

# Getting everyone on board A vision for buses in place-making

Transport for New Homes Conference
9th September 2019

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# The development Agenda: back to the future?

Cross party consensus about the need to tackle a serious housing shortage: like 1951

300,000 new homes annual aspiration, not achieved since the mid-1960s. Particular focus on the more populous South and East

Where will they be built? Suburbanised villages? Urban extensions? New Towns?



### **Urban Morphology and Public Transport**

- Pre 1939: public transport corridors drove suburbanisation: through land speculation
  - Metroland
  - First experiments with Garden Cities
- 1945: Nationalisation of development rights. Dawn of town planning.
  - Abercrombie report
  - Recognition land use and transport planning must be integrated
- 1950s: 3 million Homes for heroes
  - Mass council housebuilding: sweeping boulevards to accommodate trunk public transport corridors
  - New Towns. Expanded Towns. Grand visions
- 1960s: Reforging Britain in the "white hot heat of technology": people as consumers, city as machine. Divergent visions for transport in cities.
  - Runcorn and its Busway (1964) vs.
  - Comprehensive regeneration to accommodate the car: Urban motorways
  - Huge changes in employment, retail and leisure begin

# What car-dependency looks like



### What car-dependency looks like (2)



...and so on.

# How have we got to where we are today?

The planning system is more balkanised than it has ever been?

- •2004 Removal of County Structure Plans
- •2010 abolition of Regional Planning
- •1998 onwards: unitarisation typically at smaller-than-County level

Constant upheaval: a complex system struggling with repeated root and branch reforms

Political agenda is now entirely numbers driven.

- •Plan-making now cannot keep up with the political demands for delivery.
- •National Planning Policy Framework and "presumption in favour of sustainable development"
- •paras 11-12, 14.

### The real culprit is...

- Who has the greatest vested interest in championing the role of the bus?
- Who is the authentic voice of bus users?
- Who is best placed to advise regarding best practice, from daily exposure to the full range of operating experience across the UK and potentially beyond?

If we will not champion the role buses can and should play as cities grow and change, why should we expect others to?

Why would or residents want to get on a bus?

Why should we pay attention to buses? Only old people use them.

Can't you just divert the bus into our development?

Driverless cars will take over within a few years, won't they?

There's a bus service operating every hour within 800m of the site. Won't that suffice as a good mode choice?

£150,000 per year to keep a bus on the road!? You don't expect me to believe that!

How do we calm traffic speeds without tightening carriageway dimensions and alignments?

We want spaces that are people-friendly, not dominated by traffic.

The planners have refused our proposal on sustainable choices grounds. What can you do for us?

# What kinds of bus services are required to reverse the cycle?

- "it is there when I need it"
  - demands high frequency
- "I can depend on it"
  - Demands consistent journey times
- "It takes me exactly where I want to go"
  - Difficult tradeoff between penetration and directness
  - Competitive with journey times by other modes
  - Easy to understand

# **Locating Development**

Building the right homes in the right places



### A plan-led system?

- Preparing a properly-evidenced development Plan is a legal requirement of Planning Authorities
- The Statutory Development Plan as the key mechanism for mediating complex choices and tradeoffs
  - Sustainable development as the "golden thread" (whatever that means)
  - 15-year minimum horizon: a long-term view NPPF para 22
  - Evidence based, transparent and democratically accountable para 31
  - Requirement to engage with all stakeholders –including "transport operators" Paras 16 c), 25 and 104 b)
  - quantum, pattern and type of development to minimise number and length of journeys para 104 a)
  - Integration of land use patterns with movement para 102-103
  - Prioritise sustainable modes in design; walking, cycling and then public transport – para 110 a)
- Plan making is breaking down
  - Sclerotic and slow constantly in "arrears"
  - Intractable political tradeoffs at local level prone to hijack by certain groups
  - Lack of resources

### A plan-led system?

- S 38 (6) of 2004 Planning and Compensation Act: The Plan is the starting point for all development management decisions
- What happens when a Plan is "absent, silent or out-of-date?"
- NPPF "Tilted Balance": presumption in favour of sustainable development at paragraph 11 applies
  - A development can happen unless the disbenefits outweigh the benefits taken as a whole or other material issues set out in NPPF indicate development should be restricted
  - No simple definition of what constitutes sustainable development
  - Minimal detailed guidance: succession of legal challenges and case law
  - No overview or strategic remit for the decision taker
  - Entirely reactive
  - Requirement to maintain a rolling 5-year supply of development land sufficient to meet objectively assessed development requirements
- Many planning authorities still have no up-to-date plan in place
  - Rather more cannot securely demonstrate a 5-year housing lad supply
  - Little real incentive on some LPASs to plan at all.

