
TOMORROW'S PROPERTY TODAY
sustainable live/work development in a low carbon economy
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What is live/work?

Live/work is a type of property that is **designed** from the outset for two purposes – living and working.

Most 'live/work' properties – as their users see them – are not formally designated as such by planners. They are properties bought or rented and then converted to incorporate a professionalised workspace (not just a spare room).

These include homes with outbuildings, garden sheds, annexes and barn conversions.

Many residential properties are therefore used in a 'live/work' way, though would not be classed as live/work in the planning system.

It is not easy to pinpoint at what point a property changes from residential (with some homeworking) into live/work. However, we think that the key distinction is: **design or conversion of a building to create a professional workspace that can be used comfortably – and possibly by more than one person – to run a business.**

There are now around two million home-based businesses (on top of those who work from home as employees). It is reasonable to assume that hundreds of thousands of (unofficial) 'live/work' units are already business premises in the UK.

Designated live/work property

The number of formal designated live/work units (properties classified as live/work rather than residential in planning terms) is smaller. We would estimate the total to be in the tens of thousands. However, this number is growing fast and live/work schemes are being given consent across the UK in both urban and rural areas.

When live/work is built on employment land – or other kinds of non-residential land – planners usually **designate** the property formally as 'live/work'.

Designated live/work properties are seen as a **hybrid** of residential and commercial property – *'sui generis'* (of their own type) according to government planning circular 03/2005.

Designated live/work units will often carry conditions of use, which bar a wholly residential use of the whole property.

Where live/work units contain separated workspace areas (eg on a particular floor of a building), these are often given a use allocation such as B1 (office uses).

Understanding live/work

Live/work development is **not the same as home working in a housing development**. Some of the wider issues are the same (eg travel reduction) but it is not helpful to see live/work as a subset of homeworking. It is about enterprise, and many of the issues are those of the small business sector.

Most home workers in the UK (those who work mainly from home) are self-employed **not employees**. The most recent Labour Force Survey figure is 64%. Add on those who are company directors and the number grows again. It may well be around 70% (see page 61).

In the UK live/work property, in particular, is usually occupied by someone running their own business, not by employees working occasionally (or even mainly) from home.

There are precious few examples of designated live/work property (which require work use in perpetuity) being built on **residential land** in the UK. This is because of the extra costs involved and the smaller market (the self-employed) who can buy live/work.

Live/work is therefore – at the current stage of the UK market's development – a more viable option on **low cost land**, especially employment, brownfield and exception sites.

This is not a passing fad. Arguably live/work use of property reflects the **changing patterns** of employment, as the economy moves out of the industrial era (when work and home were necessarily separated) into a wired global knowledge economy.

Some also recognise live/work as being a return to a **traditional form** of property use more prevalent in pre-industrial times. 'Living above the office' as a modern equivalent of living above the workshop/store.

CONTENTS

Aims of this report:

- to raise awareness of what live/work is – who is doing it, why they do it, what the market is and what the future may hold
- to highlight the practical and policy issues that surround the development of live/work
- to explore the contribution that live/work can make to reducing the carbon footprint of economic activity and building sustainable communities
- to recommend ways in which public policy can develop to maximise the benefits and encourage genuine high quality live/work.

Live/work reflects people's changing aspirations to avoid commuting and achieve a better work-life balance. It is also inherently more sustainable. Yet live/work sits awkwardly in the traditional frameworks of planning, employment, taxation and housing policy. This report aims to raise awareness about what live/work really involves and what it can deliver if mainstreamed into thinking about sustainable communities.

This report was written by Live Work Network and represents its views. It was supported by the Royal Town Planning Institute, South West Regional Development Agency, SEEDA, Advantage West Midlands and BT.

1 Why now?

With over 40% of UK businesses now run from home, a major shift is taking place, challenging the traditional separation of workspace and home. But this trend is being led by consumers, not by planners and developers. To many people, making mixed use of single properties is becoming increasingly attractive. How can the property sector modernise its approach and respond effectively to the emerging live/work economy?

The evidence in this report reveals a clear trend. Properties in the UK are increasingly being used as both workspace and home. This has significant implications for the way buildings are designed and developed in the future.

In the UK homeworking is booming. The proportion of the workforce working mainly from home doubled between the last two census years of 1991 and 2001 to around one in ten (well over two million people). And in 2007 a DTI survey revealed 41% of all businesses being run from home (DTI - ASBS 2005).

It is now plausible to suggest that in ten years' time the majority of UK businesses will be based at home. But the property sector has so far done little to respond to this fundamental change. What can be done to fast-track the development of tomorrow's property today? How should the built environment respond to the live/work trend?

This report presents evidence of a series of constraints and challenges to live/work development today. It suggests immediate changes to help mature the live/work market (see section 2 summary and potential solutions listed in detail in section 11). Looking ahead a decade, it describes what the live/work property sector could achieve in the UK, should these actions be followed.

Driving the trend towards the combining of business and home in the UK is the rapid advance of new technology and broadband. It is now relatively easy to run a global business from home with just a computer and phone. But other factors are playing their part too: high house prices (making separate offices harder to afford), a growing resistance to the time-wasting and pressures of commuting and a desire for better work-life balance.

But perhaps the biggest push factor, one that will surely grow in coming years, is global warming. Not only do live/workers not have to commute, unlike occasional home workers, they do not have a separate office to go to at all. This means that only one property, not two, is built in the first place – a significant carbon reduction. And only one is fuelled. We may have little choice but to encourage the live/work approach to property if we are to minimise our carbon footprint while continuing to support enterprise.

Government policy is to encourage sustainable mixed use development. Live/work fits the bill perfectly. It represents mixed use at its purest, residential and workplace use of single properties.

But to date the environmentalist approach to development has tended to focus on how *separate* homes and commercial premises are built – eco-homes and offices. There has been much less attention paid to how individual properties are used. That needs to change. Live/work makes it possible to reduce carbon generation by encouraging smarter use of fewer buildings in the first place.

It also puts the focus more on changing the way we live and interact with each other, rather than relying on the way homes and workplaces are built and the systems within them.

