

Institute for Transport Studies

FACULTY OF ENVIRONMENT



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Milton Keynes: The carfree city that nearly was

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ITS



Milton Keynes was the most ambitious of the 30 or so New Towns built in Britain after the Second World War

This is the story of a city that is, and a city that could have been...

If you remember the 60s...



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- Recognition of conflict between cars and city life
- “The Death and Life of Great American Cities” by Jane Jacobs
- “Traffic in Towns” by Colin Buchanan
- UK New Town building & inner city rebuilding

Separation Anxiety



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- Thinking in “Traffic In Towns” based on horizontal or vertical separation of traffic and pedestrians
- Precursor: Radburn, New Jersey, USA, from 1929



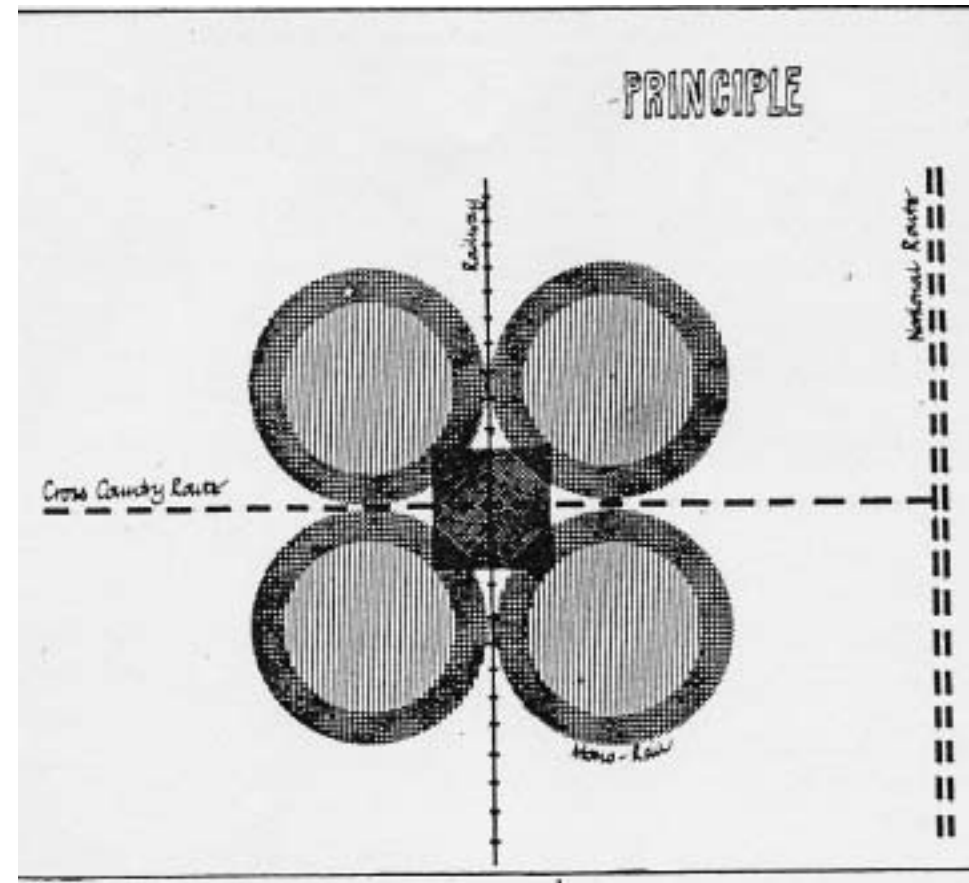
Radburn (Radburn Association, 2006)

Pooleyville



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- **1962:** Colin Pooley develops ideas for new city north of Bletchley – North Buckinghamshire New Town
- Separation of car and pedestrian traffic a major idea, a year before Buchanan
- Monorail based travel