# Steering development patterns to make fullest possible use of the opportunities for sustainable transport

- Site development on existing high quality corridors
- Large scale sites present bigger and more complex issues for bus services, than smaller ones within easy reach of existing commercial services:
- Few if any urban extensions will offer a critical mass of demand for bus services in the foreseeable future if at all
- Diversion is undesirable. Extension is preferable.
   Enhancement is ideal.
- "Pearls on a string": Oxford-Swindon service 66, along A420
- Its easier to steer development towards high quality bus services, than contrive to bend services to suit a development strategy driven by other factors.

#### **Urban extensions**

- Can provide a comprehensive approach to movement and access
  - But rarely do, as they are often very hard to integrate with existing built form: "bolt-on communities"
  - Often cannot facilitate bus service access and penetration due to phasing issues
- Theoretically can deliver a critical mass of demand for high quality bus services
  - But more often this would take 10 or more years to realise. Who
    pays to sustain a service over that period?
  - And are travel demand expressed within a single logical corridor?
- Are considered to be able to better fund "lumpy" investment in facilities to meet their residents needs, such as bus services.
  - But in practice are generally saddled with extraordinary infrastructure costs

#### New Settlements aren't new

1910: Garden Cities

1946: New Towns Act

1952: Expanded Towns – Town Development Act

1988: "New Country Towns" – Consortium

Developments Ltd.

2008: "EcoTowns" – DCLG Supplement to PPS1

2015: "Garden Towns"



# "Garden Settlements" – How sustainable?

- Ebenezer Howards original 1901 idea sited the towns on existing rail corridors.
- Today, site decisions are too often driven by any other consideration than transport, but in particular
  - availability of a large site in single ownership,
  - perhaps previously used (e.g. Airfields),
  - as far as possible from restive voters
  - and therefore remote from travel destinations or existing bus routes.
- The current generation of "Garden Settlements" threatens to be the most car-dependent pattern of development ever conceived, that bus services can never economically serve.

# **Urban Design**

Making buses effective through place-making



### Urban design essentials

- Simple, direct bus routes
- The bus has to fit!
  - Street dimensions must accommodate two buses passing with reasonable ease
  - 6.2m clear widths
  - 26m minimum radii
  - 31m bus stop clearways
- Development oriented around bus routes and stops
  - Including careful consideration of pedestrian and cycle connectivity
- Conjoined land use and movement strategy
  - Local Centres as mode-change points
  - Maximising development within convenient bus stop hinterlands

# Clear passage for buses



# **Street alignment**



### **Effective Bus Priority**

- Buses need to be given a clear visible and obvious advantage over personal car use
- More direct routes within the site, and connecting to key movement corridors
  - Bus lanes and links: can be short and focused, but as art of a well-conceived holistic corridor approach.
  - Bus gates
- Seamless priority: Off-site corridor improvements are likely to be essential
  - Including careful consideration of pedestrian and cycle connectivity
- Conjoined land use and movement strategy at much larger scale
  - Demands a clear and consistent policy recognition that buses and sustainable modes should play a much greater role for all local travel, not just from new development
  - Robust alignment of Transport Planning with Local Plans

### Parking!

- Within developments, the biggest single hindrance to efficient bus operation.
- Super-sized streets of 7.3m wide encourage unrestricted parking on both sides: effective width generally less than slightly narrower streets
- "free kerbline" must be avoided
- Use off-street solutions like double-width drives, grouped shared drives
- design strategies with parking in bays alongside the carriageway
- clear access by buses to the kerbside at bus stops:
   Clearways? build-outs? Care when siting stops on curves.
- School sites and parental parking regularly entirely block bus routes. School sites demand particular care, and access points are better not sited directly on proposed bus routes.

