

Putting people rather than traffic first for new housing

'Predict and provide' is being replaced by a new approach to assessing transport need called 'vision and validate' which focuses on active and sustainable travel, says Mike Axon FCIHT.

Introduction

Transport assessments have traditionally been firmly rooted around a traffic focused 'predict and provide' approach. A prediction was made about how many people would like to drive, an 'acceptable level of convenience' was set for commuters at peak hours, and the road network was designed to accommodate that.

We prioritised vehicular movement and the basic premise was that this traffic would 'come what may'. This assumption, however, isn't a true reflection of reality. The fundamental law of traffic is that on a busy network the volume of traffic is a function of the available road space.

Following the traditional 'predict and provide' often leads to either a conclusion that development cannot be accommodated, or that it will require highway works that are probably unnecessary. But the consequences of this are the antithesis of what we are expected to achieve in terms of addressing issues such as climate change, health and housing.

It is no surprise then that industry bodies such as CIHT, the Town & Country Planning Association and most recently the Department for Transport in its 'Decarbonising Transport' publication in July have advised that the 'predict and provide' approach should be abandoned.

Instead, we say, the transport assessment process should follow an approach that prioritises a reduction in carbon emissions, healthy living and is led by masterplanning. In this way it addresses big policy issues of the day.

Following a new vision

An EU research project called 'CREATE' coined an expression for this approach, which it called 'vision and validate', sometimes known as 'decide and provide'. The idea is to decide what we want to see and design accordingly so



↑ Active travel is at the heart of plans for Harrington



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that the objective is achieved. This is the right way to proceed where it is 'accessibility' – not traffic – that matters most.

This approach means a fundamental shift in transport analysis. Change is already present in planning policy, but often does not find its way into the nuts and bolts of assessment. This is hindering the best delivery of homes and development.

But change means a great deal more than simply reducing the predicted traffic by an amount equal to what we think people may be persuaded to do given no constraints, and then still 'providing' for the residual demand. That is still 'predict and provide'.

In some circumstances it means using road capacity as a tool to limit or reduce traffic volumes. Within this approach, traffic models are being used to inform, explain characteristics and to scenario test, and not as the 'pass' or 'fail' arbiters for which they have often been used in the predict and provide world.

Many schemes strive for this but are thwarted by requirements to invest substantial amounts in expensive road infrastructure on a 'what if it doesn't

work?' basis. This 'what if' approach does not just assume that policy will inherently fail, it is self fulfilling.

Considering climate change

We must have the confidence that our planning policies, our climate aspirations and our health objectives are sound and will succeed. Building road capacity 'just in case' for non strategic reasons is not just weak, it will imperil the delivery of climate change targets.

There is precedence. These include Harlow & Gilston Garden Town in Hertfordshire; Plas Dwr in Cardiff, Silverstone Park in Northamptonshire; Dunton Hills Garden Village in Essex and Worcestershire Parkway Garden Town.

Dunton Hills, for instance, features in the draft Brentwood Local Plan. Landscape and masterplan led, it makes sure that the right land uses come forward and it prioritises active travel connectivity within the design.

It includes connectivity conduits further afield, with its most major access infrastructure being a dedicated shared transport and active travel corridor only. It accentuates

Brentwood Council's 'Sustainable Transport Integration Vision' which seeks to rebalance from car dominance to movement corridors.

Over in Oxfordshire, a 6500 home proposed new settlement at Harrington takes this to the next level. The primary movement network is the active travel network. It knits in 'Third Places' (work hubs) and 'Mobility Hubs' (which include a community concierge, electric bikes, scooters and other shared travel systems) with the landscape and neighbourhoods.

Investment in connectivity infrastructure throughout and beyond the mini arc of places in which it sits focuses on smart shared travel systems including corridors for micromobility and active travel. Private traffic is a choice, but not a priority.

Changing times

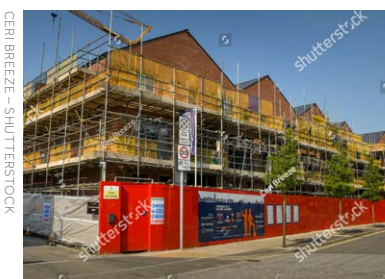
One of the many things the pandemic has taught us is that some of the old rules are not necessarily needed any more. Under the 'accessibility' umbrella, transport is often the 'third question' after 'Can I do it online?' and 'Can I do it online and get it delivered?' Parking need not be 'on plot' and the asset (a private car) need not be owned by the individual.

We also look at accessibility across the whole day, not just the commuter peak, because liveability, climate and health are most important. We also want community interaction for mental and physical health benefits.

So when it comes to mobility we encourage it at the local level, to mingle, to pick up parcels from the Hub and for leisure and living. It can be described as 'the 20 Minute Town'.

Encouraging local living

Surface transport is the single biggest emitter of carbon in the UK today. The first task among the measures to combat climate change is to maximise



↑ Better assessment of transport need could improve housing delivery

those trips which are best served by local living including for example, going to school, taking the dog for a walk, visiting friends and buying a pint of milk.

In doing so, the aim is to maximise the relative attractiveness of 'classic mobility': two feet and two wheels.

For those trips that then perform a regionally significant purpose including higher order shopping and interaction between businesses, the task is to make that easy and climate efficient.

Therefore, the accessibility vision can be thought of as follows:

- **Maximise local living** – Ensuring that the community provides the facilities that satisfy day to day living needs including schools, leisure facilities such as open spaces, jobs, other people, day to day shopping, means of receiving deliveries, means of working 'from home' but with other human interactions, otherwise known as 'Third Places'.
- **Creating a place** – Here, local living is undertaken by a good choice of the means of accessibility, but in order of priority. So digital connectivity first, followed by active travel, shared travel and then single occupancy private vehicle travel. The primary movement network may well be the active travel network, alongside which there may be roads.
- **Connectivity** – By this we mean beyond the local area, through a good choice of means across the day, but in order of priority: active travel, then shared travel followed by single occupancy private vehicle travel. There may be a different priority for some business travel.

To put this in context, without any heroic assumptions about change in attitudes, and based on existing data from the Census, the Office for National Statistics and the National Travel Survey, it is likely that the following 'internalisation' of accessibility will be readily achieved in a suitably sized, well planned and well located new settlement:

- 90% + of education trips.
- 60 - 80% of leisure and daily shopping accessibility.
- 20 - 40% of residents travelling to a permanent workplace will travel to that workplace within the settlement.



↑ Providing good access to local facilities is urged

- 30 - 40% of working residents will work from home, or from a local 'Third Place' within the settlement on any given weekday post the Covid period, an increase from typically 20 - 30% pre pandemic.

These are 'observed effects' from typical small towns, except for the work from home figure, which is an expected figure based on a portfolio of reported surveys.

This often equates to about 65 - 80% of all reasons for accessibility being contained within the local community. With good design or retrofit – and accentuating changing attitudes particularly between generations – we can do better. It is now possible to make estimates based on published data of likely working from home proportions on any single day based on authority area without the benefit of any further intervention.

Conclusions

Key drivers for a new settlement are size and location, and creating a critical mass of homes and on site services that allow trip 'internalisation'. Transport is not a subject in its own right when it comes to new settlements, it is instead a critical subset of masterplanning.

'Vision and validate' offers great potential for housing development by rebalancing investment in the infrastructure required to make housing happen, away from highways towards social, green and sustainable infrastructure supporting well designed places for the future.

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