

# Two Wheel People Movers

by Steven Muir 2008

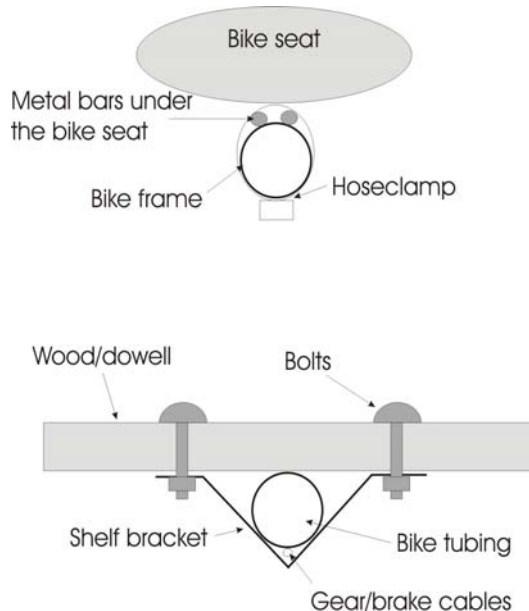
I am part of the Great Hamster Community in central Christchurch, which has lots of young children aged eight and under. I also make bike trailers and have written a book called PROSACC – Profound Revelations Of Sunday Afternoon Cycling Church, which is a humorous look at religious traditions from a cycling perspective (see [www.cyclingchurch.org.nz](http://www.cyclingchurch.org.nz) for details). We aim to reduce our need for cars by cycling as much as possible. This means we often need to carry the younger kids and associated gear on our bikes. Some of the methods we have employed are as follows:

1. Using a proper bike trailer to carry two children which costs anywhere between \$400 and \$1600. They are very good but the expense often puts people off using one and large items of gear are hard to fit in (e.g. my bass amplifier, bins of shopping). It is generally better to buy a high quality Chariot or Burley which has a high resale value after the few years you use it, rather than a low quality one which is stuffed by the end of a few years use.

2. Using a plastic bike seat on the back for younger kids (mine was \$4 from a garage sale or you can get them \$150-200 new). It works well for younger kids. I have big feet so had to make a different mounting mechanism to allow room to pedal. Our kids are solid, so by three years old they are too heavy for the back seat and move to the front seat (below). The bike trailer is supposedly safer as most accidents involve a sudden stop then falling over (e.g. car door opened in front of you), so if the child falls from the height of a bike seat it will hurt, whereas the trailer remains upright in most cases, and kids are unhurt. The trailer also makes you three dimensional and more visible.



3. Using a bike seat attached to the main bar with a hose clamp, with a footrest underneath which is a piece of wood bolted to an old shelf bracket bent at the ends. This can carry much more weight than the seat at the rear, is easier to converse with the child, and doesn't disturb the pedalling unduly. The child is not strapped on so could be hurt in an accident, particularly a sudden stop. It cost me \$5 for a seat, \$2 for a hose clamp and the other bits I had lying around. It is quite portable so I took it with me on holiday and attached it to a borrowed bike in a couple of minutes, allowing us to sight see by bike. My four year old also enjoys changing gears for me. A foam pad around the handle bar stem is recommended to avoid groin injury in case of a sudden stop. You can get these new for \$200 with straps, but they are generally designed for younger kids.



4. Build a bike trailer. A kitset from cycling church will cost \$170 and provide a high quality aluminium frame and hitch, to which you add second hand wheels and bins or deck to suit your loads, and away you go. Children can travel in bins and love it, but fingers-in-the-spokes is an ever present danger. Mud guards can solve this problem relatively easily. But I just warn my kids of the dangers and they have had no problems (other than a stuck elbow when one child attempted a moving exit of the trailer, and standing up and dancing in the crates while moving which was quickly banned).



Quick disconnect ball joint hitch



Bike trailer set up for recycle crates using old wheelchair wheels. Note the horns and 12V battery on the front of the bike.

5. Clip on tandem with or without bike trailer. Older children can provide some useful pedal power so put them to work with a clip on tandem. Loads can be carried behind the tandem. Kids love it, but the wobble factor can be a bit disconcerting till you get used to it. This photo was of the supermarket challenge where the cyclist beat the car by 30 minutes travelling 3km and back. Tandems are around \$2-400 new. I made one from an old power rider exercise machine and a bike. A Trailgator tandem setup is also very good, which is a bar that raises the front wheel of a child's bike and connects to the adults bike. It can be disconnected when you get to the park and the child can ride free.



### Safety

As mentioned above a trailer is likely to increase your safety on the road. An air horn (trademe) or a couple of 12V car horns are an excellent addition to a bike to alert dozy drivers to your presence on the road. There are not too many regulations to comply with when carrying children other than the obvious wearing of a helmet. The other restrictions in LTSA regulations are as follows:

#### 11.7 Cyclists and moped drivers - Carrying restrictions.

A person must not ride a cycle or moped on a road while it is carrying a passenger unless-(a) the passenger is carried on a pillion seat designed for that purpose and footrests are provided for and used by that passenger; and (b) in the case of an infant, the infant is carried in a container or seat that is designed to protect the legs of the infant from coming into contact with the wheels of the vehicle.