# Topic Paper

Car Clubs and Reducing Car Ownership

Client Name: Milton Keynes Council

Reference: 1000006479

Date: April 2021

milton keynes council

PROJECT CENTRE

part of Marston Holdings

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|---|---|---|---|
| Rev | V01 | V02 | |
| Reason | First draft | Final | |
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| Date | 12-03-2021 | 15-04-2021 | |
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| Date | 12-03-2021 | 15-04-2021 | |

File path: G:\Project Centre Brighton\Brighton\Project-BST\1000006479 MK Parking Standards Evidence\2 Project Delivery\3 Reports

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# 1. INTRODUCTION

1.1.1 Project Centre Ltd. (PCL) has been commissioned by Milton Keynes Council (MKC) to prepare a topic paper on the potential for policy to reduce car parking requirements and car ownership.

1.1.2 The paper covers the following two topics:

- the potential for Car Clubs to reduce car parking requirements, and how best these can be secured and supported as part of new developments.
- how car parking standards and solutions can support the potential transition from high levels of car ownership and use to future scenarios where car ownership could be greatly reduced within Milton Keynes.

1.1.3 The role that Transit Orientated Development could play in the above will be explored, with discussion on how these could support lower parking requirements.

# 2. CAR CLUBS

## 2.1 Introduction

2.1.1 Providing non-car alternatives, including walking, cycling, and public transport helps improve air quality, combat climate change, improving health and wellbeing, address inequalities and tackle congestion.

2.1.2 Pay per trip car clubs, sometimes known as car sharing, allows individuals and businesses to have access to a personal vehicle without being tied to ownership. Pay as you go cars offer affordable, occasional access to cars to benefit individuals. At the same time, they help policy makers to meet targets at local, regional and national levels, including emissions reduction, improvements to air quality and encouraging individuals to increase their use of sustainable modes. Car clubs can offer low carbon, flexible use of vehicles which potential integrate into wider mobility systems.

2.1.3 In addition, car clubs can improve accessibility by providing non-car owners with access to a car for journeys that cannot realistically be made by any other mode.

## 2.2 Potential impacts of car clubs

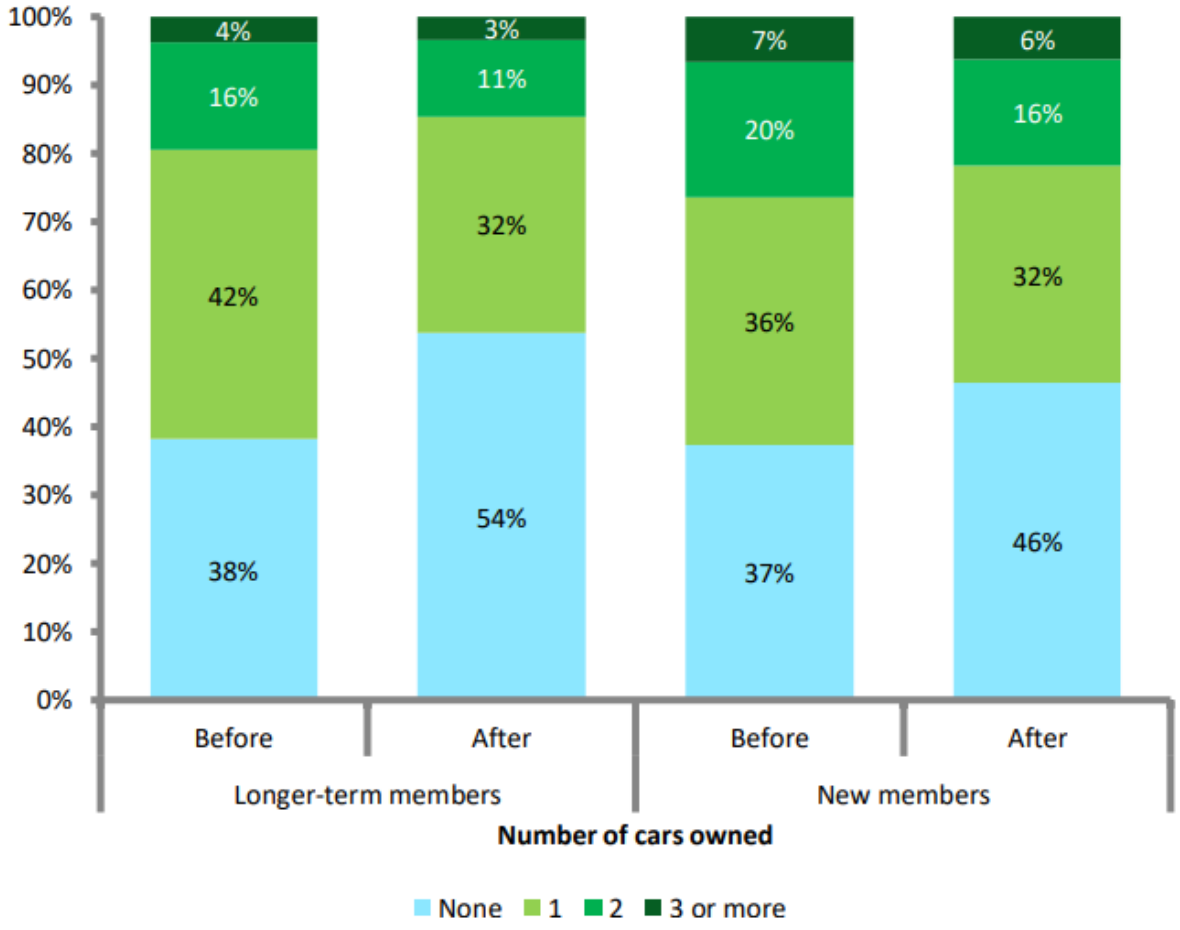
2.2.1 An annual survey of car club members conducted by CoMo[1] was completed by 2,500 car club members in England and Wales. The survey demonstrated the high potential for car clubs to lead towards reduced car ownership:

