

A CASE FOR IMPROVED BICYCLE FACILITIES

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1. INTRODUCTION

Mankind has made incredible technical advances during the 20th century and will continue this asymptotic growth in technology in the future - spurred on by the silicon chip.

Technological improvements in transportation have also benefited many and the comforts and quality of personal mobility is for all to observe. However, there are still millions of citizens worldwide who cannot afford motorised transport and are considered either “stranded” or “captive”.

Moving South Africa, was published in 1998, and sets out the South African government’s 20 year transport strategy. A table of interest, in this report, indicates the number of people in South African urban areas who fall into one of the following categories.

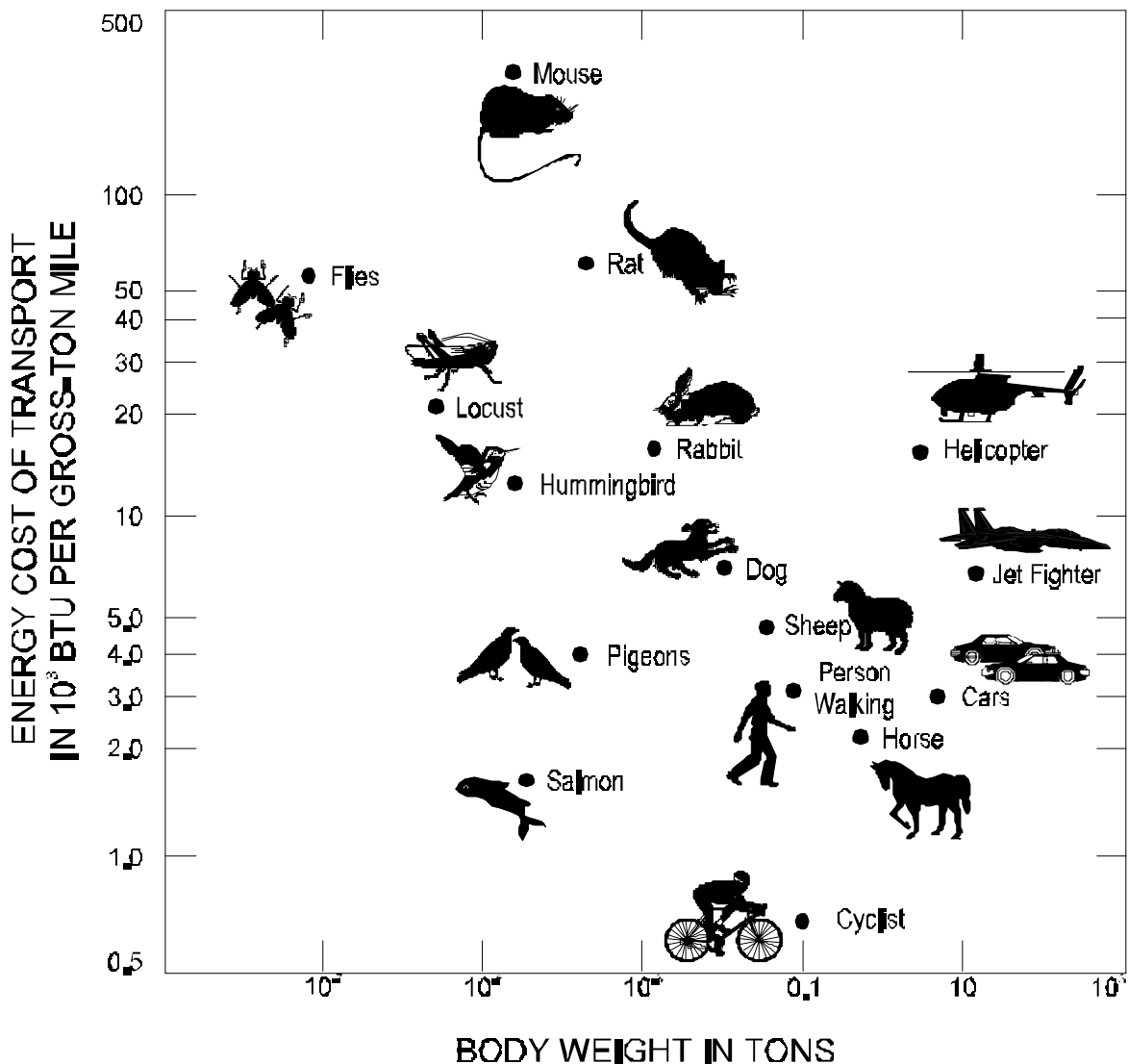
Stranded (no affordable public transport available)	: 2,8 million
Survival (captive to cheapest public transport option)	: 4,1 million
Strider (prefers to walk or cycle)	: 5,4 million