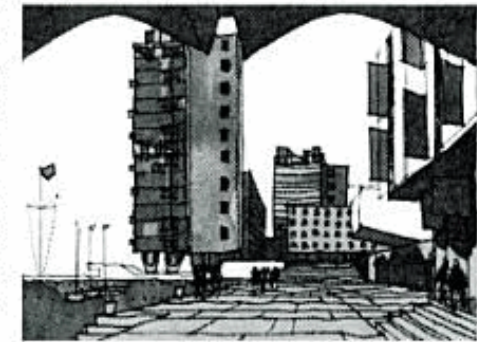
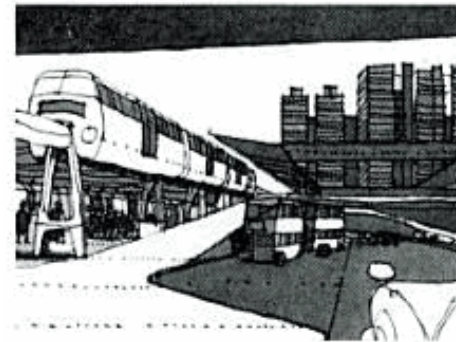
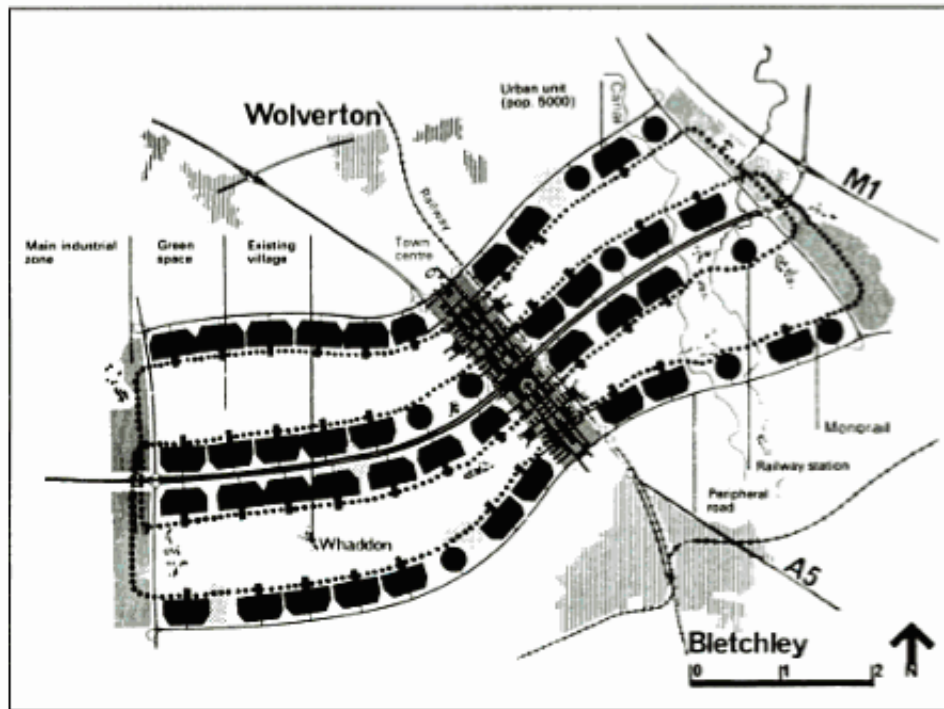
An early sketch of the concept, 1962
(Mortimer, 1984)

A monorail city?



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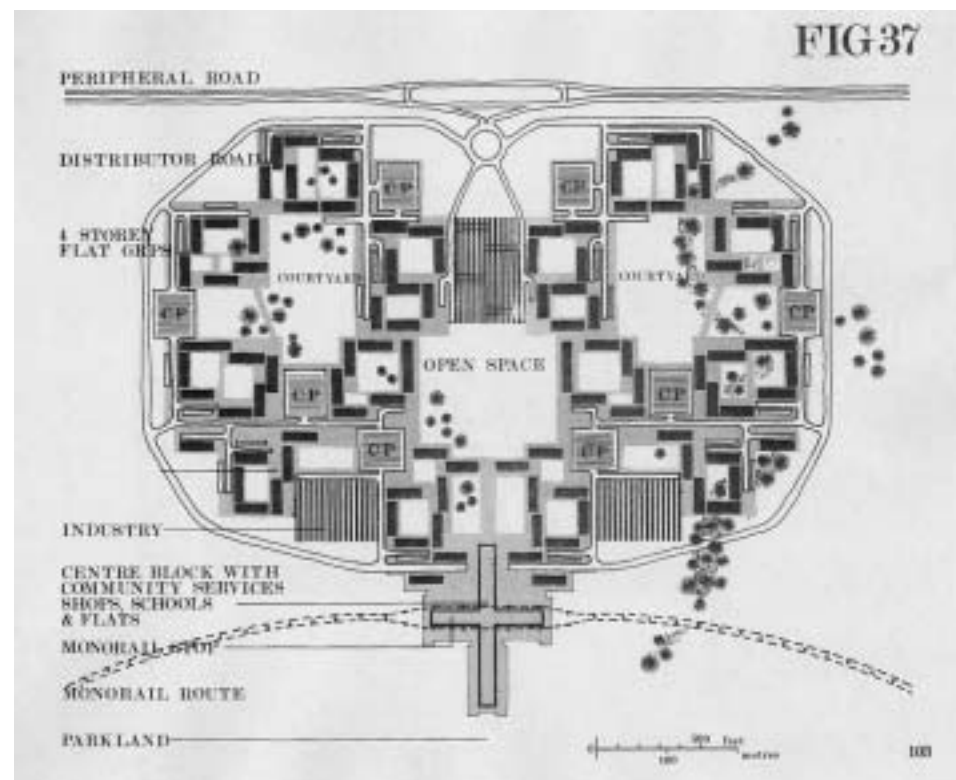
An initial plan for a monorail city, published as part of the North Bucks New City Plan in the early 1960s. Each “township” was to be a carfree area