- Members disposed of 4,747 vehicles since joining a car club, using the 783 available car club vehicles provided by the three operators. This equates to an average of 6.1 private cars removed from the road per car club vehicle.
- Long term members decreased their annual household mileage by 793 miles.
- 8.4 years old was the average age of vehicles disposed of in the last year by members.
- 68% of members use another shared mobility service other than a car club.
- After joining a car club, members completed 3,832 more walking and cycling trips.

2.2.2 The graph below shows the trend in reduced car ownership, with longer-term members showing a larger drop in car ownership.

[1] England & Wales Car Club Annual Survey 2017/18, CoMo

**Figure 1: Car ownership before and after joining a car club**




*Source: England & Wales Car Club Annual Survey 2017/18, CoMo*

2.2.3 The survey also found that car cubs not only reduced existing car ownership, but reduced the potential for future car purchases. 36% of members reported that they would have bought a new car had they not joined a car club, equating to c. 9,297 deferred car purchases (11.9 per car club vehicle).

## 2.3 Engagement

2.3.1 To ensure that local residents and businesses fully understand the benefits that a car club bring to their local area, it is important to engage with these key groups as well as other local stakeholders at the earliest opportunity when a car club is being considered. Typically, local people will be supportive in principle of a car club but will be concerned about the potential loss of parking, with bays being allocated to car club vehicles.

2.3.2 Prior to making an application to the relevant authority for a Traffic Regulation Order (TRO) to request the allocation of car parking spaces, consultation and engagement on the proposals should take place. Good engagement will provide

information on the car club and the benefits that it will bring to interested parties and reduce the number of objections to the TRO once it is advertised.

2.3.3 Mandatory consultation is required as part of the TRO (such as an advert in a local newspaper and a sign erected where the bays are proposed) but it is advised that engagement with other interested parties also takes place in advance to secure support and reduce the number of objections. The affected parties will be dependent on the proposed location of the car club vehicles' parking bays.

### 2.4 Car clubs in new development

2.4.1 Car clubs should be accessible not just to the development or council, but to everyone in the local area. Ideally the car club market caters to a mix of residential and commercial; for example, used by the Council during the week and by residents at weekends. That way you get maximum use from the vehicles and the car club stands a higher chance of being successful in the long run.

2.4.2 The most successful clubs are clearly visible to the public. Being obvious helps with marketing the product.

2.4.3 There also needs to be consistent political support and a long-term commitment to written planning agreements, so they are not undermined e.g.: residents moving into car-free developments then canvassing politicians for car parking.

2.4.4 Ideally developers contribute to car clubs in the longer run with an on-going subsidy, although there are rules about how much and for how long developers contribute. The key is to ensure developers contribute to the initial start-up costs.

2.4.5 CoMo[2] have developed a checklist for securing car clubs in new development:

- Car club policy:
  - Sustainable spatial and planning policy greatly increases the viability of car clubs, especially in terms of the siting and density of development in relation to local services and the availability of a range of travel options;
  - parking policy (typically Local Plan (LP) / Local Development Framework (LDF) policy) plays an important role, especially the use of controlled parking zones which limit and ration the availability of free on-street parking;
  - parking policy with regard to new development (typically LP / LDF / supplementary planning documents (currently MK Parking

