Workbikes
Tools for a Sustainable Community

Shane Rhodes, Sevilla, Spain
shanerhodes@teleline.es

Summary

For many years cycle planning has looked at how to effectively and safely move cyclists about the city center and beyond. It has become clear that we must also look at how goods and services are moved in these same areas. In the following paper I will be discussing three main points of the workbike industry, their current situation, and thoughts on improving that situation.

The first point is the use of the workbike in government and private businesses delivery of goods and services to the community it serves. Many people remember the past of the local baker or grocer delivering their goods by bicycle and this now 'historic' method of transport has become essential to the future of sustainable urban development as well. Secondly, we will look at businesses that provide a Human Powered Delivery Service (HPDS) to government, private businesses, and the community. Though the cycle courier continues to be an important part of many cities delivery infrastructure they are mostly used for small packages and letters. With ever increasing cycle technology and the desire to create more sustainable modes of package delivery many HPDSs have been created around the world. These companies are moving cargo from 10 grams to more than 100 kilograms every trip, and the idea of "one less car" on the road is becoming a reality. Finally, it is important to look at the private individuals use of the bicycle for transport of their own goods. Whether it is bringing the children to daycare, doing the shopping, or even moving house, we should not limit ourselves to using the bicycle solely to transport ourselves but expand ourselves to the idea of moving our goods by human power as well.

1. Introduction

Workbike- *A human powered vehicle with two to four wheels, a steering mechanism, a saddle seat, pedals, by which it is propelled, and a load carrying area. Also: cargo-carrying, work, commercial, or utility cycles, cargobike, human-powered delivery vehicle (HPUVs), etc.*

In some manners it is difficult to determine where a paper on workbikes exactly fits into a conference venue such as this one. The four general tracks from this conference all have an important influence on this field. *Transportation* seems like the most obvious, we are working everyday to move goods and services throughout our urban cores in the most sustainable manner possible. The track of *Land Use Planning* is one that influences our field the most; a city that is laid out for the car is not the one most suitable for workbikes, yet a city that is well thought out for bicycles makes the workbike field grow and flourish even more. In both the *Health* and *Environment* tracks we find workbikes not only benefiting the health of the worker riding the cycles but also the general health and environment of the whole community in which he/she works.

Yet it is in the track of *Economy* where we are based, because first and foremost we are businesses. Workbikers throughout the world are not only benefiting the cities they live in with clean air, less traffic, and less noise, but also themselves with a healthy, sustainable way of making a living. Through this paper I hope to impart a little understanding on workbikes, their current situation, and their promising future by looking at three major areas of their use; individual businesses and the government, human powered delivery services, and the community at large.

2. Business and Governmental Use

For many, the classic picture of a workbike is that of the grocer or baker from the corner store loading up his/her basket and riding off to deliver the goods. Unfortunately, this picture is becoming more and more classic. In the 1870´s some of the first carrier cycles were developed in England and were used by postal and newspaper deliverers, grocers, bakers, milkmen, fishmongers, butchers, confectioners, carpenters, and many other tradesmen. With this new invention business efficiency was increased by providing a cheap way to move ones self and services quickly about the city and countryside. It also aided in employment, as many people were hired as the first "bike messengers" for these businesses.

Business ownership of work cycles has declined astronomically with the advent of the automobile and now delivery by bicycle is seen as a novelty rather than an advantageous service. Still, in many northern European countries one can still see some tradesmen, bakers, and grocers delivering by bicycle. In the United States, restaurant and grocery delivery bikes are seen in a few large cities and various mobile services such as landscaping (*Tera Nova*), recycling pick-up (*Second Generation Curbside Recycling*), and even bicycle repair (*WE Fix Bikes*) can be seen in many smaller cities. For many businesses a workbike is the only type of delivery vehicle possible, as it is the most economical. For a local grocer to own a van, insure it, fuel it up, and maintain it would cost more than he/she could ever earn in deliveries, yet having an employee that is already working at the store deliver the groceries using a vehicle with small capitol investment and very little maintenance costs adds little to his/her overall costs. For those businesses using a workbike the extra service increases overall sales. The *Bike Doctor* program in Dusseldorf, Germany have increased overall shop revenues not only in their repairs provided on the road or in homes by their mobile service, but also by the advertising provided on the eye-catching workbikes.