More and more live/work developers are now using the sustainability of combined work and home use as a selling point to attract buyers to the live/work product as a positive lifestyle choice.

But serious obstacles lie in the path of such a coherent approach to development.

Planning is still often based on the principle of zoning employment and residential land apart. This hangover from the industrial revolution – when work was noisy, smelly and dangerous – can leave live/work looking like a square peg in search of a round hole. Even 'mixed use' development generally results in adjacent/separate uses, rather than combined and integrated ones.

At a time when the population is increasing rapidly, and large-scale building programmes are being planned across the south of England, the planning system is struggling to adjust to new trends in the world of work.

Most work these days does not take place on land classed as 'employment land'. The growth in employment is in the service sector, especially personal services, health and education. Meanwhile, globalisation means that the manufacturing sector in the UK is increasingly about high 'value added', project management and sourcing operations rather than directly operating factories and workshops.

The spatial impacts of these changes are various and challenging – and not best served by use class orders. when technology means that many tasks and roles are carried out on a remote or mobile basis. The 'location independence' of an increasing amount of work is the employment backdrop to this report. This report is not the place to deal with these wider issues. Our focus is on one particular aspect – how we can best plan for high quality spaces in which people both live and work? Our proposals, however, may have a wider resonance in rethinking planning policy to develop more integrated and sustainable communities.

It is not only the planning system that is struggling to adjust. Another sector that finds the concept a challenge to its comfort zone is the housebuilding industry. Too many builders prefer to stick with run-of-the-mill property products, and will allow live/work to fail if pressurised to provide it.

Tens of thousands of homes are currently being built that effectively 'design out' the ability to work from home. New build larger homes are built on smaller footprints, with a study or 'office' on an upper floor: an inappropriate workspace for any significant economic activity.

The third obstacle is tax. Live/workers – unlike their home worker counterparts – are penalised for openly using their premises as a workspace. They often pay business rates on part of the property. And VAT and capital gains tax can technically apply (they rarely do to home-based businesses).

All this should be reviewed urgently to avoid perverse disincentives blocking live/work, which has so much to offer the environment and the economy.

This report suggests a major change in how we develop workspace in the UK. It advocates immediate steps to aid the creation of **live/work quarters** in urban neighbourhoods and rural market towns as the first step towards a more widespread mixed use of single properties.

The UK live/work market is at an early stage on the road to this destination. Lessons can be learnt now from more mature markets such as in the USA. But in the UK genuine live/work property will not become mainstream until barriers are removed and risks taken to pilot and demonstrate new approaches.

We believe that the UK property industry should take a proactive approach to advancing tomorrow's property today. From now on, the question today should not be *whether* to enable live/work development, but *how* to do so.

Live/work at Bristol Paintworks

2 Report summary

Trends

The UK live/work market is growing against a backdrop of changing social trends:

- 41% of businesses are now run from home, 55% in rural areas
- Home is the business location of choice of 50% of self-employed people
- Home-based workers make up around 12% of the workforce
- 64% of those who work mainly from home are self-employed
- Attitudes to separating home and work life are changing fast.

Public policy now implicitly supports live/work development:

- A wide range of government initiatives encourage home-based working and greater work-life balance
- Policy encourages more sustainable mixed use communities
- Policy increasingly encourages transport reduction
- Policy supports innovative working practices that reduce carbon.

Experience

Our case studies show:

- Live/work appeals to home-based businesses wishing to expand/professionalise their premises
- Live/work property's uniqueness is a selling point not a burden
- Live/work is no longer a London phenomenon – demand is growing in regional cities, market towns and rural locations
- Live/work works best where resident businesses can collaborate and support each other – clusters not individual/isolated units.

Market

From our consultation and case studies, we have found the following about the state of the UK live/work market:

- Demand for live/work units, evidence suggests, usually comes from those who already run a business from home
- While the market is young in the UK, experience in the USA shows that live/work communities are viable and contribute to community vitality
- UK live/work occupations tend to be mainly in the creative industries and new technologies, though we have also found occupations such as therapists, recruitment consultants, commercial property managers, education service providers, and niche product providers
- There is scope for more innovative approaches to live/work, rather than pigeonholing it as bohemian/artistic/high tech – though these do have niche appeal. One area that needs to be looked at further is retirement live/work
- Growth of the market is limited by the conservatism of some planners and developers
- The market is also limited by perceived financial penalties (see below) and inappropriate planning conditions
- Developers need to become more savvy in marketing live/work for its business advantages (lower costs) and environmental benefits (lower carbon).

Live/worker at Westferry, London

Finance

There are financial impediments to live/work development in the UK:

- VAT applies to the workspace element of live/work accommodation
- Capital gains tax also applies to workspaces
- Home-based businesses in ordinary houses do not pay VAT on workspace nor are they normally liable for capital gains tax. There needs to be a more level playing field by removing these taxes on live/work enterprise
- Mortgage lenders have tended to be cautious about lending for live/work, though recently they have started to ease restrictions
- It remains hard to get mortgages on properties where workspace comprises over 40% (certainly 50% plus) of the accommodation
- Additional costs (eg business rates) hit the affordable end of the market hardest.

Choice: 'ancillary' home-based business or live/work?

- For many people running a business from home the issue is about having sufficient space and a professional environment in which to work. The choice is then between live/work space, and finding a larger home – probably £500,000+ in the south of England
- There is a particular need for live/work space at the cheaper end of the market
- The kind of new build homes that have a small study or 'office' in the attic are more suited to home-based employees than people running a business
- Live/work space has particular advantages when there are clusters and shared facilities.