ABOVE LEFT AND ABOVE RIGHT: The powerful imagery of a monorail city: Gordon Cullen's drawings.



LEFT: In Cullen's monorail city many people would have been housed in towers of flats or in nests of houses to put them within a short walk of a station.

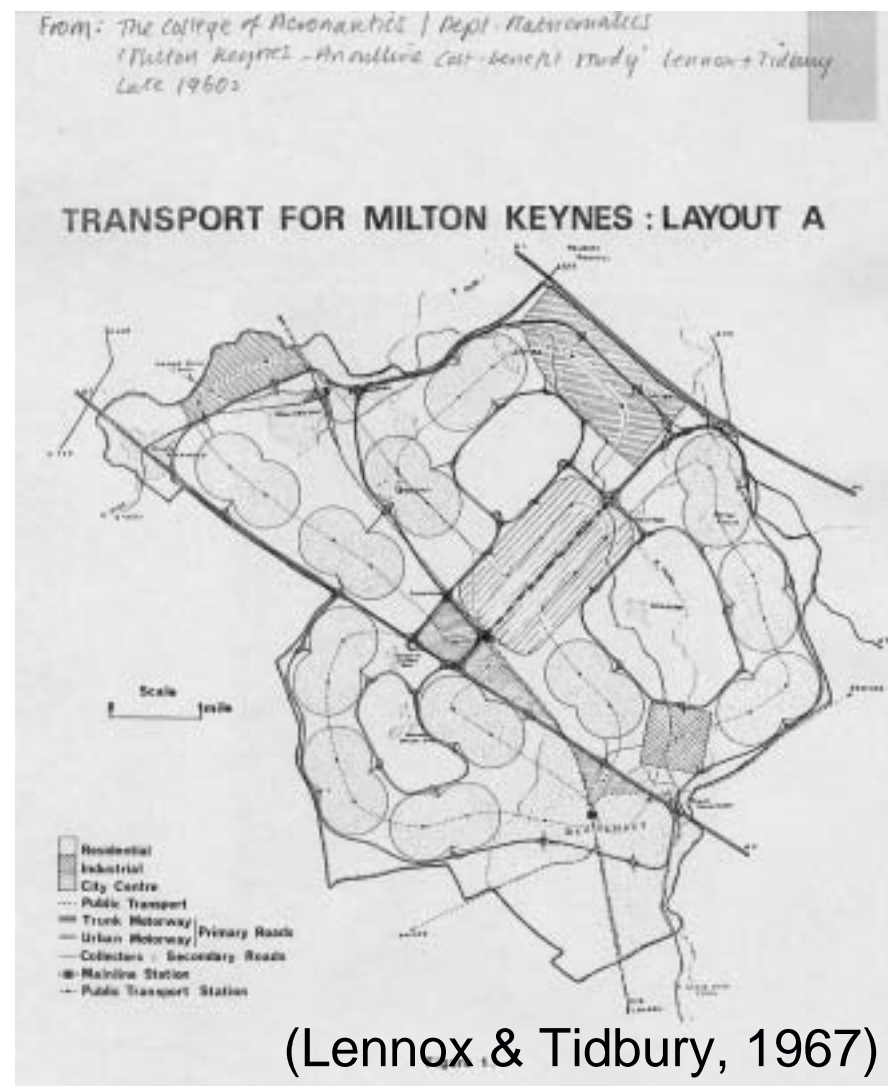


Monorail 'townships' as carfree areas
(Pooley, 1966)



