

Better places: new settlements with transport that works

**Outcomes from the study
tours of Freiburg and
Cambridge organised
by the University of
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Introduction

The UK Government is committed to building 1.5m homes in England during this Parliament. Part of this target is to be delivered through a new generation of New Towns – large scale new developments, either as standalone towns or as extensions to existing settlements. A New Towns Task Force was established to recommend potential locations and set out ways these towns can be delivered as best practice in creating large scale new settlements. The task force reported in September 2025 and its report is [here: https://www.gov.uk/government/publications/new-towns-taskforce-report-to-government/new-towns-taskforce-report-to-government](https://www.gov.uk/government/publications/new-towns-taskforce-report-to-government/new-towns-taskforce-report-to-government).

Transport is a key issue addressed in the report. There is substantial literature showing that much of the current new housing development in the UK is located and designed in ways that require significant car use¹. This adds to traffic congestion on existing roads and hence harms local economies and potentially the economy as a whole. It also entrenches social exclusion for those without car access and adds to carbon emissions.

The University of Hertfordshire and its Smart Mobility Unit have a long track record of working with the Innovation Academy², a social enterprise organisation in Freiburg in southern Germany, helping students and researchers review best practice in planning and in transport-related and sustainable developments. Freiburg is recognised globally as an exemplar for sustainable urban development, especially the districts of Vauban and Rieselfeld, and UH staff used them as examples in a RTPI report on futureproofing new towns³. In discussion with officials at the Department for Transport, it was agreed that a study tour to Freiburg, followed by one in the UK to review practice in this country, would be helpful in enabling the Government to respond to the Task Force



Waterbeach (Cambridge Cycling Campaign)

report and to understand better how to accommodate growth through the creation of healthy and sustainable communities.

As a result, a visit was arranged by the Smart Mobility Unit to Freiburg, hosted by the Innovation Academy, in December 2025. To allow comparisons with UK experience, a follow up visit to urban extensions and new settlements in the Cambridge area and in Harlow was held in February 2026. A number of officials from the Department for Transport (DfT) and the Ministry of Housing, Communities and Local Government (MHCLG) joined these visits. This report is intended to draw out the lessons learned and the implications for urban extensions and New Towns in England, especially in relation to transport. We are also able to draw on the report of another study tour to French cities, undertaken almost at the same time⁴, which allows some further comparison.

¹ <https://www.transportfornewhomes.org.uk/reports/building-car-dependency/>;
<https://www.transportfornewhomes.org.uk/reports/what-is-being-built-in-2025/>;
<https://www.rtpi.org.uk/new-from-the-rtpi/new-housing-fails-to-move-away-from-car-dependency-report-finds/>;
<https://www.createstreets.com/steppingoffthetoadtonowhere/>

² <https://www.innovation-academy.de/en/>

³ <https://www.rtpi.org.uk/policy-and-research/futureproof-new-towns-international-lessons-on-how-to-build-flexible-and-adaptable-new-towns-in-england/3-case-study-freiburg/>

⁴ <https://www.createstreets.com/projects/towns-and-trams-what-britain-can-learn-from-frances-tram-led-housing-model/>

Summary, comparisons and conclusions

Faced with a need to build more homes, it is tempting for any Government to support new housing of any sort, in any location. However, this has led in many areas to a pattern of low-density development with limited or no shops and community services, limited or no public transport, and sometimes with no pavements. This leads to car dependence, where most journeys have to be made by car; those without access to cars suffer significant social exclusion and those with cars face increasing levels of congestion on road networks around these new developments. There are also wider impacts, including on people's health from reduced physical activity.

There is therefore an emerging consensus that urban extensions and New Towns should be based around high quality public transport and prioritise active travel. The New Towns Task Force report says: "The Taskforce's placemaking principles recommend new towns come with high quality public transport networks and connection to wider transport networks" (para 232).

Our visits found that there are barriers and challenges to this approach. One issue is **complexity in governance**. As noted in the main report, the governance in Cambridge and Harlow is complex, with many different authorities with overlapping functions on planning and transport, compared with simpler governance arrangements in German and French cities and towns. Cambridge and Harlow have both developed partnerships and joint arrangements to address this issue, but the underlying issue remains. To address this, the New Towns Task Force proposes development corporations to "co-ordinate investment, develop expertise, assemble land and facilitate faster delivery" (para 17) – this model was used to develop earlier New Towns and also areas such as London Docklands and a development corporation has now been approved for Cambridge.