2. THE BICYCLE

In South Africa, blessed with a sunny climate, there is an obvious mode of travel that could greatly enhance the lives of millions - viz the dependable bicycle.

The bicycle is cheap to acquire and run, does not pollute, keeps the user in good health, has low space requirements (movement and storage) and has a very manageable range of use (anything from 2 km to 20 km). The bicycle also happens to be the most efficient transport mode - it is more efficient than walking - as illustrated on page 2.

ENERGY EFFICIENCY



Source : Comparison of the Energy Efficiency of a wide assortment of “fellow travellers” (Wilson)

3. STATE OF THE BICYCLE MODE OF TRAVEL

Bicycle travel through the world comes in many shapes and sizes. In first world societies the 10 speeds are more predominate whereas in developing countries the single speed roadsters are the work horses. It is difficult to imagine that in Asia, bicycles transport more people than all the motor vehicles in the world ! In India many bicycles are adapted to haul major loads or to act as taxis for 2 and sometimes 3 passengers.

In The Netherlands, Denmark and especially China the bicycle is one of the most important commuter modes.

The following table estimates the use of bicycles in various countries.

Bicycle Ownership in Selected Countries

(Source : Mainly Worldwatch Institute)

Country	Bicycles / 100 persons
Netherlands	79
Germany	74
Japan	49
United States	42
Australia	42
South Africa	36
China	27
Mexico	16
South Korea	15
India	7
Malawi	2

These figures can be misleading but does give an indication that the more developed the country the higher the bicycle ownership.

However the number of bicycles in use in some of these countries are:

China	:	351 million
India	:	70 million
South Africa	:	15 million
Netherlands	:	14 million

4. ENCOURAGEMENT OF BICYCLE USE

To encourage the use of the bicycle, either for commuting, shopping or recreation, facilities that enhance safety and security must be high on the priority list. For the younger generation (8 years to 16 years old) separation of bicycle paths from general motorised traffic is essential. Young riders have not had the experience of driving motor vehicles and are oblivious of the dangers of controlling a one ton mass on 4 wheels with limited peripheral vision. Separation of travel paths, in urban areas, can be achieved by the use of parks and river courses for bicycles or by use of a physical barrier (kerbs, bollards, railing) between motorised and non-motorised vehicles where a right-of-way is shared.

For the more experienced cyclist, separated paths are very nice to have but not essential as riding defensively on main routes is part of a built in awareness as a result of also being a motor vehicle driver.

The surfaces of paths for bicycles also play an important role in attracting users. Smooth, clean surfaces make a big difference when riding a bicycle.

Bicycles do not “sweep” roads compared to motor vehicles so maintenance and removing debris from bicycle paths is essential.

Traffic measures which give priority to cyclists should be at the forefront of planning. At road intersections, which are the location of most bicycle accidents, “blow-up” stop markings, which give cyclists priority at signalised intersections, have been used successfully in many cities. Allowing cyclists to cross intersections along with pedestrian movements is another method of enhancing safety for cyclists.

Having reached ones destination as a cyclist, availability of parking and changing facilities with a shower, further adds to the encouragement of cycling as an alternate commuting mode.

Parking for commuting cyclists is long term whereas parking for shopping, deliveries or visits are short term. The facilities required for bicycle parking are dependent on the duration of parking which vary from secure lockers, for long duration, to racks for short term parking. Bicycle planning manuals illustrate several examples and the most appropriate and cost effective parking should be installed to ensure reasonable security.