- Principles

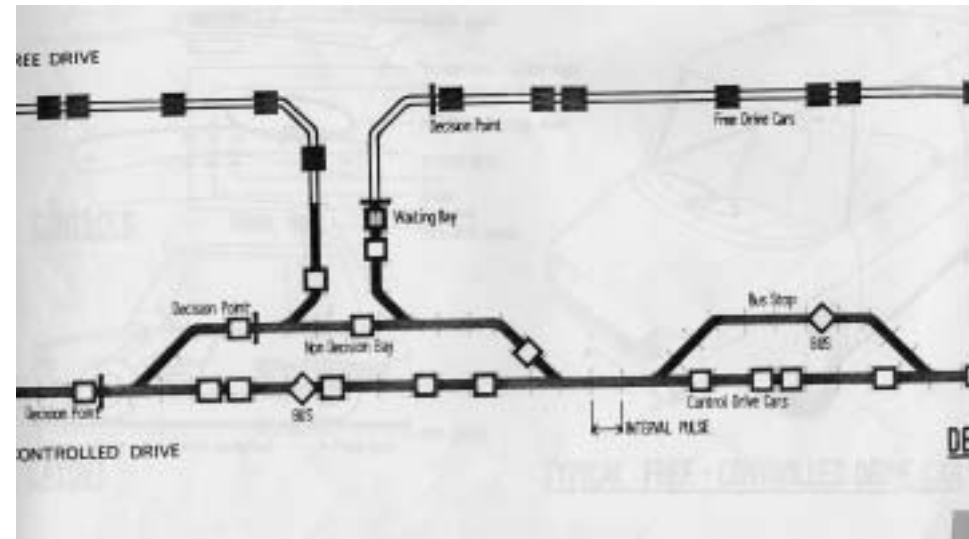
- “Radburn Layouts”, houses separated from cars, with peripheral parking
- Most direct journeys by monorail & on foot, but “free choice” for car drivers with lots of parking
- Other transit options considered, including staRRcar, a PRT system



A PRT city?



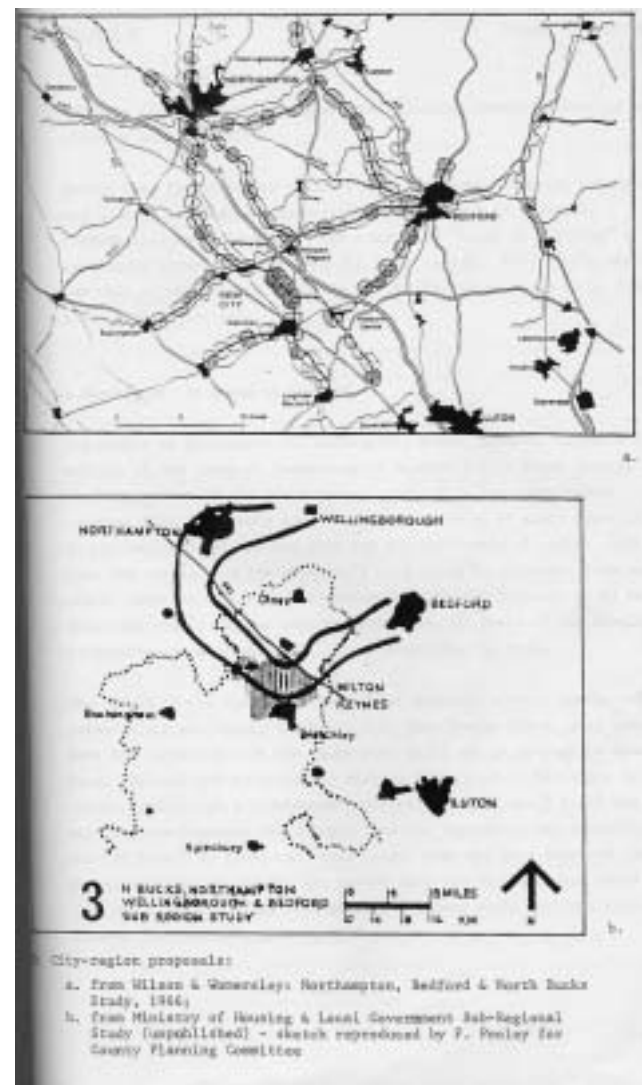
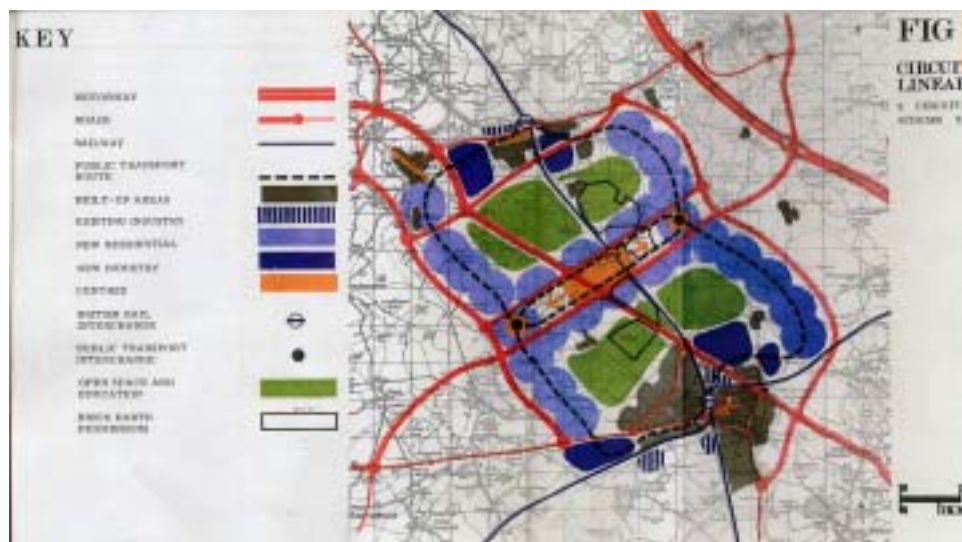
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staRRcar was only adopted at one location in the USA (left: Wikipedia Contributors, 2010). A more complex system was proposed for Milton Keynes (right: Pooley, 1966)