[2] Car Clubs in Property Developments, CoMo, February 2015

Standards SPD, 2016)), especially the ratio of car parking spaces to residential units or commercial floorspace, including car-free policies. The experiences of operators suggests that a ratio of 0.8 car parking spaces per residential unit or less creates the conditions in which a car club and parking levels are mutually complementary; and
    - planning gain policy, especially specific measures regarding the use of developer contributions or Community Investment Levy (CIL) to secure or promote car club facilities or a contribution towards one.
- Car club implementation:
    - Requires carefully worded planning conditions and developer agreements which meet the tests set out in the NPPF, to ensure developments provide the facilities needed and intended;
    - there is much to be gained from the early involvement of a car club operator(s) in the decision about whether and how to facilitate access to, or provide, a car club for occupants of the development; and
    - effective monitoring and enforcement of planning conditions and planning obligations ensures that the intended outputs are achieved.
- Car club operational factors:
    - Care in the siting of, and access to, car club vehicles, to ensure people have full-time access to the vehicles without impediment (e.g. preferably not in private enclosed parking areas, if shared with people from outside the development);
    - clear and enforceable marking of car club bays, with signing that raises awareness of and promotes the car club to potential customers;
    - parking enforcement to ensure the vehicles are in their dedicated parking bay and available when needed;
    - car clubs should be available to a wider audience than the occupants of the development itself, including business use to complement residential use (see siting of car club vehicles above);
    - occupants of a development should have access to a wider network of car club vehicles. Isolated standalone car club vehicles are rarely viable, but could be possible in developments of 250 units or more;
    - car club should be promoted to prospective occupants (off-plan), in welcome packs and periodically post-occupation, coupled with

incentives such as free membership and drive time can help people to form new travel habits at a moment of change in their lives.

## 2.5 Car clubs in Transit Oriented Development

2.5.1 Transit Oriented Developments (TOD) are built on the ethos of creating integrated and sustainable communities that bring residential, employment and leisure space within easy walking and cycling distance, and with high quality public and shared transport links to wider areas.

2.5.2 Car clubs would support this development model through the reduced need for private cars and thereby private parking. High car ownership and associated parking contributes towards urban sprawl due to space inefficiency creating lower density development. Poor development planning, built at vehicle-scales rather than human-scales, can perpetuate high car ownership by increasing walking distances and therefore reliance on cars. As discussed above, car clubs have been found to remove up to 6.1 private cars per car club vehicle, and therefore could potentially support a reduction in parking of up to 84%.

2.5.3 CoMo guidance[3] notes that car clubs and low car parking ratios are mutually beneficial: car clubs enable lower car parking ratios in new development, whilst lower parking ratios encourage take-up of the car club. The optimal parking ratio for a development supporting a car club is 0.8 spaces per unit or less.

2.5.4 TODs in a wider context will be discussed further in Section 3.4.

## 2.6 Local authorities can save with car clubs

2.6.1 By switching from a pool fleet or a grey fleet (where employees use their own vehicles for work) to one provided by a car club, local authorities can cut carbon emissions and demonstrate leadership in tackling the climate emergency.

2.6.2 Costs for councils are reduced as the operator takes on the responsibility for maintaining the vehicles, licence checks and the booking system. This can support the establishment of a car club for local community use - providing access to shared transport, helping reduce private car ownership and potentially address transport poverty.

2.6.3 A number of Scottish local authorities and other public sector organisations such as Police Scotland and the NHS have switched from using pool fleets and grey fleets to a car club - making significant savings:

[3] Car Clubs in Property Developments, CoMo, February 2015

- Highland Council saved £400,000 in one year when they replaced their grey fleet with a car club, cutting council mileage by 825,000 car miles, travel costs by 15%, and resulting in a 19% cut in emissions.
- North Ayrshire Council has saved £396,000 by switching their grey fleet to a car club, saving 9.1 tonnes in CO2 emissions every year.
- Aberdeen City Council set up a car club in 2012 and has seen the number of vehicles grow from 12 to 52 across the city with an annual cost saving of £40,000 per year.

## 2.7 Car club Accreditation

2.7.1 One way to ensure a high-quality car club is for councils to ensure the car club providers which developers or they use are accredited. Accreditation ensures a collectively agreed set of standards is upheld across the industry to maintain the reputation that these shared transport schemes have gained as a valuable component of sustainable transportation.

# 3. SOLUTIONS TO SUPPORT REDUCED CAR OWNERSHIP

## 3.1 Parking Standards and Developments

3.1.1 Parking standards - both residential and commercial - are important tools in reducing car ownership and use, but restrictions need to be accompanied by consistent and thorough enforcement. Enforcement needs to be in place from the first day of implementation. Without appropriate enforcement from day one, people are likely to continue to park in locations they should not; once inconsiderate parking is established then it is harder for the council to enforce it and retain political support to follow through on the enforcement of the scheme.

3.1.2 Car free development can be attractive to developers; they may be committed to reducing their carbon footprint for social responsibility reasons, but also the less space that is allocated to parking, the more space can be dedicated living accommodation or flats.