Future cycle lane at Northstowe (Danny Williams)

By contrast, in Freiburg the city council has a clear leadership role in site selection, masterplanning and having a special unit to own delivery of the masterplans as the developments are built. This has enabled Freiburg to have a simple and well-conceived central idea and sticking to it, with a tram running down a boulevard forming the spine of each development.

Financing and land value capture

This emerged as a key difference. Germany's 'urban development measure'; combined with its strict local plans system, provides a streamlined and codified route to establishing comparatively low existing use values for land bought in this way. German development corporation-style bodies can borrow without caps, and local authorities have a wide range of local taxes which can capture further development value.

How Germany achieves high land value capture in its 'Urban Development Measure' system

The German system succeeds because it distinguishes between two types of CPO. The first is a case-by-case process similar to the UK. The second is to designate special areas, such as the 'urban development measures' within which the case for CPO is pre-approved (like a Development Consent Order) and where different rules apply. This has several advantages:

First; landowners are disincentivised from dragging out CPO proceedings by 'freezing' its planning status in the valuation at the date when the public scheme becomes known. In the UK the planning potential valuation date is the date the land is actually entered, years in the future; the landowner doesn't know what the planning situation then might be so, fearing a bad deal, fights the CPO; and continues to try to add planning value to the land with applications.

Second, the 'urban development measure' in Germany allows the CPO price to specifically disregard the value added to the land by appearing in the local plan allocation. In the UK, judges have sometimes included the local plan allocation in the compensation value even where intended to enable the scheme; disregarding it requires forensic case by case evidence that the plan allocation wouldn't have 'happened anyway'.

Third, there is fairness between those whose land is acquired within the 'urban development measure' area and those whose

land is not – they can be required to pay a development levy for the amount of value created by the plan allocation. In the UK, land that stays in private hands may have to pay S106 or CIL contributions; but is likely to leave its owner much better off than if they were compulsorily purchased.

Fourth, and importantly for human rights justification; land value uplift can only be used for scheme costs – profits outside this must be returned to the original landowners.

Fifth, transactions in the development area are subject to pre-emption rights; where the value of land is exceeded the sale can be blocked (or pre-empted), to prevent speculation increasing costs.

Sixth, even outside of special CPO areas, in Germany land can only become developable if allocated in the local development plan. In the UK, land can sometimes get planning permission outside it - where there hasn't been enough building; or, in the most recent NPPF; around rail stations. This creates more routes for landowners to claim they might have got planning permission otherwise.

While specific get-outs have been created in the UK, these are typically too limited to work: For example, if a new transport project unlocks land, the value it adds can be disregarded from the CPO price – but only if the purchase is within 5 years of the transport scheme opening; whereas such developments can take 30 or more years.

Density is also an underlying issue. We have noted that the Freiburg urban extensions are at high density (though low rise), whereas standard UK housing developments are much lower⁵. The Cambridge developments are higher than this standard but still in many cases lower than Freiburg's. Density matters because with lower density journey lengths tend to increase, leading to increased car use and less walking and cycling. It can also be more costly or difficult to provide public transport in lower density developments. One of the "placemaking principles" in the New Towns Task Force report is **"ambitious density"**:

"New towns should aim to be built at a density sufficient to enable residents to walk to local amenities, support public transport, unlock better social infrastructure, and create active and liveable neighbourhoods, with the government establishing clear minimum density thresholds... Well-planned urban density allows more homes to be delivered within a compact footprint, creating more space for parks, shared gardens, and community facilities. It also enables more people to live closer to employment, services, and public transport, reducing reliance on private vehicles and associated household costs" (p71).

5 Greenfield developments in the UK average 28 dwellings per hectare – cited in <https://www.theplanner.co.uk/2018/06/04/loss-green-areas-increases-58-cpre-says>

It has been shown that urban extensions in the UK can if built at higher density provide housing numbers with less land take and less car use. A study by Create Streets and Sustrans in Chippenham, Wiltshire, showed that 7500 homes could be built with reduced land take, increased public transport and active travel, and no extra public funding⁶.

A main barrier to urban-edge density is lack of transport being in place ahead of time. Germany solves this by accepting a need for temporary transport subsidy for mass transit routes. The funding streams to do this do not exist in the UK, so neither dense development nor mass transit can rely on the other to justify the financial case for either.