One of the largest uses of workbikes within the private industry is found within factories and manufacturing plants. Companies such as *Exxon, Texaco, General Motors, Chrysler, Boeing, and Anheuser-Busch* have seen the advantages given by a machine that doesn't emit carbon monoxide, hydrocarbons, sulfur dioxide, and particulates within enclosed areas. To some businesses a noiseless, vibrationless, and non-sparking machine is needed, while others simply can't afford to buy a fleet of trucks but a fleet of workbikes is more manageable. For example a bakery in Columbia, *Ponque Ramos*, replaced almost it's whole fleet of 200 motorized delivery vans with 800 workbikes, the result of which was a huge savings in transportation costs for the company and a greater amount of employment and livability for the city.

For private businesses to increase their use of utility cycles there has to be a growth of examples from government agencies. Community parks, recreational areas, and gardens could all be maintained and services by workbikes. The postal service, meter readers, police, and many other city departments could implement workbikes into their everyday work. The city of Eugene, Oregon used a tricycle recumbent as the parking patrol vehicle since they were able to carry the equipment to "block" the wheels of certain vehicles as well as easily to manoeuvre and park to fine violators. There is something eye catching and meaningful about a cyclists ticketing illegally parked cars. Another important governmental use of workbikes can be found in many countries postal services. The Swiss postal service alone uses more than 3,700 delivery bikes and the Danish postal service uses forty *Christiania* Trikes in it's everyday service. As one Chinese postal worker, Yang Yuliang, states in "Postal Wheels Bring People Together," "Society can't do without us. My bicycle wheels link thousands of families!" Whether it is delivering the mail, ticketing illegally parked cars, chasing down thieves, cleaning up a city park, or reading water meters this economical form of transport will not only help a governmental agency save money and have better contact with the community, but also help that community to become more sustainable and livable.

The government should not only encourage by leading but also by assisting. Sometimes a simple tax-break or assistance program is all that is needed to bring a companies attention to the idea of using appropriate transportation. Some U.S. cities have been trying to revitalise their downtown by giving large businesses tax breaks for locating in the centre of town instead of the outskirts or suburbs, where land is normally less expensive. While this can be a positive influence on transport, with less people commuting out of the downtown area, it should be combined with requirements that a businesses use sustainable modes of transport, like workbikes, to move it's goods or services in and out of the downtown core and encourage employees to do the same. A program started in 1995 in the Netherlands that gives tax breaks (which can be up to NLG1,500, $730) to employers who buy 'company bicycles' instead of company cars for their employees had sales of 70,000 units in 1998 and is expected to reach 200,000 in the coming years. This same program could be implemented for the purchase of company workbikes as well.

3. Human Powered Delivery Services

One of the fastest growing fields within the workbike industry is that of the Human Powered Delivery Service (HPDS) also known as commercial cargo cycling, or cargo cycle courier companies. These services consist of one or more riders using a combination of trailers and/or cargo cycles to deliver goods within the city. Their services are contracted by government agencies, companies, and private individuals and range from recycling pick-up and grocery delivery to on-call package pick-up and delivery. Some HPDSs only have fixed routes with fixed companies or individuals, while others work as "typical bike messengers", only adding the convenience of cargo to their on-call services. Their beauty lies in their simplicity and low start-up costs. Some people start with only a bicycle and trailer, a phone or pager, a small business license and a lot of energy and desire.

One of the classic examples of an HPDS was started in Seattle, Washington by six teenagers and two bicycles in 1907, well known now as the *United Parcel Service* (*UPS*). New York bike messengers used to deliver large packages on specially designed bicycle racks, before they switched to the now classic (though somewhat space-limited) messenger bag, and the *Western Union* messengers used bicycles until the 1940´s. Though these companies (and many others) abandoned their original delivery vehicles, there is a migration back to the workbike, as they are finding it easier to get around in many congested urban cores. Even if larger delivery companies don't find their way back to the bicycle, many smaller businesses are sprouting up to provide this much needed service.