3.1.3 Car parking restrictions or reductions need to be accompanied by attractive and considered alternatives at the same time; cycle stores and cycle parking, car clubs, enforceable agreements, permeable developments, along with a well-designed walking, cycling and public transport network. The car clubs need to have publicly accessible bays (not just for the use of the development) in highly visible and accessible locations.

## 3.2 Bike share

3.2.1 Bike share can be broadly defined as any setting where bicycles are pooled for multiple users. Models include Public Bike Share (PBS) – self-service on-street docked or dockless stations – workplace pool bikes, railway station hubs, loans, lockers and peer to peer sharing.

3.2.2 Bike share is developing rapidly, and it has the potential to help normalise cycling. Studies indicate bike share is attracting more people to cycle[4] and provides a snapshot of who uses bike share and the way they use it.

3.2.3 Key trends show that increasing numbers of women are using bike share, and that people combine it with public transport. Proportionately more women use public bike share than ride their own bikes. Only 25% of cycle trips on personal bikes (cyclists riding their own bikes) are made by women, but 40% of people riding shared bikes are women (average of 4 years data).

3.2.4 A significant number of people (17%) switched journeys from cars to bike share bikes, which has a direct impact on congestion and emissions.

[4] Bike Share Users Survey 2019. CoMoUK

## 3.3 Mobility Hubs

3.3.1 Mobility hubs create space designed specifically to house public transport alongside active and shared mobility modes whilst improving the public realm. The redesign and reallocation of space from the private car, is intended to enhance the experience of travellers as well as benefiting local residents and businesses.

3.3.2 Hubs should deliver integrated, quality services and consider the needs of those who live nearby as well as those who travel through them.

3.3.3 Success factors include:

- Choice of sustainable modes: Include public and shared modes as well as consideration of pedestrians
- Visibility and accessibility: Hubs need to be part of the clearly identifiable network with services which are easily accessible by all
- Ease of switching between modes: Both in terms of physically and digitally linking the use of the different modes
- Safety: The design and facilities should ensure traveller safety is a key factor
- Practical facilities: Good design will consider what non-transport practical additions can be included
- Visual, social and community appeal: Finally, a successful mobility hub will enhance the area visually, and provide a contribution to the social and community fabric

## 3.4 Measures for Milton Keynes

3.4.1 This section discusses measures specific to Milton Keynes which could encourage lower car ownership.

### *Upgrading Cycle Facilities*

3.4.2 Milton Keynes is perhaps unique among UK towns in that it was designed for cycling as well as driving from its inception. The town benefits from vast grid roads and fully segregated shared cycling and walking paths called Redways.

3.4.3 In Milton Keynes, the street network is highly permeable for motor traffic, even on roads which are purely residential. This is likely to make driving very attractive and cause cycling to be suppressed as the evidence shows up people do not like mixing with motor traffic.

3.4.4 Consequently, much of this network planning phase will be focussed not so much on where to put routes, but on how to improve the existing network and bring them up to LTN 1/20 standards.

3.4.5 Feelings of isolation on some of the routes are noted as a deterrent to them being used in the Walking and Cycling Position Technical Report (January

2020). Planning development which allows for active frontages will help reduce personal safety issues as well as replacing underpasses with at grade crossings and reducing waiting times/building more crossings. Some of the routes are severed by the major grid roads with little more than drop kerbs at crossing points which poses road danger. Where these two networks intersect at grade, people on foot or cycle in most cases are obliged to give way to the routes designed for drivers. Many of the points of severance are large roundabouts which are very difficult for people to cross, particularly for anyone slower, disabled, accompanying children or for children travelling independently. The level of service offered can be significantly improved by building crossings which give priority to those using the cycling and walking routes.

3.4.6 As noted in the Milton Keynes January 2021 Position Paper, even on residential streets (away from the major grid roads), “Pedestrians must wait and give way to vehicles at every road crossing, even slow moving side streets”. This can be addressed with side road zebras, continuous footways and more zebra crossings at intersections.

3.4.7 Another factor which suppresses demand for cycling is likely to be the lack of filtered permeability which makes car use very attractive. Everyone is currently free to drive through most residential roads as illustrated by the blue lines (which indicate where driving is permitted) on the plan below:

**Figure 2: Milton Keynes street network is highly permeable for driving inducing car dependency**

3.4.8 The driving network invites people to drive even for short trips, which serves as a disincentive to walking or cycling.

3.4.9 A way to support car clubs and parking restrictions would be to improve the Milton Keynes walking and cycling network by addressing the above two issues and building:

1. Priority crossings such as zebra, parallel and signal controlled crossings which are inclusive (a refuge or uncontrolled crossing "may not be suitable for everyone" LTN 1/20)
2. Proposals for low traffic residential roads which deploy point closures in the form of bus gates or modal filters (using planters or removable bollards).