Planning

As a new form of development, the planning system is struggling to find a way to deal with live/work development:

- Home-based businesses have been developing despite, rather than because of, the planning system. This ought to change
- There is a lack of clear national policy on live/work – though emerging guidance offers promise of a more coherent and flexible approach
- There is support for live/work in numerous regional policies – economic strategies, housing policies and now draft spatial strategies
- At local level – where development control decisions are made on live/work – there are policies defining live/working in divergent ways, and a range of approaches to restricting locations and the nature of the occupancy
- Regional policies promote live/work as appropriate in urban, suburban and rural locations. But local policies tend to pigeonhole live/work as appropriate for regeneration sites
- Live/work is classed as '*sui generis*' – a hybrid of employment and residential uses. In practice, applications often fail as they are seen not to fit with either employment or residential policies
- A new live/work use class would help to define acceptable uses and give planners a tool to promote and enforce genuine live/work
- Developers feel that design is key to ensuring continued work use, rather than regulation
- In the longer term, the planning system needs to move away from rigid use classes, allowing greater integration of living and working in mixed use areas. Potential conflicts should be dealt with through amenity/noise/hazard/nuisance tests rather than distinctions from the industrial age
- Live/work is particularly appropriate for development in the new growth areas and the proposed eco-towns.

Smart and sustainable

Home-based businesses are more sustainable:

- Studies show significant reductions in transport energy among home-based workers as they reduce their commuting
- New studies show that home-based working has a lower carbon footprint than working in a typical office
- There is evidence that home-based workers tend to have 'contracted activity spaces' – ie they do more things nearer to home, and may change their mode of transport while accessing more local services
- Small businesses are looking to conferencing technologies and IT solutions to reduce travel, while being sceptical of public transport solutions
- Home-based businesses with higher use of ICT are likely to have a lower carbon footprint than those who do not
- Having one workplace rather than two will contribute to reduced resource consumption in building and running offices
- A live/work cluster is intrinsically a more sustainable type of community than a business park that is empty for 70% of the year.

Proposals

1 Launch a national programme of exemplar live/work schemes

Each region should support the development of **exemplary live/work clusters**, with the aim of delivering quality live/work schemes that have enduring live/work use

2 Enhance live/work's unique use status

The government should consider a new **use class** for live/work

3 Treat live/work workspace use differently

Rather than specify a use class for the work element of live/work, a level playing field with home working should be considered and a **nuisance/hazard/amenity test** be applied

4 Create live/work quarters, not just single units

Provide hub facilities, ensure stronger involvement of the economic development function in planning decisions and enforcement

5 A more flexible approach to change of use

To respond to the realities of business and personal life, a **more flexible approach to change of use** needs to be considered

6 Create clear local policies on live/work

Local authorities should develop generic live/work policies which support developments that demonstrate most likelihood of creating sustainable live/work clusters. Inflexible and over-prescriptive approaches should be avoided

7 Land use

Live/work can unlock land. Greater efforts should be made to use live/work to bring forward sites where there have been stand-offs between planners wanting employment uses and owners seeking residential land values.

These proposals are covered in more detail in section 12.

Live/work tomorrow – view from the year 2020

Between now and 2020 we can expect to see an erosion of the barriers that separate work from home. People – and public policy – will increasingly try to reduce the need to commute. Planning policy will increasingly promote mixed use to create lively and sustainable communities.

These will be occupied throughout the day – rather than being dormitories for commuters – and will be inclusively designed, fully accessible communities as we live longer and move from a three-generation to a four-generation society.

Properties and public space will be designed to enable work to be carried out flexibly from a wide range of locations. Spaces for living will be **designed to enable** people to work from home, and to run businesses from home. Locally, there will be services to support enterprise and opportunities to interact with other customers, suppliers, colleagues and associates. Digital networks will allow people to access markets beyond their locality while limiting the need for business travel.

A key feature of this new landscape will be live/work – not built in isolated ones and twos, but built in **clusters with hub facilities** that can bring real added value to the wider community, especially the currently atomised community of (non-live/work) home-based workers. The **live/work quarter** will be a commonplace part of the urban fabric – in rural towns as well as city neighbourhoods.

By this time, the planning system will have evolved to cope with and support multiple uses of single premises. There will be a **coherent policy framework** for live/work, and a widespread awareness among both planners and developers of what is needed to build high quality, sustainable live/work units.

Best practice will have developed that incorporates the highest standards for eco-homes and intelligent offices, to add to the inherent sustainability of living and working in one building.

The new growth areas and proposed 'eco-towns' in particular will have taken live/work on board, providing exemplars of good practice, and a range of models of live/work. Live/work will also be found more in rural areas, as the rural economy finds sustainable solutions for diversification, and new ways to anchor skilled workers in local communities.

Factors driving live/work demand

- Advances in information **technology**/broadband
- Appeal of lower **cost** of combined workspace and home
- Appeal of improved **work-life balance**
- Aversion to **commuting** (stressful, costly and time-wasting)
- Concern for the **environment** (live/work lowers carbon footprint)
- **Productivity** is boosted by home working.

Many studies show productivity is significantly higher among home-based workers. For example BT reports increased productivity of between 15% and 31% across all functions (EOC 2007). It is reasonable to assume that live/work businesses will also be more productive.

For more on demand and the market, see sections 5 and 6

3 Live/work's sustainability potential

Live/work property can bring considerable sustainability benefits, ranging from reduced commuting to lower carbon emissions through less construction and fuel waste (one property not two). However, these benefits are most significant where live/work quarters are developed – a new form for the built environment

Most assume that the major sustainability contribution of live/work is its ability to remove the need to commute to work. This is certainly a key factor – and one which we found cited by most live/workers interviewed for this report.

However, there are additional sustainability benefits that live/work can contribute, especially when live/work quarters (clusters of live/work businesses) are created. These include:

- lower carbon emissions in construction (one property/site not two)
- lower fuel emissions (single properties to heat/power not two)
- more vibrant cohesive communities
- economic boost for small business activity
- better use of existing buildings and sites.

Less unnecessary construction

One of live/work's key sustainability benefits is its reduced use of natural resources. One property is constructed/adapted not two (the owner would otherwise require a separate home and workspace).

Aside from the building itself, this can mean that only one piece of land is prepared for construction rather than two – a live/work scheme rather than separate housing scheme and business park (or similar).

In others words there will be often be less **'potential energy'** used in starting up the development of a site at all. For example the following will only be necessary on one piece of land not two:

- remediation of land
- vehicles (lorries/diggers/cranes) used on site
- roads, landscaping works
- workers going there to do the building work
- lighting, security, power on site
- waste generated, collected and removed
- water, power and gas infrastructure installed
- scaffolding etc.