Pedalers Express, in Eugene, Oregon, started in May, 1992 delivering a weekly periodical by one rider and one cargo bike and they continue to flourish today with five cargo bikes (100kg capacity each), one cargo trike (250kg capacity), two trailers (75 and 150Kg capacities), and a short wheel based recumbent used for longer runs, all locally built by *Human Powered Machines.* They have served hundreds of clients and their logo pasted on the front of their bikes, "One Less Car," is real truth in advertising. PedEx Eugene were just the first of what is a growing field, with four other businesses across the U.S. using the same name some owners say "it's not a franchise, it's a movement." Besides these five there are more than ten other established HPDSs in North America and more than twenty throughout Europe, as well as many smaller unrecognised ones. They are delivering car parts, newspapers, groceries, prescriptions, office supplies, household goods and furniture, print shop products, produce, videos and video equipment, flowers, books, recycling goods, computers, bread, the stray bride and groom, wooden cross, or lost pet here and there and anything else that is normally assumed a "bike messenger" can't carry. Some of these businesses have completely replaced a private companies delivery vehicle, others are used instead of a car-based courier service, while others supplement an existing service used by their clients, but no matter how they operate they are all working to reduce the miles travelled by motorised vehicles.

The future is full of possibilities for commercial cyclists. As local economies compete with large corporations to survive, they look to offer specialised services for their community. As Andrea Casalotti of *Zero Emissions, Real Options Ltd.* in London, states:
In cities and towns where people take pride in their local area, workbikes will be prominent. Businesses will be attracted by their low purchase, running and maintenance costs as well by the flexibility they offer. Residents will appreciate their quietness, but most important, they will appreciate the effort by local businesses to improve the quality and attractiveness of the area.

As our cities become more congested with traffic, we are beginning to look for solutions to not only move ourselves but our goods about the city. Since the majority of individuals state "the need to run errands" as their reason for car commuting, a city with several human powered delivery services operating, reduces the need for an individual or business to use their petrol-based vehicle. Those individuals or businesses that don't find it necessary or can't afford to buy a workbike or trailer only need to pick up their phone and ring the local HPDS.

The majority of HPDSs that exist in the U.S. today are in what are considered to be "bike-friendly" towns. Each owner states that it is the environment of their city that benefits their business (as well as their business that benefits the environment). *Pedal Express*, in Berkeley, say that since the local government started using their services they have come to understand and be very receptive to how important Pedal Express is to the city. Another Pedalers Express rider from Eugene says that "since we are a bike town there is a Pedalers Express and because there is a Pedalers Express we are a bike town." Land-use planning that focuses on the bicycle as transport is necessary in expanding the possibilities provided by the workbike.

Part of the Pedal Express Berkeley crew and their Human Powered Machines.

4. Personal Use
Outside of work many people find the automobile to be a necessary evil, they state "the need to take the kids to school, do the grocery shopping, or go to the dry cleaners" as reasons for not riding their bicycles. All of these reasons would be good ones, if it wasn't for the simple invention of the bicycle trailer. By attaching a trailer, or buying a bicycle with a little more cargo space, one is able to do all of these tasks and more. With the advent of the automobile we know that our travel time has not decreased, since our travel distances have increased . Instead of shopping the local market many people take the extra time and gas to drive to the suburban supermarket because it offers lower prices. Yet, the extra time and money saved by stopping at the local market on the way home from picking up the kids from school not only helps our city traffic problems but supports the local economy as well. The money saved in the suburban supermarket can be made up for in saved car

expenses and a more liveable city.