Public transport

As we note in the main report, Freiburg's urban extensions are characterised by high density (but low rise) development served by high quality public transport in the form of trams. Critically, these have been installed at the start of development so are available as the first residents move in. The trams are at the centre of the extensions, forming a spine around which high density development is placed.

The provision of the tram lines in Freiburg is enabled by a number of factors:

- Funding: capital and funding is available from Federal and state governments for rail-based public transport investments. The process for tapping into this funding is fairly straightforward. The city's share comes from the uplift in land values from the Urban Development Measure designating the land for development. This reflects proposals in the New Towns Task Force for the use of new financing mechanisms so that "future rising land values, created by transport investment, could be better relied on to pay back costs" (para 244). Revenue funding is available both from higher government tiers and from local tax levers
- Planning approval: the process for approving new tram lines is also reasonably clear. As we note in the main report, a single planning approval process by the relevant district council or regional government gives planning permission, and although there may be other requirements many of these are rolled into this approval process. Consultation with other authorities and with the public and environmental protection agencies also seems to be part of this process.

This means that in Freiburg the provision of public transport is fully integrated with the development of the urban extensions.

This is not unique to Freiburg, or to Germany. Other German cities have created urban extensions around public transport – two often cited are HafenCity in Hamburg and Kronsberg in Hanover⁷.

France has also seen urban extensions around trams. A study tour undertaken at the same time as our visit to Freiburg looked at three areas in France, two in Greater Paris and the other in the city of Angers. All have seen major housing development enabled by tram lines. Local funding through an employers' payroll tax (the "Versement Mobilités") is used to finance such projects⁸.

One major barrier to replicating this approach in the UK is cost. As the New Towns Task Force report observes, the UK has unusually high costs for urban rail mass transit schemes. One study found that tram routes in Britain cost more than twice as much as elsewhere, at £87m/mile average compared with £42m per mile average in Europe⁹. Utilities regulations (and the share of utility diversions paid by tram promoters) and other planning and technical requirements are said to drive unnecessary cost. The New Towns Task Force recommended that the government should review these cost drivers and "provide guidance on reducing costs for future schemes and new settlements" (para 230). The Government has now responded to this by setting up a "Mass Transit Task Force"¹⁰ to review and tackle barriers to the delivery of mass transit schemes in the UK.

Whereas "mass transit" in Freiburg and other European cities has generally meant trams and light rail, in the UK it has also meant busways (sometimes known as Bus Rapid Transit or BRT). These are sometimes, as in Cambridge, guided busways, with concrete guideways; the Cambridge busway, as noted in the main report, is the longest in the world, but there are others in the UK – Luton-Dunstable, Leigh in Greater Manchester and shorter sections as part of larger bus projects. Other BRT systems do not have guided sections but have high quality vehicles and priority over other road traffic; the Glider in Belfast is sometimes cited as a successful example of such bus provision offering high quality public transport¹¹. The task force will include bus schemes in its remit.

There is a UK debate about trams and busways. The trams offer certainty and reliability, and are a visible commitment for the future; they also have higher capacity than buses, which matters on main routes and

⁶ <https://www.createstreets.com/steppingofftheroadtonowhere/> 2024

⁷ https://urbed.coop/sites/default/files/Case%20studies_1.pdf

⁸ <https://www.createstreets.com/projects/towns-and-trams-what-britain-can-learn-from-frances-tram-led-housing-model/>

⁹ <https://www.britainremade.co.uk/backontrack>

¹⁰ <https://www.gov.uk/government/news/new-mass-transit-taskforce-to-reshape-the-future-of-transport-in-towns-and-cities>

¹¹ [https://en.wikipedia.org/wiki/Glider_\(Belfast\)](https://en.wikipedia.org/wiki/Glider_(Belfast))

at peak times. Busways offer flexibility – buses can use guideways or bus lanes for core routes but can then serve areas away from these routes without the need for interchange. They can also be cheaper in initial capital cost than trams – the final cost of the Cambridge scheme was £11m/mile in 2010, though the new busway to Cambourne is estimated to cost £17.6m - £23.5m/mile. New engineering approaches to trams being pioneered in Coventry (“Very Light Rail”) are also predicted to bring the costs of trams down by 40-90% and speed up construction¹².