### *Low Traffic Neighbourhoods to reduce car dependency*

3.4.10 A study has been undertaken which assessed the impacts of the mini-Holland schemes in Outer London[5]. The Waltham Forest mini-Holland was characterised by low traffic neighbourhoods (LTNs) on residential roads, plus protected cycle routes on the boundary roads. LTNs are controversial, as are many schemes that seek to restrict car use.

**Figure 3: Example of a modal filter, Walthamstow neighbourhood**

3.4.11 Led by Westminster University and funded by TfL, the project involves a longitudinal study of adults age 16 and over, meaning that the academics

[5] Aldred, R. and Goodman, A., 2020. Low Traffic Neighbourhoods, Car Use, and Active Travel: Evidence from the People and Places Survey of Outer London Active Travel Interventions. *Transport Findings*.

followed the same people's changes in travel behaviour year-on-year. In this way, they compared changes in 'intervention areas' in mini-Holland boroughs to 'control areas' (the rest of Outer London). This controlled 'natural experiment' study design allowed them to separate the effects of broader changes affecting all of Outer London (e.g. unusually good or bad weather) from the impacts of the programme. The study focused on changes to walking and cycling (active travel) and has consistently found that living near interventions has led to a 40-45 minute weekly increase in active travel.

3.4.12 Key findings of the study were:

- In relation to **car ownership**, there is a consistent trend towards people in the LTN area being less likely to own a car.
- In relation to whether a participant reported **any past week car use**, the largest decrease was again always the LTN group.
- As for **minutes of past week car use**, the point estimate in the LTN group was always negative (i.e. a decrease in time spent driving) and always lower than any of the other groups.

3.4.13 In summary, there was a consistent trend towards reduced car use in the LTN area for all three of these measures.

3.4.14 The decrease in 'minutes of past week car use' is notable, as a concern sometimes raised about LTNs is that one may see some mode shift away from cars, but if all the remaining car journeys have to take more indirect routes on more congested roads then those car journeys will become longer and slower, and so the total volume of driving and pollution will go up. The findings of a trend towards decreasing total weekly duration of car driving provide some evidence against this concern.

3.4.15 Other studies of LTNs are showing a drop in car use, not just on the filtered roads but also on the surrounding roads for example recent data produced by Hackney Council.6 Another mechanism for traffic restraint is ANPR cameras. Hammersmith and Fulham have effectively created LTNs or "virtual gated communities" using ANPR cameras which white-lists residents, so they continue to have motor vehicle access into and out of their own streets but not those of adjacent neighbourhoods[7]. This option is only currently available to London boroughs but this may change in the future.

[6] https://news.hackney.gov.uk/ltns-have-not-caused-a-rise-in-nearby-main-road-traffic-early-analysis-shows/

[7] https://www.lbhf.gov.uk/transport-and-roads/south-fulham-traffic-congestion-and-pollution-reduction-scheme

### *Streetscape*

3.4.16 As Milton Keynes transitions from existing to lower car ownership, car parking space is freed up for other uses. Spaces previously allocated to the storage of vehicles can be used for soft landscaping, seating, cycle parking and play areas making better use of space in the future.

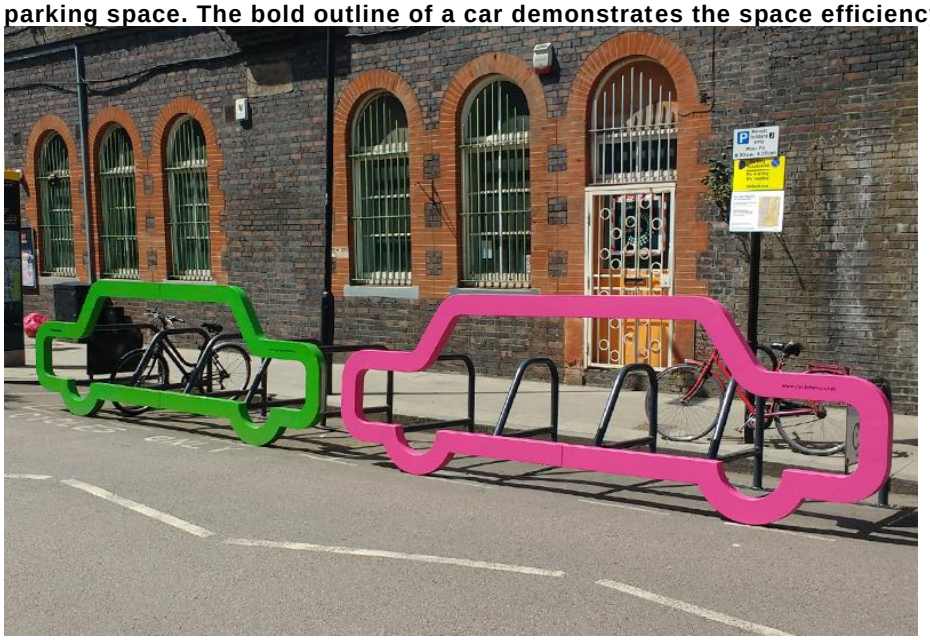
**Figure 4: Parklet, Rivington St, London**