This is the area where local government aide is most needed. For people to use the bicycle as their main vehicle of transport a city needs to be well planned; high density and encouragement of mixed uses is necessary and infrastructure providing safe bike ways and parking make everyday use of the bicycle as a utility vehicle more practical A good example of government encouragement of utility cycling for individuals is the *Air Beautification Project* used by a Californian county air pollution control district. It awarded a local bicycle trailer manufacturer (**BOB Trailers Inc.**) $5,000 to subsidize the retail price of it's trailers, dropping the price in half for the consumer. Co-owner Philip Novotny states that "cyclists who have originally purchased these trailers for recreation/adventure travel, are now using them for their around town errands and in effect, they're using their cars less!"

5. Conclusion

There are a few areas within the workbike field that I have not covered in this paper that deserve at least mention as well. Looking beyond the Western countries, the amount of people and cargo moved by bicycle in Asia alone outweighs that moved by motor vehicles in all of Europe combined. Western countries must not only encourage workbikes but work with their Eastern neighbors so that they do not lose that most sustainable mode of moving their goods. A very influential field for workbikes throughout the world is that of the pedicab or rickshaw; they make up an important part of the economy not only in less-developed countries, but also continue to grow in those countries dominated by the automobile, and they are an essential key to any sustainable city.
Integrated transport is another advancement the workbike industry is working on. A combination of an HPDS picking up packages in one town, delivering them to the train station, and another HPDS at the other end delivering them has been started by *E-Trans* and *Zero Emissions* in the UK. They are making long distance parcel service not only rapid, but extremely reduced in the amount of air and noise pollution over traditional freight shipping. The technology of workbikes has also changed incredibly over the years. Thanks to great advances in general cycling technology the workbike has been able to improve its capabilities and ease of operation. Many small bicycle manufacturers are producing revolutionary machines that will lead us into the future of what is possible for the commercial cyclist.

Throughout the world there are more than ten million workbikes in use and production continues to increase. Businesses, government agencies, and private individuals should look at how they are moving their goods and services within the urban core. Could it be done in a more sustainable manner? Has the workbike and all of its possibilities been considered? Please use the information below to learn more about workbikes, HPDSs, and utility cycling in general, because the tool for your sustainable community will be delivered by human power.

Resources

Web sites and Mailing Lists:

- www.workbike.org - The workbike web site, a great jumping off point with lots of information on manufacturers and operators of workbikes, news, free ads, comments, and good links. A must see.
- Workbike mailing list: Send an e-mail with subject line Info to workbike-request@ihpva.org or simply go to the above website for more information.
- www.efn.org/ cat- The site for the Center for Appropriate Transport in Eugene, Oregon. Their projects are too numerous to list, but include Pedalers Express and a great transportation education program.
- www.bikeroute.com- A good general information site with good links.

- www.bikeculture.com- The site for Open Road Publications.
- www.web.net/ detour- The site for Detour Publications.
- www.velorution.org/workbikes_page.html- Simple listing of workbike manufacturers.

Books and Magazines

- Gregory, Jim. *Cycling for Profit*, San Francisco, CA: Van der Plas Publications, 2000. 144 pp. A must read. Great information for those interested in starting any kind of commercial cycling business, or those interested in how they work.
- Perry, David B. *Bike Cult, The Ultimate Guide to Human Powered Vehicles*, New York/London: Four Walls Eight Windows, 1995. 570 pp. The big thick "bike encyclopedia" with information on anything relating to bikes, with a spattering of utility cycles.
- *Open Road Publishing*, Unit 1, East Riding Business Park, Annie Reed Road, Beverley, East Yorkshire, HU17 OLF, UK. Tel +44 (0)1482 880 399 The publishers of *Bicycle Culture Quarterly* and the *Encycleopedia* (book and video). Lot's of transportation cycling and always something on workbikes.
- *TransMission*, Transportation Options/Detour Publications, 761 Queen St. W., Suite 101, Toronto, ONT, M6J 1G1, Canada, Tel. (416) 504-3934, E-mail: detour@web.net Besides their magazine they publish a great series of booklets (*Chapbook series*) for those just starting out in the workbike industry. Request a free catalog of all their cycle-related material.