The list goes on. For more on this subject, see section 10 on live/work's carbon footprint.

'Two for one' benefits

Having one property to power and heat and not two can create a significant ongoing reduction in waste of electricity, gas, water. For more on this, see the detailed carbon analysis in section 10.

Social sustainability

Home-based working is promoted by the government as being family-friendly and conducive to work-life balance. Beyond this, there are also potential positive impacts for the wider community.

These can include:

- live/work businesses providing local work opportunities
- stimulating the local 'daytime' economy (year-round business generated locally, not commuters running businesses elsewhere)
- higher demand for local services, with live/workers 'repatriating' their spending into the area
- safer communities with more 'social oversight' of neighbouring homes and public spaces
- active citizens – live/workers spending more time on local activities because they don't commute.

Live/work schemes are often built on brownfield land. Many make imaginative use of derelict buildings. Both of these factors can improve the look and feel of the local area and add value to its appeal as a place to live, work, shop or visit.

They can also often act as catalysts for area regeneration, breathing economic vitality into neglected neighbourhoods, acting as magnets for creative businesses and creating new roles for market towns and large villages.

These benefits are likely to be most significant where a meaningful live/work cluster is created, ideally with shared facilities in some form of hub that can also be accessed by others in the area.

Low carbon businesses

Furthermore, live/work units are ideal for businesses in sectors with low environmental impact. Many are reliant on new technology to conduct their business and are increasingly likely to use applications such as webconferencing to avoid unnecessary trips or to conduct business with far off clients in the UK or across the world.

Live/work or home offices have been assessed favourably in comparison with traditional offices, which are usually unoccupied at night. Studies on the environmental impact of home offices compared to regular offices show:

- a home office produces 865kg of CO_2 per year (Banister 2007)
- a typical office produces 2-3 tonnes CO_2 per employee (Carbon Trust; Goodall 2007)
- car-based commuting produces 5.5 kg CO_2 per day (Banister 2007) – around a tonne per year for an average commuter.

Smart growth

There is currently a great deal of interest in 'smart economic growth'. Innovative live/work schemes can create smart added value, extending beyond the live/work scheme itself and providing both social and economic development benefits to the community as a whole.

Live/work quarters that incorporate hub facilities in particular can:

- provide new facilities for existing home-based workers in the area and voluntary associations
- become a venue for business support and related agencies enabling them to connect with previously hard-to-reach home-based businesses, without going to each one separately
- provide scope in larger schemes for including affordable live/work units helping start-ups to incubate their businesses
- offer units to self-employed graduates from nearby colleges to retain their skills in the area and to foster 'real world' links between education and business.

Less commuting

The other key sustainability benefit of live/work is its ability to reduce car use. The average UK worker commutes 2,906 miles per year and travels 1,622 miles on business by car. Reducing these figures are key to meeting the government's climate change targets. Travel makes up a quarter of the UK greenhouse gas emissions fuelling global warming. By working 'down the wire, rather than down the road', live/workers can help meet these targets.

According to the RAC Foundation, the average daily commute time is 45 minutes (yet many typically experience double this or more). Those who work in live/work units can therefore save the equivalent of up to one working day per week by avoiding commuting. This is extremely valuable time for live/work businesses, enabling them not only to suffer less stress and save money but to be more productive. This makes their business more sustainable as well as helping the environment.

From the transport planners' point of view, it is not only the mileage but the number of trips eliminated that is important – and the time of day they occur. The reduction of regular commuting trips during the morning and evening peaks helps take the pressure off the roads when they are most congested.

Hubs and sustainability

Hub facilities at live/work schemes can also provide 'added smart value'. Their facilities can be used not only by residents on the site, but by other local home-based businesses (and home-based employees).

This can reduce the latter group's need to travel and purchase equipment. It can also enhance their viability and competitiveness as businesses by enabling them to collaborate more effectively.

By 'isolation busting', live/work schemes and hubs can provide a very effective support infrastructure making it easier for home-based businesses in the area to sustain and motivate what they do (eg Havelock Walk open studio – see section 4).

Sustainable neighbourhoods

Live/work schemes can create a 'daytime economy' – people working locally rather than commuting (or second homes in rural areas). This can boost spending on local services, for example post office facilities, pubs and restaurants etc.

Live/work can also increase security, with more properties occupied during the day reducing fear of crime in a neighbourhood.

Whether, and how much, all the benefits above are achieved depends on how live/work is implemented and the extent to which live/work policy and practice is dove-tailed with other good practice, such as eco-homes and infrastructure that can minimise the need to travel.

Potential sustainability benefits of live/work quarters

- reduced reliance on **commuting**
- **sustainable use of property** – one building not two, less land and materials used, lower fuel emissions and energy use
- retention of **wealth creators** and spending power in the area
- maintained and enhanced **sustainability** of other local businesses servicing the live/workers (eg post offices)
- contribution to the **skills/knowledge base** of the local economy
- enhanced range and quality of employment **opportunities** locally
- lower costs for those struggling to **afford** separate premises – workspace and home
- suitable premises for **high value micro-businesses**, particularly in the creative, technology and knowledge sectors
- suitable premises for **workshop/studio** type businesses that require more space than normal residential property provides – and with different proportions
- critical mass to bring more powerful **broadband** connections and other business benefits to the area
- improved neighbourhood **security** through continual occupation
- **hub facilities and networks** that can serve other home workers in the area, making their use of property more sustainable.

4 Live/workers in their premises

INTERVIEWS WITH LIVE/WORKERS IN 12 SCHEMES AROUND THE UK

Planning for and building live/work requires understanding of what live/workers do, and what they want. In this section we present a series of case studies of live/work developments and the people who live there. Some interviews with developers are also included in section 9.

The case studies show a range of types of live/work developments, and a variety of live/work occupations. Many of these schemes have been created against the odds, in the face of resistance from authorities and institutions that initially found live/work a challenge to established ways to develop property. The evidence of these interviews underpins the following two sections, which analyse the live/work market and how it might be enabled to grow effectively.