However, as the Treasury in the UK typically only funds capital costs of projects, this can result in neglect of whole life cost and cost-shifting to local authorities. The higher revenue cost in a bus project from employing more drivers and maintaining the road surface falls to the operator; whereas higher initial capital investment in higher-capacity trams and longer-lasting tram track moves this cost into the capital spend.

All types of mass transit projects in the UK face a much more complex approval process than in Germany or France. Approval is given via a “Transport and Works Act Order”, for which promoters have to apply to the Government, which makes the decisions on them. The Government is now consulting on devolving TWAO approval powers for mass transit schemes to mayors. However, other approvals are also needed, and the Government also has to approve the detailed business case for each mass transit scheme, which is not the case in Germany or France.

Cambridge – unlike Freiburg – is also making use of the heavy rail network to serve its developments, with new stations and the East-West Rail line. The East-West Rail project is also being used as a development spine for new developments, including a new town at Tempsford and the expansion of Milton Keynes.

However, Cambridge’s experience has shown that good public transport links from the surrounding areas to rail stations are also required. Another feature of Freiburg public transport is that bus services to surrounding areas are integrated with the trams. As noted in the main report, the UK bus network is deregulated, but several areas including Cambridgeshire are looking at using new legislation to move towards a franchised system; one argument advanced for this is that it would allow better planning and co-ordination of bus services to serve new developments.

In summary, Freiburg and Cambridge both show that it is possible to give new developments high quality public transport. However, the process for developing

and getting approval and funding for high quality mass transit schemes to serve new housing developments is more complex in the UK than in Germany or France; regulatory and other factors add significantly to costs and implementation time compared with European provision. The New Towns Task Force has recognised this and made some proposals for change, some of which the Government is already acting on.

As the task force suggests, new funding mechanisms for public transport in new towns, using the uplift in land values from development, might also help the upfront funding of transport infrastructure. This “land value capture” has been used in the UK – for example business rate supplements to finance the Elizabeth Line in London – and an innovative approach was used to part-finance stations on the reopened Northumberland line, with landowners contributing a portion of the uplift in the value of their land¹³.

In terms of public transport funding, especially for revenue funding, the UK has modal-specific national funds (examples are funding for Bus Service Improvement Plans and rail franchise subsidies or cross-subsidy within franchises, and there are other specific funds). These have different criteria for what services are worth subsidising, naturally leading local authorities to prioritise the mode with more money available (e.g. rail over bus).

Active travel, roads and parking

Another key aspect of our visits has been high levels of active travel – walking, wheeling and cycling. Both Freiburg and Cambridge have high levels of cycling and the urban extensions in both have built on this. Local services and facilities – for example retail and the community centre in Eddington – enable walking as well as cycling for more journeys. This has required high quality infrastructure and priority for active travel compared with other road traffic. The designs for streets in the developments give priority to pedestrians and cyclists, with low speed limits (20 mph/30 kph) and on-street priority where appropriate (for example, the street by the school in Waterbeach is an active travel route, with car access at the rear).

However, our visits showed that promised active travel infrastructure in Cambridge has not always been delivered; for example part of a supposed active travel route in Northstowe has cars parked on it and some of the links between developments such as Waterbeach and the existing networks have been delayed. Audits of some developments have shown that in some cases active travel networks and plans that are overall of high quality are let down by details – poor quality or missing links,

¹² <https://www.coventry.gov.uk/coventry-light-rail/light-rail>

¹³ <https://www.e-rail.co.uk/>; <https://www.e-rail.co.uk/first-of-a-kind-groundbreaking-model-helps-to-fund-the-re-opening-of-uk-rail-line/>

poor or no signing, poor design at key points etc¹⁴. By contrast, Freiburg demonstrated good attention to detail in making high quality active travel networks that function well. Clear design standards, properly implemented, seem to be the key here.

Another key element in the places visited was the level and design of parking. In Freiburg and in many of the UK developments visited, residents still have access to car parking, but it is not provided on the roads immediately outside houses. In some parts of the Freiburg developments parking is provided underground; in other parts, and in some of the Cambridge developments, it is provided nearby, but not next to the houses on the streets. As noted in the main report, in Vauban householders pay an additional fee for a parking space in a nearby multi-storey car park, and Dietenbach is adopting a similar approach.