Other ideas developed for a linear city that could spread out towards the surrounding towns



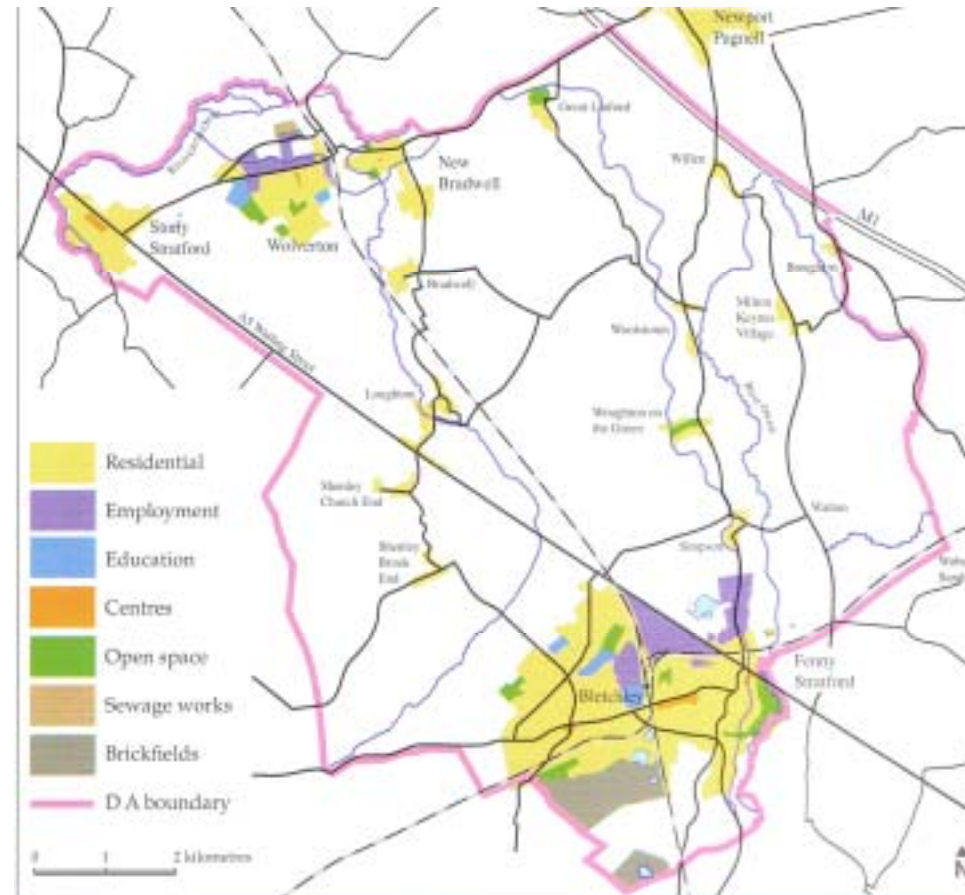
(above, Pooley, 1966; right, Mortimer, 1984)

