriers double up as a pushchair which presumably would be more cost effective. If it's a child carrier you're looking for, check out these links>>



<http://www.bikeradar.com/gear/category/accessories/trailer>
(includes reviews)
<http://www.bikesandtrailers.com/children/index.html> (based in Lewes, East Sussex)

ELECTRIC ASSIST>>

Electric bikes are becoming more popular and fall into two main options:-

- **Purpose built** – off the shelf, usually with an integrated space for a battery.
- **Retro fit** – most bicycles can be adapted to run with electric assist.

There are a whole range of electric bikes and retro fit options available at present in the UK. When looking at these, there are a few things to be aware of:-

Legality>>

An electric assist bike is legally classified as a bicycle and can be used on cycle lanes only if it fulfills (amongst others) the following criteria:

- The bicycle doesn't weigh more than 40kg when unladen
- The motor doesn't exceed 200 watts
- The motor must not be able to propel the bicycle at more than 15mph

Trikes and tandems have their own legislative criteria.

For the full criteria have a look at this pdf from the Department For Transport -

<https://www.dft.gov.uk/pgr/roadsafety/drs/cyclingandmotorcycling/electricassistedpedalcycles.pdf>

Quality>>

There are many manufacturers out there producing electric bikes, so it's always worth doing some research before you buy. The rule of thumb, as with most things, is that if it sounds too good to be true, it probably is.

Batteries and recycling>>

Lithium batteries are now replacing the old NiCad and NiMH batteries, because they tend to be lighter and more durable. A more comprehensive discussion on batteries can be found here>> http://www.lxe.com/uploadedFiles/pdf/White_Papers/wp_Li-IonBatteries.pdf

There are environmental issues with all batteries, so electric assist bikes do carry their own ecological burden. ReBatt UK appear to be offering a reconditioning service for batteries, although it looks to focus on power tool batteries at present. Their website is

here>> <http://www.rebatt.co.uk/refurbexplained.shtml>.

OTHER LOAD CARRYING BIKES>>

Cargo bikes are becoming more and more commonplace and new ones are appearing all the time. As I said earlier, this document can only give indications and food for thought for further research. So, as a final bit of research, you may want to check out the following if you're looking for a cargo carrying option:-

The Bakfiets>>

Very common in Amsterdam is this cargo carrying classic. Not cheap but still cheaper than your average car and available from

<http://www.practicalcycles.com/userimages/procart7.htm>



The Christiania Trike>>

Originally designed for use in car free Christiania in Copenhagen is this versatile three wheeler option. Available from Velorution in London

<http://www.velorution.biz/2006/06/christiania-event-synopsis/>



FURTHER READING:-

A to B magazine - (<http://www.atob.org.uk/>) - specialises in alternative transport of all kinds. Very credible and informed read.

Velovision - (<http://www.velovision.com/>) - advertises itself as 'the practical cycling magazine' and, again, offers up good articles on the growing realm of machines fit for urban purpose.