To sum up, bicycles in urban areas can assist in mobility of its citizens, as well as easing traffic congestion, by planning for the following :

1. Dedicated paths for cyclists
2. Good maintenance of paths
3. Traffic priorities for cyclists
4. Law enforcement for safety purposes
5. Various long and short term secure parking facilities

5. AFRIBIKE

A significant development is taking place in Africa to assist mobility of people by the recycling of bicycles.

The establishment of AFRIBIKE (an incorporated association not for gain) in Johannesburg has given the encouragement to utility cycling in South Africa a major boost. Afribike was created by the Institute for Transportation and Development Policy (ITDP) from America. Recent approved funding has come from the United Nations Development Program (UNDP) and the Danish Development Agency (DANSED).

Afribike procure used bicycles and after refurbishment are sold to the public at a minimal cost of a new bike. Several bicycles are also remodelled to load carrying versions.

In addition, a skills program is offered covering bicycle maintenance, repair and riding skills. Advanced courses inform cyclists how to cope with more complex mechanical problems and how to boost their income using these Afribike work bicycles.

Afribike intends expanding its activities to Kwa Zulu/Natal and the Western Cape and will support projects in other sub Sahara countries.

6. CONCLUSION

The case presented for greater bicycle use is not new. It is also not an anti-automobile stance but based on the logic that many folk are restrained in their movements through lack of transport due to bread line incomes. It is also based on the need to reduce urban congestion by making alternate travel modes more attractive, safe and economical.

South Africa needs role models for encouraging people to use their bicycles for commuting, work opportunities, to school, shopping and for recreation. Luckily two of South Africa's Cabinet Ministers are keen cyclists, viz Minister Valli Moosa (Environmental Affairs and Tourism) and Minister Patrick Lekota (Defence) and they are important role models. (See the press cutting on the next page).

With 40 000 requested entries in the popular Argus Pick 'n Pay Cycle Tour on 12 March 2000 one can ask the question why are so few of these bicycles used for everyday use. The answer lies in the lack of bicycle facilities in our urban areas.

Safe facilities attract greater use as was the case in the Cape Town Bicycle Demonstration project in the 1980's when a 30% increase in scholar commuting resulted.

If logic prevails, all transportation planners and government and local authorities should be encouraging greater use of the common efficient bicycle.



HARD WORK: Environmental Affairs and Tourism Minister Valli Moosa gets in some pre-tour training

Political pedal power for Tour

Staff Reporter

The Cape Argus Pick 'n Pay Cycle Tour on Sunday March 12 will be a political tour de force.

Two of South Africa's most influential politicians will be pedalling their way around the new route as part of the Cape Metropolitan Tourism team.

They will be among the huge field of 35 000 cyclists from all over the world.

The Cape Metropolitan Tourism team includes Environmental Affairs and Tourism Minister Valli Moosa and Minister of Defence Patrick "Terror" Lekota, both keen cyclists.

Their team-mates include the internationally renowned cycling commentator Phil Liggett, the "voice of the Tour de France" who is a regular participant in the Cape Argus Pick 'n Pay Cycle Tour.

Other team members will include Comrades Marathon great Bruce Fordyce, who will be forsaking his running shoes for a bicycle and Rick Taylor, CEO of Cape Metropolitan Tourism.

Wearing colourful, specially designed cycling outfits, this celebrity group is certain to catch the eye of the tens of thousands of spectators who will be lining the route.

Registration of entrants for the Cape Argus Pick 'n Pay Cycle Tour starts at 1pm on Wednesday March 8 at the Good Hope Centre.

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CURRICULUM VITAE

Louis de Waal is a graduate of the Universities of Cape Town and California (at Berkeley) and is the present Chairman of Hawkins Hawkins & Osborn South (Pty) Ltd. He is also a Past President of the SA Institution of Civil Engineering and Automobile Association.

He is a Councillor of the Pedal Power Foundation and assisted with the organisation of Velo Mondial 2000, an international bicycle conference, held in Amsterdam in June 2000. He has completed all 23 Argus Tours.