CONTENTS

1 Queen Street, Burslem

Market town affordable live/work

Queen Street in Burslem is a good example of a regeneration-led live/work scheme creating a new economic identity in a town centre. Midlands Heart housing association has renovated a disused terrace and created six live/work units above three retail/workshop units, all primarily reserved for creative businesses.

The aim is to establish a new creative quarter in the Potteries town following the loss of its famous name factories, Royal Doulton and Wedgwood.

Each unit is designed for flexible work use and is available for rent to entrepreneurs who would find it hard to afford a separate work space and home. Rents are around £270 per month. A second phase of another six live/work units and two retail/workshop units further along the terrace is also under way. There is already a waiting list for phase two.

www.burslemlivework.org.uk

The Queen Street scheme is next to Burslem School of Art, where a Business Innovation Centre (the BIC) satellite office helps support the live/work tenants with business plans, free business advice and networking. The location helps to ensure a greater degree of sustainability by helping the live/workers to associate with each other and with like minded entrepreneurs using the art school.

Similar commercial tenancies are used for both the live/work properties and the retail/workshop units. Of the original nine lettings, seven were start up businesses, two of whom came direct from the local university.

Tenants include software solutions experts, creative designers, ceramic designers and a website magazine publisher for local nightlife.

A second phase now under way will extend the live/work scheme to include the derelict properties next door

Networking

The residents are already extremely well connected, sharing ideas, knowledge and skills.

Animator and photographer Karen Sayle has run events and produced photography for Jason Conway. He in turn colour corrects Karen's photographs.

Together they have designed the ID and stationery for Karen's business and worked on contracts for local companies, including Poole Pottery. Poole Pottery's website was designed by Queen Street-based Jellifish Internet Services with Karen and Jason providing photos and design.

David Lyth runs Go Stoke, a web-based business to business directory. Camilla Prada gets IT support for her Mac from Jason who is also a Mac user, and has created a holding page website with his help.

Every Thursday night the live/workers try to have a social evening, anything from going to the pub to a group meal in one of their units, playing poker or more recently, says Jason, 'watching a magician!'.

The first phase live/work units are above creative retail spaces on the ground floor

Jason Conway runs a design studio, IdeoSync. Although he works alone, his business is expanding with other freelancers called on to help ad hoc. 'I was living in a flat with friends who then got married, so I had to return to live with my parents in Newcastle-under-Lyme,' he says. 'I used to commute two and a half miles to my office space which was sub-renting and sharing with four other businesses. It wasn't an ideal set-up from a work or home point of view.'

He heard about the live/work units through contacts at the art school in September 2005. 'They sounded ideal. When I got the email I called within one minute to inquire. I moved in the following spring.'

He believes the scheme has helped professionalise his business: 'Before, I was very much a part-time freelancer doing bits and bobs of design for people and gradually building up my clients. I wasn't really sure how I wanted to do this but having a live/work property gave me a sense of becoming a real business. I am still a sole trader but that may change.'

Being next to the Business Innovation Centre is crucial for him. 'Not only do they offer IT support and help with business plans, they also help us access grants. I was able to get my Mac Pro paid for with a special grant, which was a huge help to my business productivity.'

He also values the time he saves. 'Here I get convenience, flexibility, privacy and independence. I don't have to commute at all so can spend many more hours a week working or relaxing. And I do appreciate being able to access work at a time of my choosing.

'Live/work in general is a brilliant idea for any start-up,' he says. 'It saves money and time, both essential when you're trying to concentrate on building your business up, and I particularly appreciate the friendly atmosphere here and the way we help one another.'

He does have some concerns about the scheme. 'Our tenancies are limited to five years. We need some options when this ends, the ability to buy afterwards, for example. I think it's essential that the project keeps creative businesses local. That way the regeneration of Burslem can keep growing. We may expand and employ local people, which the area needs. It would be a shame if some of us moved away after renting.'

Like others at the site he would have liked some kind of hub facility. 'Although the School of Art is a good resource for us, there is no single space we can all claim as our own back-up office. For example if I want to hold a meeting with clients or demonstrate new designs, there is no obvious place to do this. Other live/work projects have such hubs and they help to generate interest within the community and showcase local talent.'

www.ideo-sync.co.uk

Jason Conway helps organise networking meetings for the live/workers

Camila Prada is co-director of Vinila Ltd, designers and manufacturers of unique china figures. She came to the scheme after graduating with an MA in ceramic design from Staffordshire University.

'I was considering my options. I saw a poster about this scheme at Staffordshire University and it immediately appealed to me. I am Canadian and previously had a live/work unit in Toronto so I knew how good they could be.

'In Canada live/work schemes I know are not organised like this or subsidised. Here I can get IT support next door at the Business Innovation Centre, for example, help with my tax, etc. That's the kind of thing I didn't come across in Canada.'

The biggest appeal of the unit is how professional it has made her space, she says. 'It's a real work space not just a spare room in a residential property. That matters to me and to people working with me. I can bring them here and it does look like a work space.'

She also finds it convenient as a non-driver. 'It was this or nothing. Having a live/work space was a deciding factor in me staying in the area and not returning to Canada.'

Does she feel she can adequately separate her work and home life? 'The unit is open plan so physically it isn't separated. But mentally I think I do handle it well. I also like the fact that I don't feel isolated here because there are other live/workers around day and night.'

www.vinila.co.uk

Camilla Prada is a recent graduate of Staffordshire University

David Lyth is a co-director of Possoft Ltd, a specialist software provider of touch screen EPOS retail till systems. His business partner continues to work from home.

'This place had everything I needed and it was such a good concept it appealed to me straight away. At the time I was living up the street home working. I saw an advert in the local paper and knew this would be right for me.'

What was the main appeal? 'Well it's certainly got more kudos than running your business from a bedsit! As a company we couldn't really stretch to a proper retail space or office, so we saw live/work as a staging post – one better than homeworking.

The space here is comfortable and professional, he finds. 'I have an accounts area at one end near the TV, so I don't leave any of my accounts paperwork by the window or the front door.'