Towards a plan



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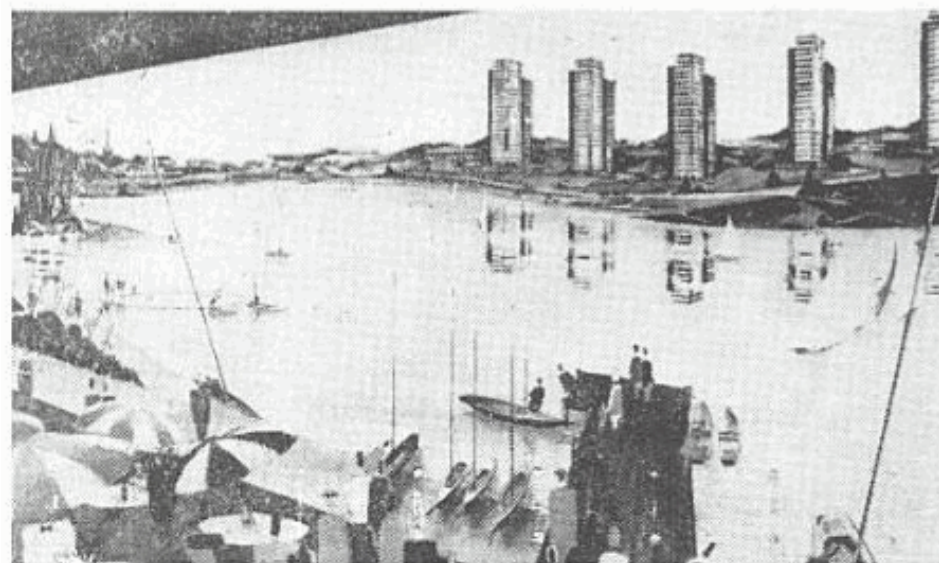
- **1967: New Town Designation Order**
 - A name, **Milton Keynes**, one of the villages in the area
 - Llewelyn-Davies, Weeks, Forestier-Walker & Bor commissioned to develop masterplan
 - Basic principles inherited from Pooley's plan
 - Choice a key aspect, both in activity locations and travel mode



The site in 1969 (CNT, undated)



- New ideas about how to live...
 - New thinking on urban design and public space
- ...and how to travel
 - Monorail considered too expensive and unsuited to population & density
 - Traffic planners got involved & considered car based movement best (Edwards, 2001)





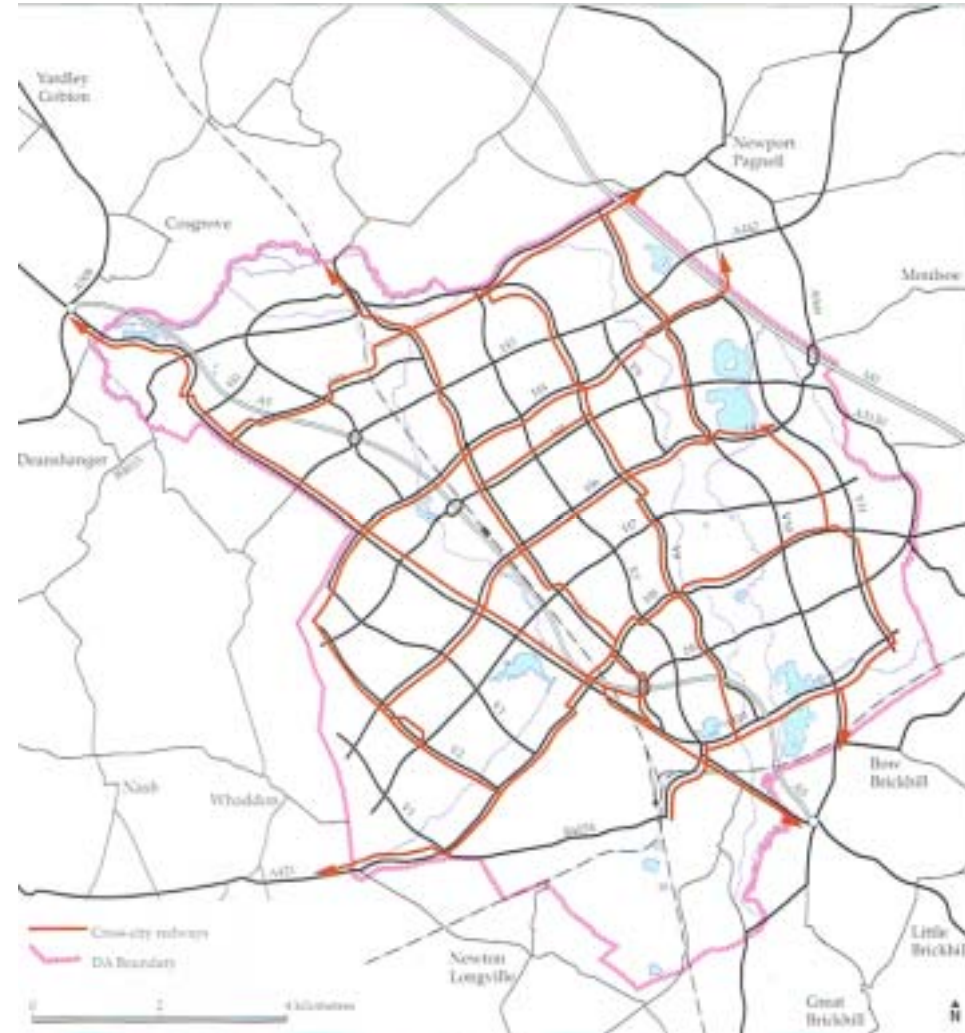
The City Club, a multi-use public & leisure space in the city centre (Bendixson & Platt, 1992)

