# New housing: a Charter and Checklist for sustainable transport

#### Tim Pharoah

MSc; FCIHT; MCILT; MTPS

Transport and Planning Consultant
Member of CIHT Urban Design Panel
Lifetime Achievement Award – Urban Design Group 2017

livingtransport.com

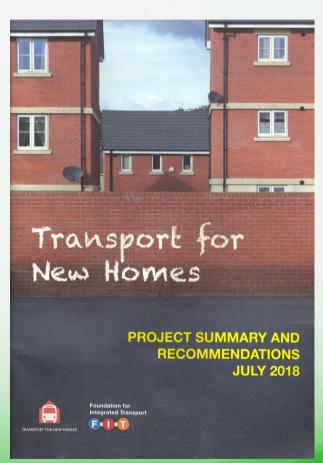
# Transport for New Homes (TfNH)

New housing locks in car-dependence

The problems are set out in the Transport for New Homes report



A sharp change of direction is needed



### TfNH Charter



TfNH is drawing up a Charter for good practice

- A statement of the key aims of TfNH
- Something specific that supporters can sign up to
- An encouragement for developers and planners to achieve sustainable transport solutions

#### Key items for the Charter

1. Avoiding car dependence

New housing should be designed such that residents can live full lives without a private car

2. Improving transit

New housing should be well served by and enhance transit services

3. Traffic reduction

New housing should contribute to traffic reduction by promoting a higher sustainable mode share

4. Attractive places to live

New housing should be designed with attractive streets, places and spaces, and local facilities, that encourage active travel and social contact

5. Helping existing communities
New developments should contribute positively to the achievement of the above aims in existing communities

### Also, a TfNH Checklist

#### Purpose of the checklist:



# To assess how well development plans and schemes meet the aims of the Charter

- Expose schemes that are unsustainable in transport terms (e.g. with a high level of car dependency)
- Identify specific ways in which development proposals can be improved

### TfNH Checklist

#### Who should use it and why?

- Bodies promoting or vetting new housing schemes, to make sure they are on-message
- Authorities responsible for planning and transport, to ensure developments meet sustainability policies
- Consultants or agents working for the above
- Organisations (e.g. TfNH) resisting unsustainable development, and holding developers and planners to account

# "OK" is not good enough A "step change" in sustainable transport is needed

#### A "step change" requires developments with:

- 1. High quality transit:
  - Frequent and reliable; (not just a half hourly bus, 6 days a week)
  - Transit stops close to homes (few minutes walk)
- 2. A good range of local facilities within walking distance
- 3. Low car ownership (Unlikely with minimum parking provision of 2.25 parking spaces per dwelling)

How can new developments meet this challenge?

# Plans should be driven by a vision for low levels of car use

E.g, reverse 70% car mode share to 70% non car trips Any precedents?

Freiburg (225,000) \*car 16%, PT 16%, active 63%

- Intensively developed with 5 tram lines

**Groningen** (180,000) \*car 30%, PT 10%, active 46%)

- Strong cycling culture, segregated cycle paths

**Houten** (44,000) \*car 31%, cycle 44%, other 25%

- Small town(s) but on rail transit (2 stations) and designed for cycling

(London car 37% incl passengers, but target for 20%)

# Low car use requires:

- High density development
- Compact layouts
- Mixed uses (range of facilities/employment)

But car provision precludes this...

#### Typical new housing in Britain





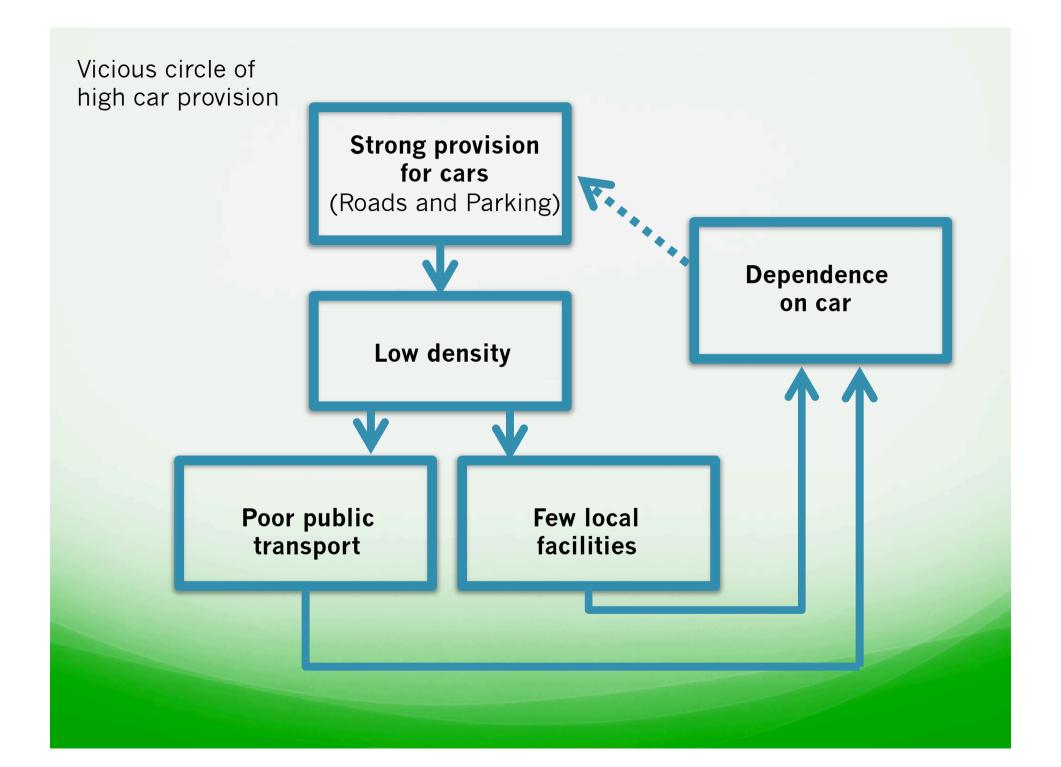




"Every time the front door closes, it's another two car trips"