**Figure 5: Hammersmith Grove, London**

**Before: Parking bay**

**After: Parklet by Project Centre**

**Figure 6: A bike port cycle parking solution that provides for 10 bicycles in a standard car parking space. The bold outline of a car demonstrates the space efficiency of bikes.**



### *Transit Oriented Development*

3.4.17 Transit Oriented Development (TOD) is the creation of compact, walkable, pedestrian-oriented, mixed-use communities centred around high quality train systems. This makes it possible to live a lower-stress life without complete dependence on a car. They are an effective method of creating inclusive communities and reducing social exclusion and transport poverty[8].

3.4.18 In seeking the best solution for housing which is affordable, healthy and low-energy, TOD should be explored and prioritised. TOD is seen in cities like Freiburg in Germany and could be more widely applied in the U.K. to meet the current housing crisis.

3.4.19 The success of new neighbourhoods depends on location, public transport access, low-energy housing and mixed land use – the principles of TOD. Sustaining a city's vitality through improved housing, amenities and public transport helps attract investment and is therefore good for those living in or near a city.

3.4.20 Traffic-dominated streets are bad for us be they in a low-density suburb or a compact city. Lower density housing, ideally where children have direct access from the home to the garden, and car-free streets should be a central goal for planners. Parking restrictions, home zones and filtered permeability can also help reduce the impact of traffic in streets, while promoting walking and cycling

[8] Transport and Inequality: An evidence review for the Department for Transport, 2019

for local journeys. These are the ingredients of a development that is 'good for us' and not whether we live in a dense city or sprawling suburb.

3.4.21 Much of Milton Keynes is characterised by planned residential estates, and the grid street pattern creates natural separation of areas and communities, each bounded by c 1km square distributor roads. Towards the outer areas of Milton Keynes, road structures are characterised by more curved roads and cul-de-sacs, albeit still encased by grid distributor roads.

3.4.22 This network lends itself towards distinct individual communities; however aside from small-scale local retail, many of these areas are low-density residential far from other land uses, with wide, straight boulevards creating an urban scale which encourages car use.

3.4.23 With that said, the street network also provides opportunity to create low traffic neighbourhoods as discussed above, and dedicated public transport only corridors using the extensive North-South / East-West grid network.

3.4.24 Given the current housing crisis in the UK and the constraints (both in terms of policy and land) neighbourhoods need to be built outside the city around new or existing public transport links. Parks, schools, libraries, shops and other services should be located in or within reach of housing to enable people to walk and cycle for these regular local journeys.

3.4.25 However, current cost benefit analysis (WebTAG) and modelling techniques in the UK tend to favour schemes which reduce congestion for motorists and make it harder to justify large capital expenditure on schemes such as light rail on lower density areas. To implement TOD will therefore require a long-term view - commitment, vision and considerable initial investment, but with great potential for long term gains to the community.

### *Case Studies*

*Vauban, Freiburg*

3.4.26 Vauban is a planned ecosuburb in southern Freiburg, Germany. Some defining characteristics of the Vauban neighbourhood are:

- Mix of uses and high residential density. Attached residential buildings up to five stories with first-floor retail; no single-family detached housing.
- Jobs on site. Integration of office and retail space along transit served arterial streets, and light industrial land uses on the development periphery. Housing includes live–work units.
- Transportation; Transit-oriented development with frequent rail and bus service, high-quality walking and bicycling paths, convenient bicycle

parking, carsharing, traffic calming, and speed limits of 20 mph (30 km/h) on all streets.

- Social infrastructure. Community associations, libraries, churches, and other meeting centres, shared courtyards and play areas, community gardens[9].
- Investment in good public transport seems to be central to the longer-term success of smaller cities such as Freiburg, with a population of just 230,000 "the backbone of the city is its tramlines"[10].

3.4.27 The area was developed by "dividing the land into small plots and giving priority to private builders and groups of builders, a variety of housing styles are promoted and with it liveliness within the district"[11]

3.4.28 Vauban is based on a grid street pattern, with filtered permeability providing a street hierarchy that favours active travel modes.

> *"Schools, shopping facilities and recreation will all be accessible on foot in the "quarter of short distances.""*[12]

3.4.29 The neighbourhood is largely parking free, with cars kept to a community car park at the periphery for which residents have to purchase a space. Car sharing vehicles were located on site, with two cars from the outset, quickly increasing to five and currently providing 10 in the vicinity.