Mostly he appreciates the business networking. 'Burslem is a very creative town with a growing number of creative businesses moving here and it's good to have neighbours doing fairly similar things, willing to help. We can get grants for things like broadband from the BIC and there are organisations like BizFizz to encourage us to network with one another. But with live/work neighbours I know there are other people facing a similar approach to their work, right next door to me, day and night.'

www.possoft.co.uk

Software creator David Lyth: ' A live/work space gives you independence. I can literally fall out of bed into work if I want to at any time. I always put my shoes on to know I am really working!'

The scheme is next to Burslem School of Art

2 Harewood End Farm, Herefordshire

Rural rented live/work workshops

Perhaps one of the greatest difficulties in rural areas is identifying properties being used as live/work. Even where planners have given specific consent for dual use, few local authorities keep records allowing them to identify, or support, businesses in this type of property. And for the occupants, self-identification runs the risk of incurring unwelcome additional taxation.

Harewood End is a Duchy of Cornwall-owned conversion of farm buildings in a rural area near Ross-on-Wye in Herefordshire. Four rented live/work spaces of various sizes sit alongside commercial units and a residential-looking house that is also being used as live/work.

Because the units are rented, the workspace proportion is higher than that usually found in sold units, as residential mortgages are hard to secure if workspace is over 40% of the total floorspace. Each unit has a designated living and working area, which from the outside are visually distinct.

The tenancies are shorthold, with the workspace areas allocated as B1 and subject to business rates, though offset by small business discounts.

Tamer Shafik and Anna Clare are co-directors of Symworks, a software company that has been based at Harewood End for six months. The company is branching out rapidly into e-commerce, selling niche market gifts and gadgets online, through the websites Shinyshack and 101gear.

Shinyshack was started in 2006 with around 100 products ranging from executive toys to cheap model aeroplanes that can be flown outdoors. It now has over 280 products. The couple also run a specialist bathroom/kitchen scales website with over 70 products, the Scale Company.

The live/workers here help their neighbouring businesses in various ways and find they are less isolated by being near others working from home. One runs an archaeological geophysics business, another runs management development courses. And there is a chip and dent car repairer. Sometimes they have social evenings, in the courtyard if the weather's good.

Symworks has a workspace of around 500 ft^2 at Harewood End. In time they believe they will need to move to premises with (or near to facilities with) more storage space. The live/work space here has helped the company grow rapidly.

www.shinyshack.com
www.thescalecompany.co.uk

One of Shinyshack's gadgets...

Symworks' live/work unit. The workspace is on the right

3 Blenheim Gardens, Lambeth

Converted urban warehouse for creative businesses

A short walk from Lambeth Town Hall brings you to Blenheim Gardens, a gated terrace of eight live/work units in a neighbourhood that is on one side residential and on the other industrial, with to the rear a small park.

The Victorian industrial building's conversion to shell spaces was conceived by specialist live/work developers Spaceworks, who obtained consent on the scheme. It was then developed by Peter Rennie in 2003. The units were sold as eight two-storey residential spaces with roof terrace above a single, double height studio area.

Rennie describes his involvement as more by accident than design. 'I was involved in a scheme in Clerkenwell when the consultant I was working with found this scheme.'

There was no space on the site to add any communal facilities and Rennie says negotiations with the council over a conversion to live/work of a building on an adjacent site, incorporating a hub, later stalled. The building is now being converted by another developer into 22 one and two bedroom flats, with commercial units for rent at ground level.

Four of the units are currently used for dual work and residential purposes. Anecdotal evidence suggests that allegedly punitive efforts to enforce work use may have most alienated those genuinely using the units for the purpose intended.

Gareth Devonald-Smith creates 'functional sculpture' – everyday household furnishings but with a unique aesthetic twist. 'I've only been doing it seriously since I've been here – my work's become much more concentrated,' says Gareth.

A ground floor door leads to Gareth's studio, a large room with ample space for welding. 'I use Stone Age technology – fairly basic jewellery techniques like silver soldering. Anything bigger I usually source out to a place in Kent.'

A separate staircase leads upstairs to his two-storey 'living' zone, including a broad decked balcony with potted birch trees. Gareth's west-facing unit has the best light but it also gets a fair coating of dust kicked up by heavy machinery at a Thames Water site next door.

He bought the unit as a shell. 'I don't think there was a hard and fast split between work and live,' he says. 'It was just a huge open space. The electrics, water and gas supplies were in but I couldn't even add the powerpoints until I'd established where I wanted the walls.'

Being able to pick and choose his working hours is, he says, the ultimate prize. 'If you work in an office you have a structure so you have to prioritise and not let run of the mill tasks take over. But it's wonderful to just go downstairs to work. If you have an idea for a drawing but then leave it until the morning very often you lose the impetus so in a creative sense that's invaluable.'

Replacing his daily commute with a swift trip down the staircase, says Gareth, saves him the equivalent of one day a week. 'When I first came back to London I was spending about two hours a day travelling to my studio in Deptford. The commute was a right pain. I do use my car but in the main only if I have to pick up materials or take a piece of work to a client. Otherwise I cycle or take the tube.'

'If I hadn't found this place I'd probably have bought a flat and rented a studio. I was renting one with half this floor space before and it cost my entire current mortgage'

Claus von Bohlen is a film editor and writer who recently returned from a short stint working in the film industry in Los Angeles. He bought his unit here five years ago. 'I was looking for somewhere I would be happy spending the day. I was lucky here to find a place that was spacious and light on the Cityscope website but I didn't know what live/work was,' he says.

Unlike his neighbours, Claus has positioned his work station on the same floor as his living/dining and kitchen area. The unit is starkly open-plan with a striking spiral fibreglass staircase extending from the ground floor to his third storey bedroom.

Downstairs in the designated work area Claus has created a zone he admits is best suited for parties. In one corner a white 'cube' houses a laundry and cloakroom, with a discreet staircase leading to a half-walled guest bedroom overhead.

On the middle floor is his workstation, tucked into the curve of the staircase. Most of Claus' work is done here, with the help of an Apple Mac and high speed broadband.