The city and the car



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- Design based on grid of main roads at 1km intervals
 - Key pedestrian/cycle routes, **Redways** at 2km intervals with local connections into grid squares
 - Design used traffic planning for the first time
 - A framework rather than a total plan



Cross-city redways (CNT, undated)





Figure 7. An impression of a part of the city. The proposals for planning the local environment are illustrated on this sketch which shows how a typical part of the city might be developed



Figure 8. The environment of the new city centre. A possible layout is shown for roads, buildings, main pedestrian routes and main planted areas. In the centre is a climate-controlled shopping mall linked to public buildings, offices and housing



- Traffic planners privileged grid roads
 - Faster speeds
 - Wider verges
 - Reduced access
- Densities changed
 - Local centres moved away from grid roads
 - Planned development on grid roads removed

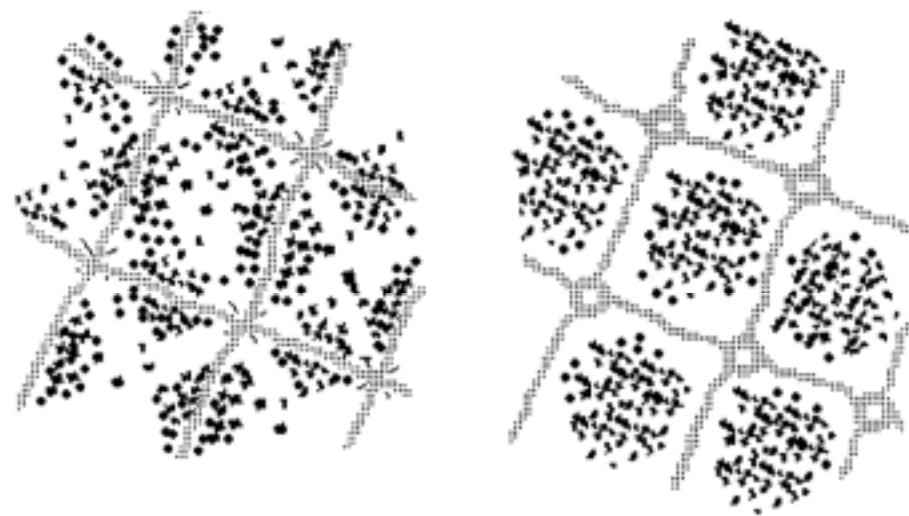


Figure 5. Result: development isolated within squares.

Development patterns as originally conceived (left) compared to as constructed (right) (Edwards, 2001)

Towards Carfree?



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- Developments clearly influenced by Radburn and what would inspire carfree designers...
- Local centres located by grid roads
 - connecting adjacent areas and providing several in short walking distance from each square

Netherfield, developed from 1972 onwards
(Walker, 1982)





- Grid squares
 - Like ‘Environmental Areas’ of “Traffic in Towns”, little through traffic
 - Main routes connect to grid roads and adjacent areas & carry buses
 - Local centre at edge (right in this concept drawing)