### Current planning is flawed

- Predict and Provide
   Predict more traffic;
   Provide more roads and parking
- "Mitigation" of new development impacts (congestion), by providing more road capacity (what a dreary aspiration – negative from the start: "with mitigation, things won't be quite as bad as they otherwise would be"



# Car problem: SPACE



The "walkmobile"

Thanks to Herman Knoflacher

#### Space problems of car

Separation (roads and parking interrupt walk and

cycle paths)

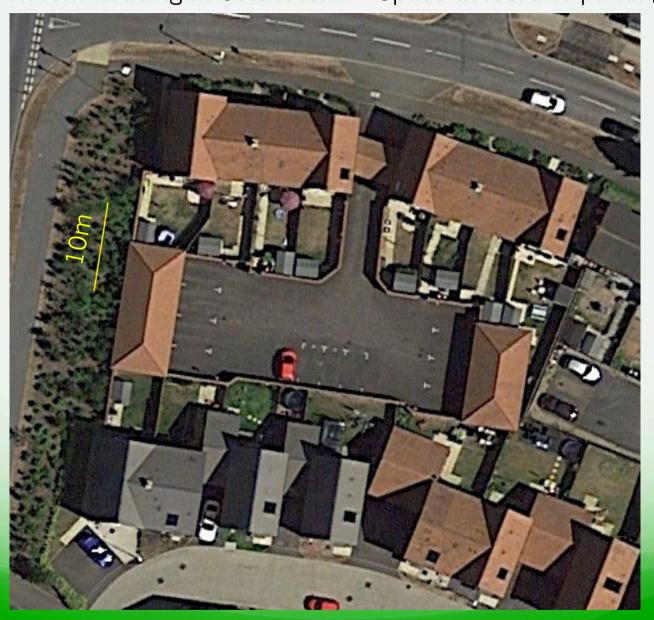




- Competition for space:
   gardens, walkways,
   social space, versus parking
   and roads
   or...
- Lower densities (yet more space)



Recent housing in Colchester Space devoted to parking





# Recognising these issues, the proposed checklist:

- Can help bad plans to be scrapped,
- Can help improve development plans/proposals,
- Can help lessons to be learnt from mistakes in schemes already built.



## Key things to check for

# Most important of all is LOCATION

- Location of a housing site vis a vis other places and things
- Location determines ability
   to provide good transit/walk/cycle connections:
- the quality of existing connections
- the possibility to create new or improved connections





#### Key items on the checklist

#### 1. Location

- 2. The local area (as a place to live)
  - Density and mix of uses
  - Local facilities and employment
  - Active (social) space around the home
- 3. Connectivity with other places. The quality of:
  - Walking and cycling routes
  - Transit routes and services
  - Parking or other restraint on car use



The "strength" of the "other places"

# Scoring the checklist

Utrecht and Houten



Houten: Pop 45,000 Mode split Car 31%, Cycle 44%, other 25% (Utrecht car 41%)





#### Houten

- Car-free town centre
- The bike has priority
- Quick transit to nearby Utrecht



### Scoring the checklist

#### A filtered approach depending on the scheme

Example: Houten, Netherlands

First check location	or proposed development	

#### Location

Well placed in relation to town/city, and a good or improving transit network

If location is appropriate, then assess the specific plans

First shock location of proposed development

Connectivity	
Car restraint, but excellent alternatives. Density supporting viable transit	
Local area(s) quality	
Density supporting local facilities / employment. Attractive surroundings	
Parking	
Low parking provision, if necessary supported by shared cars	

If plans are implemented, assess outcomes

Mode split	<u> </u>
Is car share target met? (e.g. 30% or less)	
Benefits to other areas	
New services / infrastructure reduced traffic in other (pre-existing) areas	

# Finally... New housing will score well if we:

- Intensify existing towns + improve transit services, or
- Extend towns on strengthened existing transit corridors (pearls on a string)
- Reduce car demand through pricing, controls, and provision of alternatives
- Ensure provision of local facilities and services

# Thank you

#### Tim Pharoah

Transport and Planning Consultant

livingtransport.com

### Colchester Metro

#### Colchester - Clacton Line



### From 20 housing schemes visited

- Traffic generated by building in the wrong place
- Estates that didn't connect to anything other than the road network
- Public realm dominated by the needs of the car
- Homes not properly connected for pedestrians, cyclists or buses
- Poor public transport
- Facilities? "A business park off a roundabout somewhere in the vicinity of new homes and then a new supermarket off another road junction..."

# New communities need major transit, plus cycling and walking infrastructure

- Only get 30% car if people can live without a car (i.e. Zero dependence on car)
- This means people need very good alternatives:
  - Frequent and fast public transport nearby with direct access to nearby towns (light rail, segregated bus, train)
  - High quality segregated walking and cycle routes
  - A range of facilities within walking distance

# Free-standing developments without HQ transit cannot achieve 30% car

- People dependent on cars
- Dreary places to live
- Home areas dominated by parking and roads
- Inefficient use of land (low densities)
- Impossible to provide attractive public transport (both physically and financially)
- No help to solve problems of existing towns, which continue to be choked with cars