He has also just finished his writing his first novel here, though says he frequently decamped with his laptop to the kitchen table or an armchair by the window. Since accepted for publication by Old Street Publishing, his novel, *Who is Charlie Conti?,* gets its public launch in summer 2008.

'Even if I have a particularly unproductive morning I can make up for it by working after supper without feeling I don't have a life. I have very fond memories of working out on the roof terrace at 2am last summer when it was too hot to work during the day,' he says. 'The main advantage is you save so much time not travelling – I'm saving one and a half hours a day which is almost one working day a week.'

www.vonb.co.uk

Claus von Bohlen uses his live/work unit for film editing and writing. His first novel, written here, has just been accepted for publication

Steve Double is a photographer. His unit is identical in size to Claus's, but with the skilled assistance of an architect friend Steve has created a surprisingly roomy three-bedroom house over a studio, complete with mezzanine floor.

The ground floor of Steve's studio has space designated for shoots, a dark room, dressing/make-up room and, on the mezzanine floor, his office. There is ample storage space and shelves – and even a guest bed. The ceiling height of the ground floor studio compensates for limited floor space, he says. 'It's not enormous – just under 1,000ft^2 – but what matters is height. I have been able to photograph groups of 10 in here.'

When not behind a camera, Steve now spends much of his working day in front of his Apple Macs. 'I've got high-speed wireless broadband and I use an ftp site to upload files for magazines. I'm only ever shooting 20% of the time – the rest is admin and processing.'

His clients these days are mainly in print media. 'I used to do a lot of work for the *NME*, now it's *Uncut*, *Plan B*, *Icon*, the *Guardian Weekend* magazine, the *Sunday Herald* and book jackets.' His work is largely solo, but on shoots he has assistants come in to help.

Upstairs the residential area was until a recent separation the family home. He and his wife now share custody of their two young children. Their bedrooms are on the middle floor, overlooking the park. 'Working here is invaluable with the kids,' says Steve. 'I just drop them at school around the corner and go. If I was travelling 45 minutes either way to a studio, I couldn't do that.

'I'd wanted a live/work space for years since doing six months in Baltimore back in 1983 when I was at college – loads of people there had live/work spaces. The original plan was to find somewhere we could do up ourselves but finding a 2000ft^2 warehouse was very difficult. One day I cycled round the corner and found this. It was still a building site.' A security guard gave Steve the developer's number. He had secured the first sale.

'The problem with buying a commercial property was having to put up 50% of the cost upfront,' he recalls. 'We were looking at a huge deposit. Luckily our architect was able to put us in touch with St James Place, Halifax's private client bank. Most lenders don't have a clue about live/work and most won't lend until you have the kitchen, bathroom and bedroom in place. St James were fine.'

More so than either Claus or Gareth, Steve says he had 'crazy problems' with the council's building control division. 'For example, this guy from the council was walking round the studio space downstairs and suddenly says "this could be a garage – what are you going to do if oil spills from your vehicle?".'

If getting the unit right was a struggle, he believes the end product was worth it. 'The light and proportions make this place work. I couldn't do my job in a regular Victorian house because the dimensions are all wrong.'

His running costs, he adds, are substantially lower. 'I rented studio space for 18 years before moving here and this is definitely cheaper, despite its size.'

He feels the developer did a good job at Blenheim Gardens. 'I've no plans to move. It's pretty perfect really.'

www.double-whammy.com

Photographer Steve Double's studio workspace: 'I've had that Paul Gascoigne in here. And Nigel Havers... and Sparks!'

4 Havelock Walk, Lewisham

Converted industrial warehouses now a creative live/work community

Havelock Walk, home to one of the best established live/work artist communities in the UK, is in the Forest Hill area of south London. It is now 15 years since the first two warehouses were bought by founder and resident Jeff Lowe for conversion to live/work. Jeff's plans first met a blunt refusal from the council's planners. Undeterred, he ploughed ahead and before long officials came calling again. But this time, he recalls, 'they'd been to see it and changed their minds'.

Jeff's deft hand as a developer effectively opened the door for live/work both here and elsewhere in the borough. As more of Havelock Walk's warehouses came on the market, he either bought them or encouraged other artists to do so. Most were sold on the understanding consent would be forthcoming for conversion to live/work.

The road is now transformed from car workshops and lock-ups to a charming if still utilitarian terrace with conservation status, recently described by Lewisham's planning chief as a 'catalyst for regeneration'.

The residents include sculptors, including Jeff Lowe, painters, photographers, ceramicists, an architect, a graphic designer, a fashion designer, film maker, an Indian dance teacher and even Dizzie Rascal's manager, who runs a recording studio on his ground floor. 'We've tried to create something interesting here,' says Jeff Lowe. 'We have a mix of buildings from about 1850-60, first built as part of a canal project that failed, and a couple that are new.' Thirteen of the buildings are used for live/work, most of them owner-occupied but with two currently let to emerging artists at below market rents.

The work portion of most of the units is generous though generally restricted to the ground floor. The living quarters are on the upper levels with most but not all accessed through the work space. Work/live ratios vary, with the residential element varying from 30 to 70%. 'No 7 was built when the ratio rules were very strict,' notes Jeff, 'so it's only 30-40% live.'

Havelock Walk is not entirely given over to live/work but just one unit has reverted to residential use after being sold to a developer three years ago. Another warehouse remains in use as a builder's office and store and a third is being converted into a theatre workshop. Though Havelock Walk has little by way of shared facilities, twice a year the live/workers hold Open Studios to promote their work. The event has the dual benefit, they say, of motivating them professionally. They also have a thriving social network and have formed an association, though mainly to preserve Havelock Walk's 'integrity and character'. **www.havelockwalk.com**

Havelock Walk's live/work community supports a suprisingly diverse range of designs and layouts

Jeff Lowe is an internationally acclaimed sculptor but also one of Lewisham's most prolific live/work developers. His association with Havelock Walk dates back to 1992 when he bought his first two warehouses, one for use as a studio. The other he converted into his main residence, with an office/studio below, before extending into the warehouse next door.