3.4.30 Car free households benefit from the car-sharing cars, and a flexible approach allows residents to change their preferences to or from car-free living. This flexible approach enables residents to make free choices uninhibited by concerns of "missing out" should a future need for a car arise.

3.4.31 TOD has proved successful in Freiburg where 68% of trips are by public transport, walking and cycling.

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[9] Broaddus, A., 2010. Tale of two ecosuburbs in Freiburg, Germany: Encouraging transit and bicycle use by restricting parking provision. Transportation Research Record, 2187(1), pp.114-122.
[10] Hall, P., 'Good Cities, Better Lives; How Europe Discovered the Lost Art of Urbanism', 2014. Routledge Taylor and Francis Group, London and New York
[11] Realisation of the Sustainable Model City, District Vauban: https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=1013&docType=pdf
[12] Realisation of the Sustainable Model City, District Vauban: https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=1013&docType=pdf

*Nottingham*

3.4.32 Unfortunately, trams were scrapped in many British cities when places like Freiburg resisted the trend in the 1950s and 60s[13] so often we will be starting from scratch when it comes to TOD and building new suburban rail lines, or using/upgrading existing lines.

3.4.33 Evidence from Nottingham suggests investing in trams in the UK is beneficial to long term prosperity. Nottingham is bucking the downward economic trend of many northern towns by attracting inward investment (now at a 6-year high) partly as a result of its expanding network of tram links (presentation on Work Place Parking Levy, Nottingham, 2015).

**Canary Wharf**

3.4.34 Businesses usually choose to be located on dense developments near good public transport networks in order to access a wide talent pool of potential employees and facilitate face-to-face contact for business.

3.4.35 This is seen at Canary Wharf, London, where businesses are attracted by the prospect of new DLR stations and the Jubilee Line Extension [14]. Investing in public transport contributes to the interactions between people that are important for success (the agglomeration benefits recognised by economists) allowing big cities such as London to prosper with declining car use[15].

**Cambridge**

3.4.36 Planning underpins the development of successful cities and neighbourhoods so should not be left to market forces. Nevertheless, planning interventions can have contradictory consequences. In Cambridge, housing development has been restricted and a strong green belt policy in place since the 1950. Employment has grown substantially but growth of housing is constrained so that house prices have risen substantially. The aim of the policy was partly to restrict commuting distances, but many who work in Cambridge have moved beyond the green belt to more affordable housing and now have a longer commute.

3.4.37 Constraints on land use limits housing supply, pushing up prices and rents which can exacerbate the wealth gap between home-owners (often the older generation) and others (such first time buyers or lower income groups) who can no longer afford the Cambridge house prices unless protected by social housing. Arguably this is also a symptom of wider national problems – many

[13] Hall, P., 'Good Cities, Better Lives; How Europe Discovered the Lost Art of Urbanism', 2014. Routledge Taylor and Francis Group, London and New York
[14] Transport Studies Group, University of Westminster, 2004
[15] Metz, D. 'Peak Car', 2014

cities (e.g. Hull) still have lots of attractive and cheap housing but few job prospects, while people follow the jobs to Cambridge, London, etc.

### *Milton Keynes East Strategic Urban Extension*

3.4.38 Plan:MK allocates a number of strategic housing and employment sites, including Policy SD12: Land East of the M1 for a mixed residential and employment development;

3.4.39 This site will deliver;

- to 5,000 new homes, including at least 1,475 homes within the plan period.
- Around 105 hectares of land for a mix of employment uses, complementing the role and function of CMK.
- Associated infrastructure including primary and secondary education, community facilities, health, retail and local services and a hotel.
- The development should comprise at least one district centre and/or local centre(s), of scale commensurate to the needs of the new community and that would not adversely affect the viability and vitality of Newport Pagnell district centre, with a co-location of key facilities
- The phased introduction of a comprehensive network of transport infrastructure, to include grid road connections to H4/V11 to the west and improved highway connections to Newport Pagnell and Central Milton Keynes (CMK), including new and/or enhanced vehicular crossings of the M1, involving highway works on and off-site.
- A corridor of land safeguarded for a fast mass-transit system, and associated infrastructure, enabling connectivity to CMK and other key destinations. The width of the corridor should be sufficient to enable a range of possible transit solutions to come forward whilst also ensuring the efficient use of land for achieving the scale of development proposed within this policy.
- A network of segregated, and where appropriate grade-separated, new and enhanced footpaths, cycleways and bridleways (including redways) to connect to existing routes beyond the site, including provision of appropriate pedestrian and cyclist crossings of the A422 and suitable safe and attractive crossings of the M1 as appropriate.

3.4.40 The site is the subject of a Council bid for Government funding for the infrastructure needed for its delivery. If this bid is successful, the development of the site will be allowed to commence before 2031 as a source of housing and employment land provision.