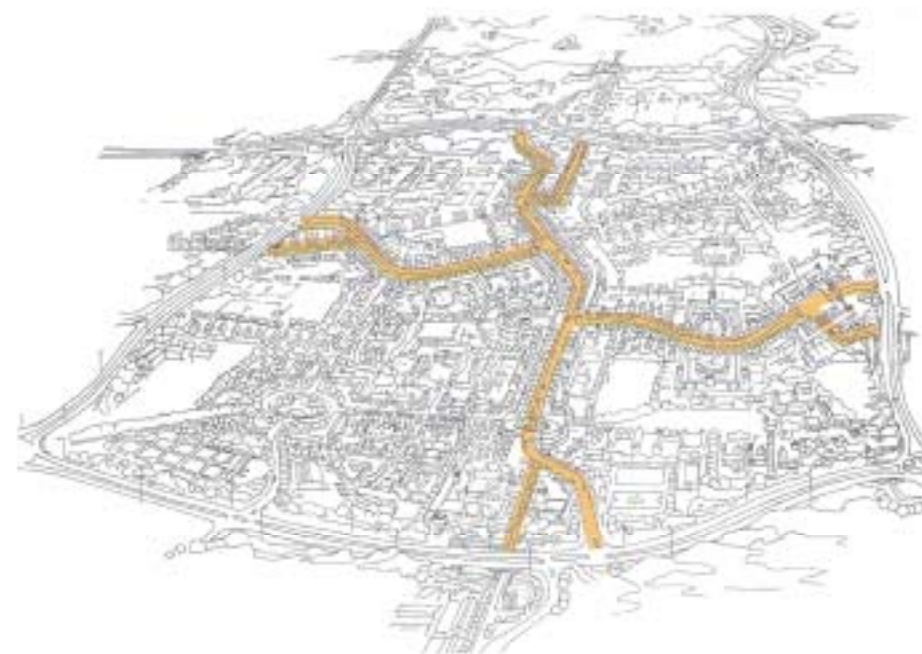


Figure 9 Theoretical Illustration of the Main Local Route System

(CNT, undated)



Court



Garden Centre Court



Court



Springfield Local Centre

Site Area: 17.5 ha
 Grid Square: 41.26 ha
 Conceived as a village community with the dwellings formed into a series of mews courts all responding to the existing natural ground features
 Total Dwellings: 549 - including adapted flats for the Spastics Society plus remedial workshop, 30 flat sheltered housing scheme
 Density: Approximately 31 dwellings/ha
 Frontages: 3.9, 6.8, 10.5, 9.3, 8.1, 12.6, 13.4m predominantly wide frontage
 Parking: Plot related garaging with facility for additional on plot parking.
 Construction: Traditional red brick and tile with simple clip on additives for identity and character
 Facilities: Adjoining local centre development with pub, health centre, shopping and small workshop facilities.
 3 schools, allotment sites and reserve sites for ecclesiastical use, light office development and further workshop/light industrial use



Pedestrian Access



Internal Court



Clock

Sketches for city centre housing, and photos of Neath Hill (1975 onwards) (Walker, 1982)



Great Linford 'carfree' (1977 onwards)
(Walker, 1982) and shared space in
Bradwell (A.Boodoo)



- In 1970s developments onwards, you will find
 - Radburn layouts
 - Early shared spaces
 - Visually carfree areas
- Green prototype...
 - Experiments included onsite renewables (MK Energy Park) and solar gain (Pennylands)



Cross-city Redway through Bradwell
(A.Boodoo)



- Grid roads
 - Separate traffic from pedestrians and cyclists, but encourage fast door to door car travel
 - Although designed not to cause severance, they are very wide
 - Crossed by bridges or subways



Cross-city Redway along Grid Road
V6 Grafton Street (A.Boodoo)



- City centre
 - Designed for 33% access by public transport, but many places served only half hourly
 - Congestion at peak times, although this was “impossible”
 - Well over 10,000 parking spaces, many free
 - Visually a sea of car parks amongst trees



A sea of car parks! Outside Xscape ski slope (A.Boodoo)



Monumentalism... views of the shopping area in the city centre (left, Walker, 1982; right, A.Boodoo)



...and fine-grained traditionalism on Upper Third Street (A.Boodoo)





- A changing centre
 - Former 6 storey maximum height limit abolished
 - Plan (as was always intended) for the centre to densify over time, with new blocks inserted
 - Becoming more “urban” and pedestrian friendly...



thehub:mk (A.Boodoo)

- Still car dominated
 - Mode split (all trips) appx.
 - 88% car
 - 6% walk
 - 3% public transport
 - 3% cycle (MKC, 2008)
 - Bus use +33% in 4 years
- Major growth plans
 - Population increase from 250,000 to 400,000+
 - Major regional employment and service hub



(A.Boodoo)



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New Sainsbury's supermarket on Silbury Boulevard (A.Boodoo)



Acknowledgements & References



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