This is unlike much new UK housing, which provides for a lot of on- and off-street parking – often augmented by a garage – for each house. This contributes to the low density in many developments. In Germany too we noted the existence of federal minimum parking standards, which the mobility plans for the Freiburg developments had to address. However, the approaches in Freiburg and Cambridge offer an alternative to plentiful car parking and the land take from it. It should be noted that another response to the minimum parking standards, seen in Riesenfeld and in other German cities has been the building of underground car parking – a feature also found in the French study tour previously referenced.

We noted that in Freiburg car ownership and use in the new developments is comparatively low and active travel and public transport use is high. In the UK particularly, there is sometimes concern that even if public transport and active travel are provided, people won't use them and will carry on driving. This translates into high levels on on-site car parking and priority on roads and in developments for cars. Freiburg also has a large car club operation, franchised by the council, and this offers another alternative to household car ownership. By contrast, in the UK car clubs have had limited local or central government funding and in fact one of the largest providers, Zipcar, recently closed its UK operations¹⁵.

In fact, the evidence is that where alternatives to car use are provided in new developments, people will use them. A 2019 survey found that in Trumpington Meadows 35% of residents cycle to work or study and 15% take the bus¹⁶. Examples from elsewhere include Kesgrave near Ipswich, where nearly 90% of students walk or cycle to school.

Conclusion

Our visits – both to Freiburg and to Cambridge and Harlow in the UK – show that it is possible to deliver new housing without relying on and providing for high levels of car use. As the New Towns Task Force has said, the new generation of new towns planned by the Government offer an opportunity to “create thriving communities which will have the supporting social and economic infrastructure and public services and amenities they require established from the outset. This includes access to green spaces and reliable transport links, built in line with leading placemaking standards”¹⁷.

As the task force report says, the previous generation of UK New Towns did offer such opportunities. Our visits were designed to help inform the transport aspects of future New Towns and the Government's response to the transport recommendations in the Task Force report (see appendix).

Characteristics of the developments visited included:

- High quality public transport – trams in Freiburg (with bus links), and guided buses and new rail stations in Cambridge; critically in Freiburg the public transport was delivered at the start of the development
- A strong emphasis on active travel, with high quality route networks for cycling and for walking, and also plentiful cycle parking
- Shared transport services –bike share schemes, and car clubs in Freiburg.

Our visits showed that developments with these characteristics have required strong planning and determination – Freiburg had to come up with mobility plans to show their plans did not need to meet national minimum parking standards, and Cambridge has had challenges in funding, governance and national norms to face down in creating high quality developments.

Wider factors have also influenced what has been delivered, land ownership being key. Most of the housing we saw in Cambridge and Harlow has been delivered primarily by private developers, but in some cases with enlightened landlords with a long-term commitment (Cambridge University at Eddington, Soper Estates at Newhall).

An underlying element in the developments visited was their density. We have noted where available the density of the developments visited, in terms of dwellings per hectare. Density matters because if houses and services

¹⁴ For example, a site visit to part of Trumpington by Transport for New Homes highlighted blocked paths and requirement to cross car parks - see <https://www.transportfornewhomes.org.uk/reports/building-car-dependency/>

¹⁵ <https://www.bbc.co.uk/news/articles/cp8zv1gr0z9o>

¹⁶ <https://cambridgeshireinsight.org.uk/wp-content/uploads/2019/07/Southern-Fringe-Survey-Report-FINAL.pdf>

¹⁷ New Towns Task Force report, executive summary para 14

are spread out (as has been a feature of much new UK housing), journeys become longer and are less likely to be made on foot or bike.

The financial powers available to the masterplanner in Freiburg (in this case the council) were central to unlocking integrated transport and density. Through control of the financial design, the value uplift, and transport funding streams, Freiburg council was able to take integrated decisions about scale, capacity and timing. As UK authorities lack these powers, both they and developers are constrained by what is financially viable for them separately, which inevitably produces a less integrated result.

Community led funding and design, especially in Vauban, also helped to create high quality housing with residents in the lead. Greater use of bonds can capture social value and could be applied in new UK housing developments.

We have tried to highlight these and other issues in this report, to show the changes that may be needed to deliver high quality transport services and networks in New Towns and other large new housing developments. Simpler governance, clear planning systems, new funding and financing regimes (including devolved funding for public transport so that it can be provided in the early years), stronger master plans and design codes and opportunities for community and resident involvement along the way will all help deliver the vision in the New Towns Task Force report.