3.4.41 Milton Keynes East SPD details the strategic movement framework with a requirement to encourage active travel, providing short direct pedestrian routes to key generators of movement such as bus stops, shops, schools, and other facilities.

3.4.42 The delivery of a fast mass-transit system will enable the site to be brought forward as a figurehead TOD. The movement framework should not only encourage active travel, but actively and ambitiously target reduced car ownership through measures discussed within this paper.

3.4.43 The location of the site on the periphery of the city, with future connections to mass rapid transit, draws parallels with the characteristics of Vauben and the Council should seek to implement TOD measures to reduce car ownership including:

- Car clubs located on site from occupation, with resident incentives to encourage uptake such as free membership or drive time;
- Peripheral parking sites and “parking-free” neighbourhoods, with parking spaces available on an “opt-in” basis for a fee. This should enable flexibility for future opt-in / opt-out;
- Hierarchical road structure with filtered permeability and low traffic neighbourhoods;
- Centred on short walking and cycling distances between land uses and public transport nodes;
- Bike sharing scheme and high-quality cycle network;
- Prioritise at-grade pedestrian and cyclists crossings that give active travel modes priority over motor traffic. Grade separated crossings should be seen as a last resort as these divert from desire lines and are not attractive to users;

## 4. CONCLUSIONS

4.1.1 This topic paper has covered the following two topics:

- the potential for Car Clubs to reduce car parking requirements, and how best these can be secured and supported as part of new developments.
- how car parking standards and solutions can support the potential transition from high levels of car ownership and use to future scenarios where car ownership could be greatly reduced within Milton Keynes.

4.1.2 Car clubs offer affordable, occasional access to cars to benefit individuals and often offer low carbon, flexible use of vehicles which potential integrate into wider mobility systems. In addition, car clubs can improve accessibility by providing non-car owners with access to a car for journeys that cannot realistically be made by any other mode.

4.1.3 Surveys of 2,500 car users found that each car club vehicle takes 6.1 private vehicles off the road and defers a further 11.9 new vehicle purchases per car club vehicle.

4.1.4 Car clubs should be accessible not just to the development or council, but to everyone in the local area. The most successful clubs are clearly visible to the public to help marketing the product. This paper has detailed measures for increasing car club uptake in new development and the benefits of switching the council's own pool fleet to one provided by a car club.

4.1.5 The paper has also discussed various measures to support a reduction in future car ownership. Measures discussed include; stringent developer parking standard, parking enforcement, bike share schemes, mobility hubs and low traffic neighbourhoods.

4.1.6 Milton Keynes has a highly permeable street network for motor traffic; however, this leads to car use being the most visible and attractive mode choice. The grid network pattern leads to many intersections at which pedestrians and cyclists are obliged to give way is most cases. To address this, the topic paper recommends the following two measures to improve the walking and cycling network:

3. Priority crossings such as zebra, parallel and signal controlled crossings which are inclusive (a refuge or uncontrolled crossing "may not be suitable for everyone" LTN 1/20)
4. Proposals for low traffic residential roads which deploy point closures in the form of bus gates or modal filters (using planters or removable bollards).

4.1.7 The note also discusses the concepts of Transit Oriented Development; the creation of compact, walkable, pedestrian-oriented, mixed-use communities centred around high quality train systems.

4.1.8 The paper has discussed the role that Transit Orientated Development could play in significantly reducing car ownership, particularly in the context of Milton Keynes East Strategic Urban Extensions. The Milton Keynes East site and the delivery of a fast mass-transit system linking it will provide the opportunity for the site to be brought forward as a figurehead TOD, and the council should seek to implement ambitious TOD measures to reduce car ownership significantly and create a pedestrian-oriented community.

# Quality

It is the policy of Project Centre to supply Services that meet or exceed our clients' expectations of Quality and Service. To this end, the Company's Quality Management System (QMS) has been structured to encompass all aspects of the Company's activities including such areas as Sales, Design and Client Service.

By adopting our QMS on all aspects of the Company, Project Centre aims to achieve the following objectives:

1. Ensure a clear understanding of customer requirements;
2. Ensure projects are completed to programme and within budget;
3. Improve productivity by having consistent procedures;
4. Increase flexibility of staff and systems through the adoption of a common approach to staff appraisal and training;
5. Continually improve the standard of service we provide internally and externally;
6. Achieve continuous and appropriate improvement in all aspects of the company;

Our Quality Management Manual is supported by detailed operational documentation. These relate to codes of practice, technical specifications, work instructions, Key Performance Indicators, and other relevant documentation to form a working set of documents governing the required work practices throughout the Company.

All employees are trained to understand and discharge their individual responsibilities to ensure the effective operation of the Quality Management System.

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