

Neighbourhood Car Fleets: the key to rational car use

Tim Pharoah

What are Neighbourhood Car Fleets?

The Neighbourhood Car Fleet provides an alternative to car ownership that leads to less car use. It is therefore part of the sustainable transport toolkit. Unlike many traffic reduction techniques, however, it depends not on unpopular regulations or financial penalties, but on enlightened self-interest.

Neighbourhood cars are parked in small groups of dedicated spaces conveniently near to people's homes. The cars are owned or leased by a club, which deals with all aspects of their maintenance and management. Members of the club can reserve a car in advance or (in some schemes) are available on spec. Members can use any car from their local fleet, or from any other affiliated fleet, even in other countries. Unlike conventional rental, the car can be used for very short distances and for very short periods, making it useful even for local journeys. This is the essence of the Neighbourhood Car Fleet (NCF) concept.

Tackling car ownership as well as car use

Excessive traffic has led to widespread demands for reducing car use, now backed up by various planning policies as well as new obligations under the Traffic Reduction Act. Car ownership, however, is seen as untouchable in political terms, and the projected 30% increase in cars owned in Britain in the next 20 years is accepted without comment. The logic of this is questionable on two counts. First, increased car use is strongly associated with the rise in car ownership. Second, desire for *ownership* of a car may be confused with desire for convenient *access* to a car.

The concept of Neighbourhood Car Fleets resolves these dilemmas and provides an alternative to ownership that reduces the stock of vehicles as well as per-capita use of them.

Objectives of NCF

The specific objectives that NCF schemes help to meet are:

- Reduced car dependence and use;
- Reduced parking demand;
- Unlocked potential for car-reduced housing development;
- Lower household travel costs.
- More equitable distribution of access to cars

Problems with individual car ownership

The NCF helps to overcome two aspects of individual car ownership that work powerfully against the achievement of sustainable transport objectives:

- The costs of individual car ownership are weighted towards fixed costs (purchase, tax, insurance, etc) rather than running costs. This means that owners cannot significantly reduce costs by driving less, and that there is always a built in financial incentive to choose the car rather than other modes.
- Each car is driven for only a small part of the time, generating a high demand for parking space, both at home and at destinations.

In addition there are aspects of car ownership that some people find irksome, such as repairs, maintenance and administrative chores.

Types of NCF scheme

The earliest discussion of the idea I have found is by two economists at the University of Warwick in 1968.¹ They largely anticipated both the structure and justification of modern NCF schemes.

Of course, cars are frequently shared on an informal basis, if only between household members. We are concerned here with more formal sharing, between people who do not have to know, let alone get along with each other. Car rental fits with this criterion, but does not cater for short duration trips.

The first known formal shared car scheme was introduced in Montpellier (France) in 1973, but failed because the car fleet served the whole town rather than an individual neighbourhood. Members could never be sure of finding a vehicle, despite students being employed to return cars to the parking points.

So the concept is not new. Some further schemes were introduced in the 1980s in Japan, the USA, Sweden, and The Netherlands. In London, too, pioneering work by Pharoah in the 1980s laid the foundation for schemes (though never implemented) in Kensington & Chelsea and Richmond.² Eventually successful schemes were devised and launched in Germany and Switzerland in the late 1980s and have spread widely during the 1990s.

There are various types of scheme, but the basic features are:

- *A locally kept fleet of vehicles for use by members of a club*
- *Payment according to use*
- *Hire by the hour*
- *Small fixed costs (membership fee)*

¹ Fishman, L and Wabe, J, "Restructuring the Form of Car Ownership", University of Warwick, 1968.

² Pharoah, Tim (1987) "Shared cars: key to reducing traffic", in *Town & Country Planning*, Volume 56, No. 9, page 240-242.

There are now schemes in over 260 cities with more than 20,000 members. Members of schemes affiliated to the European Car Sharing organisation (ECS) have the benefit of being able to use vehicles belonging to schemes in other cities. Britain's first formal public NCF scheme is planned to begin operation in Edinburgh's Marchmont district in 1998.

The European Car Sharing Organisation has drawn some general conclusions about the operation of schemes to date:

- Each Neighbourhood Car Fleet vehicle typically replaces 5 - 6 private cars
- There are 15 - 20 users per vehicle
- Membership often adheres a "rule of thirds"
 - a third are non- car owners
 - a third had planned to become car owners
 - a third gave up ownership in favour of NCF membership.
- If available throughout the European Union, it is estimated that the car population could be reduced by 6 million vehicles.
- A quarter of all bookings are made within one hour of travel commencing. (This clearly distinguishes the flexibility of NCF compared with conventional car rental).
- Members of Neighbourhood Car Fleet schemes consume 50% less energy for their total travel needs.

How do Neighbourhood Car Fleets work?

A typical scheme works as follows:

- Join the club to get personal key;
- Reserve a car by telephone (anytime);
- Collect car from NCF station;
- Drive and return; and
- Leaving travel docket and key in safe.

The club does all the business of car ownership, and members don't have to trouble themselves with maintenance, insurance, repairs, tax, M.O.T. etc.

The potential for NCF in London

With many areas of high parking stress, and good alternatives to the car, there is plenty of scope for the introduction of NCF schemes in London.

The main areas of potential may be in high density housing areas without off-street parking, but with on-street parking controls and easy access to good public transport. In such areas (Camden and Richmond for example) NCF can reduce parking pressures.

There is also potential also for NCF schemes in new housing. Car-free housing is at present a niche market, and one that has yet to be fully explored. A much wider market is likely to exist for "car reduced" housing,

where instead of one or two parking spaces per dwelling, small amounts of communal parking are provided for NCF vehicles. The benefits of reduced parking and access requirements in new housing have been explored in a recent study for the London Planning Advisory Committee, and include better environmental quality, easier development of in-fill sites, and increased housing capacity.³

This marrying of car-reduced housing with the NCF concept is rapidly developing, with schemes under construction or planned in many European cities including Amsterdam, Hamburg, Munich, and Stockholm. Perhaps the largest is a 6,000 home mixed use regeneration project in Tübingen with parking reduced to 50-60 of normal levels. The first British development linked to the NCF concept may be a 121 dwelling scheme in Gorgie, Edinburgh, which includes only 10 car spaces, for NCF and disabled drivers.

Conclusion

Neighbourhood Car Fleets offer the potential to tackle many of the problems caused by individual car ownership, including (paradoxically) lack of travel choice and excessive use of cars. They also have the potential to convert car-free housing from a niche market to the norm in locations accessible to public transport and local facilities. Housing served by NCF could be cheaper as a result.

Unlike many schemes to reduce traffic, the NCF relies for its success on enlightened self interest, and provides direct financial and other benefits to the user, as well as to the wider community through less parking and traffic.

The NCF idea originated in Britain but has been developed elsewhere. Surely it is time for a demonstration scheme in London?

Photo 1

The NCF station – containing keys and equipment for the cars, including a children's seat and even a ski rack! (Stadt Auto, Bremen, Germany)

Photo 2

NCF can relieve parking pressure in existing housing areas

Photo 3

NCF allows the development of car-free or car-reduced housing

³ Llewelyn-Davies *et al* (1998) "Sustainable Residential Quality: New Approaches to Urban Living", London Planning Advisory Committee.