

LEE LIMING  
PROGRAMME IN  
AGEING URBANISM

# Cycling and Older Adults

## Ageing and Mobility<sup>1</sup>

Adithi Moogoor

Cycling is a mode of transportation that is suitable for all age groups. Older adults can take up cycling or continue to cycle while their strength and endurance permits. Cycling is relatively faster than walking and enables people to undertake a wider range of trip distances. Also, cycles can be used on different types of roads and are cheaper to own and operate than motorised vehicles. Cyclists do not require a licence to ride and cycling enables older people to move independently for local trips. Regular cycling, as a part of a daily routine, may help older adults to stay healthy.

Cyclists encounter physical environmental barriers including a lack of direct routes, secured parking, as well as perceived and real physical dangers posed by motorised traffic. Moreover, cycling is a task that calls upon higher-order skills in multiple areas including cognitive function, sensory function and road

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<sup>1</sup> This is an evolving database. We will be adding more examples and cases over time.

skills. Some older people may not have, or feel they do not have, the skills required for cycling.

Cycling is associated with health-related benefits and risks associated with road accident. However, an investigation conducted by the British Medical Association concluded that the positive health effects of cycling outweigh the risks and consequences of accident. The study further explained that cycling for half an hour a day has the potential to increase life expectancy by one to two years. This is twenty times as much as the decline of life expectancy by accidents.

Cycling can be used for different purposes such as:

- Mode of Access
- Mode of Transport
- Fitness and Recreation

### *Cycling as a Mode of Access*

Cycling is becoming a popular mode of transport in multimodal trips. It is most commonly used in combination with train/bus trips to access and egress train stations and bus stops. There is also potential to expand the use of cycles with other modes including cars. One city that is exploring the current use of bicycles in multimodal trips is Groningen, in the Netherlands. The city has a development framework for multimodal trip

coordination between bicycles and public/private transportation, which are listed in Box 1.

#### **Box 1: Development Framework**

- Provision for extensive bicycle parking at train stations and some key bus stops from where most buses and trains converge to the city centre. The city centre has bicycle parking facilities at the main station and city square.
- Suburban rail services permit bicycles to be taken on board trains. These trains are connected to cities such as Amsterdam and Rotterdam, which permit bicycles on metro trains. There are no bicycle racks available on buses, but some of the longer-distance regional buses permit bicycles onboard during off-peak days such as weekends and public holidays.
- 'Park and Bike' is a new scheme to promote cycling in the city. Bicycle rental services will be available on roads leading to the city. This is expected to encourage car owners to leave their cars behind and enter the city by bicycle. Five thousand new parking places for bicycles will be built near the main train station in addition to the existing ten thousand slots.

Source: Zee, R. V. (2015, July 29). How Groningen invented a cycling template for cities all over the world. *The Guardian*.

## *Cycling as a Mode of Transport*

In European countries such as Netherlands, Denmark and Germany there is a positive cycling culture and the rate of bicycle use in all journeys is very high. Many people continue to cycle during the later years of their life. In the Netherlands, adults aged above 65 make 24% of their total trips via bicycle, while in Germany 12% of older adults do so. In Denmark, the cycling mode share is 22% for adults aged 60 to 74 years. High levels of cycling have been achieved, in part, by policy innovations, such as those highlighted in Box 2.

### **Box 2: Policies to promote cycling**

- Provision of protected cycle lanes along heavily motorised roads and at intersections.
- Extensive cycling rights of way. For instance, Groningen is working on innovations such as:
  - a: Traffic lights with rain sensors to give priority to cyclists when it is raining.
  - b: Heated cycle paths to avoid slipping during bouts of frost.
- Dedicated and plentiful cycle parking

facilities which are integrated with public transport.

- Traffic calming solutions at residential neighbourhoods.
- Training programmes for cyclists and a range of promotional events to promote cycling.
- Driving has been made expensive and inconvenient in the downtown areas. Ownership of cars has been restricted by imposing taxes.
- Land use policies have been formulated to foster compact and mixed use developments that generate bicycle friendly environments for shorter trips.
- General attitudes of citizens, officials and politicians towards bicycle use are important to the acceptance and use of this mode. The positive cycling culture of the society and the Government's cycle friendly policies continue to reinforce each other.

Source: Mandl, B., Millionig, A., Klettner, S., McDonald, M., Hounsell, N., Wong, A., . . . Hendriksen, I. (2013). *GOAL Growing Older, staying mobile: Transport needs for an ageing society- Older People Walking and Cycling*.

### **Bicycle Sharing Schemes**

In many cities, bicycles can be easily rented with the swipe of a transport pass/credit card at convenient street corner stations. Bicycle sharing offers older people an affordable and

accessible way to travel on sturdy bikes with wide tires. It eliminates the need that bike owners have to park bikes in residential garages or to lug them up or down stairs in apartment blocks or high rise buildings.

The bicycle sharing scheme in London, which is operated by Santander and nicknamed ‘Boris Bike’, is becoming a popular mode of transport. Regular users of this scheme can register on Transport for London’s website and buy access for 24 hours, 7 days or a year. Casual users can also use this scheme by using their debit/credit cards to buy 24 hour or 7 day access. The design of the Boris Bike accommodates older people and others with restricted agility. Currently, the Boris Bike is a utility bicycle (designed for transportation) with a unisex step through frame. This frame allows the cyclist to mount and dismount quickly without obstruction. It potentially increases the safety of cycling, as a rider who loses balance can step through the bicycle without being entangled.

### *Cycling for Fitness and Recreation*

There is mounting evidence that cycling can prevent a host of ailments in people of all ages. A study on the relationship between age and physiological function in highly active older individuals (cyclists) reported equivalent levels of balance, reflexes, metabolic health and memory ability in older and younger

people. The findings suggest that age-associated decline in physiological function may be attenuated through physical activity engagement. Registered cycling clubs targeted for older riders, promote cycling as a way to improve physical health and to foster community connections.

Organised cycling tours facilitate a range of activities that are known to promote health and wellbeing. Tour participants meet interesting people, see new sights, engage in cultural activities, and benefit from physical and mental stimulation. International Bicycle Tours (IBT) located in Connecticut, USA, organises bicycle tours for all ages. It has a dedicated travel plan for older adults called the ‘70 Plusser Bike & Barge Tour.’ Box 3 provides information on the tour programme.

#### **Box 3: Tour programme for older cyclists**

- Tours take place in northern, Europe, Belgium, France and Holland.
- Tour costs involve a flat fee which is reduced based on the age of the client.
- Daily mileage of tour is around 20 miles or lower. One can ride for three hours or longer with as many stops as desired.
- A navigation system is attached to bicycles to prevent cyclists from getting lost or wasting time deciphering hand held maps.

- Options for older adults to travel with their children and grandchildren are available.
- IBT offers two types of trips.
  - a: 'Bike and Barge' where one can stay in the same room every night on a river barge.
  - b: 'Cycle Trips' where one can travel from lodging-to-lodging and tour staff transport the client's luggage to their lodge.

Source: Kraus, S. (2015, March 05). '70 Plusers' - Bike and Barge Tours for Boomers and More.

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