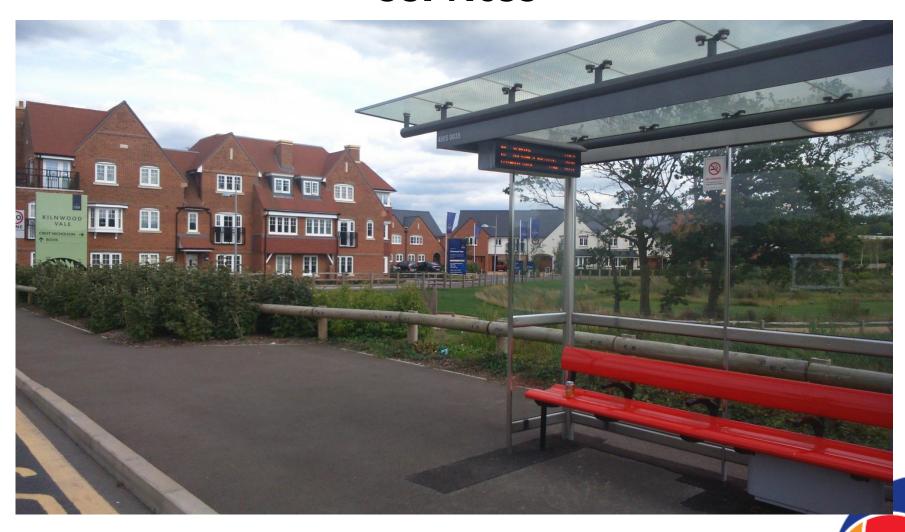
### How can a bus do its job properly here?



#### Bus stops

- Plan them in at the outset
- The ambience of the service is set by
  - Quality street furniture
  - Ample display space for up-to-date relevant information
  - Well-lit sites, in full view
  - A consistent approach
- Easy boarding for all
  - Direct approach parallel to kerb for bus
  - Direct approach to safe and clean boarding area for passengers
- Shelters?
- Real-time passenger information?

# High Quality "shop window" for bus services



The role of technology



#### **Development Phasing**

- Increasingly development is coming forward in large blocks, exceeding 1000 dwellings
- Long build-out periods, 8 years or more
- Complex technical and commercial constraints
- Mitigates strongly against early provision of convenient public transport
- Demands an intelligent, flexible and robust approach to phasing, that marries commercial and operational realities of developers with that of the bus operator.
- A good PT phasing strategy can and should

# When will this road open?



### Good public transport strategies:

- robust but flexible
- Scalable and linked to key development milestones!
  - 1400 homes ought to allow for a bus to "wash its face" based on 4000 population "rule of thumb" in urnban contexts
  - Be realistic as to what rate of build is sustainably achievable
- Seek to make fullest use of existing commercial service offer
  - And then leverage volume growth: frequency, hors of operation etc.
- Do not add capacity or operating resource greatly ahead of site occupation
  - 1 PVR at a time
- Avoid dependencies and risks that the operator and developer cannot control
  - direct developer procurement?

# What cannot be made to work

Avoiding urban design "culs de sac"



# These approaches cannot lead to a high bus mode share

- Unrestricted parking on the carriageway
- Streets designed to dimensional minima
- Poor bus route penetration, or accessibility to stops
- Master Plans with contrived access and spine road arrangements, often reflecting land control not good planning
- Unrealistic tracking exercises: Streets tracked to "prove" buses can access in the absence of any onstreet parking
- Building lines within 6m of the kerbline where buses will pass.
- Continuous built frontage with no breaks or side streets

#### You're on a route to nowhere when

- There is no commitment or shared vision among all stakeholders that bus mode share must be maximised
- Any service or infrastructure is retrofitted to a development post-consent or, worse, post-implementation
- Public transport is not considered a fundamental element steering the access and movement strategy for the site
- The strategy is essentially "ticking a policy box"
- Development proposals are viewed in isolation from the context, including the existing commercial network, and adjoining existing or committed development
  - Including careful consideration of how development can catalyse wider service improvements and mode shift
  - A 5% mode shift within the town as a whole would have radically better outcomes that a 25% mode shift for journeys from within a development
- There is insufficient and inconsistent attention to detail in downstream design and implementation

### **Key Messages**

- We need to help establish a clear and compelling vision and narrative among all stakeholders of what can be achieved and how, that is context-relevant.
- We have to engage all development sector stakeholders
  - Positively
  - Proactively
  - Professionally
  - Consistently
  - Carefully
  - Creatively
- Early dialogue is of the essence
- We need to believe and demonstrate that the bus industry offers a unique set of solutions to serious chronic problems

# **Questions?**