Three years ago he moved to No 6, a former Pentecostal church at the entrance to Havelock Walk, built to replace a building destroyed by a World War II bomb. As with his earlier properties Jeff has transformed both the interiors and exterior, making clever use of a quirky floor plan and architectural salvage.

Jeff Lowe: 'No 6 was a horrible building. My purpose was to make it interesting'

An art deco shop front, post office sorting desk, work surfaces made from church pews and floorboards from Lords cricket ground make up some of the salvaged materials used in Jeff's kitchen/diner

By adding a third storey, he has created on the upper floors a home with four bedrooms, each with its own bathroom. The top floor has a large kitchen/diner, expansive living room and roof terrace. On the ground floor is Jeff's office, library and a white-tiled gallery that provides a blank canvas for his imposing metal and resin sculptures.

The domestic and work parts of the building are separated but Jeff does occasionally work upstairs. Switching from leisure to labour is not a problem, he says. 'You have to be able to cut yourself off. Even when I was at art school I had an early morning cleaning job. You get used to it. You think "now I'm in this mode".'

Jeff employs an assistant and part-time administrator. His assistant, also a sculptor, is currently resident caretaker at Glynde House – a live/work development Jeff is finishing in Brockley – while painter Jeni Johnson doubles up as Jeff's administrator, working two days a week from his office.

www.jeff-lowe.com

Jeff Lowe uses his ground floor gallery to exhibit his sculptures and works by other live/workers at Havelock Walk and elsewhere in Lewisham

Jeni Johnson, a painter now renting Jeff's first live/work unit, was packing ready to move home with her partner and baby son to one of Jeff's new live/work units at Glynde House, Brockley. Jeni is one of Havelock Walk's younger intake, having moved there on returning from Cyprus where she completed her post-graduate degree. 'I saw Jeff's ad in the *Artist's Newsletter* and moved in two weeks later.'

The concept of live/work wasn't new to Jeni. 'I'd heard a little about it but a lot are just new developments. Jeff's properties are beautiful and it's a lot more affordable as an artist living and working in the same place: all the costs are together in your rent. It costs just £1,200, excluding the electricity.'

It has been a smart move for Jeni professionally. 'It's really good to have other artists around you otherwise it could be quite lonely. There's the Open Studios, we all support each other, and Jeff's been brilliant with his advice.' On his recommendation, Jeni has been producing small scale works but this year plans to move onto larger canvases.

She enjoys the flexibility of live/work, 'I work whenever I get a spare chance. I wouldn't want to go back to any other way. There's also a lot of admin work – sending off applications and applying for competitions and so on – so I often do that upstairs.'

Jeni's partner works for an accountancy firm and will qualify professionally this year. 'He's a writer and will probably start working freelance,' she says. That could also mean more help with the child care, useful with a second child on the way. 'I've got a 15 month old boy so have a childminder one to three days a week.'

Having a toddler in her studio has, she said, necessitated small adaptations. 'Since he learnt to pick things up he's been putting everything in his mouth. It didn't affect my work but I've had to change the way I work and I couldn't use turps, so I changed some materials.'

Eventually she concedes the need for more family space will mean having to move on again. 'We will have to move eventually because of the babies and we're hoping to buy somewhere but it would have to be live/work. I'd never go back to a conventional separate home and studio – it would be so boring!'

www.jenijohnson.com

Jeni Johnson: 'We've just had Open Studios so the studio is a lot tidier than usual. I'm messy when I work with oils so the floor will probably soon look quite different!'

Wayne Parker and Lenka Rayn, both photographers, are the creative force behind Havelock Walk's most recent live/work conversion. Three years ago they bought No 15, at the far end of Havelock Walk, with planning consent already granted.

'It took six months to make it habitable and there's still things to be done,' says Wayne. 'But we have our own electricity substation!' says Lenka. 'We're planning to have a suspended terrace over it with a spiral staircase down to the yard,' adds Wayne. Their unit is the only one to have a 'front yard', created by the steel panels that protect the electricity substation.

One of the factors that drew them to No 15, they say, was the chance to shape their home and studio from a rough shell. 'We looked at a live/work unit in Docklands,' says Wayne, 'but a lot of London live/works are done to a very high specification. They're very trendy and expensive and it's quite off-putting.'

Indoors the unit is deceptively extensive with barely noticeable doors on both floors leading to en suite bedrooms, one occupied by Wayne's brother and his girlfriend.

Lenka and Wayne use as their studio the ground floor. 'It's a multifunctional space,' says Lenka. 'About 80% of our work is done on computer before we make prints and the rest is done on location.' Unusually in a digital age, a good part of this area is given over to storing negatives. 'Everything we do is shot on film,' says Lenka. 'For me the quality is incomparable.'

Though both have unique photographic styles, their work is very much a team effort. 'We've been married nine and half years and have always worked together well,' says Lenka. 'I do more portraits, social documentaries, and Wayne does more industrial landscapes. But even if a job is Wayne's personal project I would go with him [on location].'

Both are confessed workaholics. 'Even when we went on holiday to France a couple of years ago, we had just two bicycles and a tent,' says Lenka, 'but we still took two cameras each.'

With live/work, she adds, they can easily fit their work schedules around other commitments. 'It's very convenient for us as we work at odd hours so to have to travel another couple of hours would be horrid,' says Wayne. 'And in winter we can walk the dog in the park while it's still light – we can switch our hours round,' adds Lenka.

The set up at Havelock Walk, adds Wayne, also offers a professional bonus: 'The Open Studios make it a community and it's a serious incentive to work.'

www.lenkaraynh.com

www.waynefoto.com

'We lived in Muswell Hill for eight years and got to know one neighbour. Here we know everyone'

Elizabeth Chisholm, a Toronto born and raised painter, has since 2000 lived in a two-storey unit with her two daughters, now aged 14 and 17. Her daughters occupy the two bedrooms on the residential floor, and Elizabeth has moved her 'bedroom' to a curtained-off section of her ground-floor studio.

The studio is dominated by Elizabeth's vividly coloured canvases – recent works and those in progress. A spiral staircase connects the studio with the main living space on the first floor and at roof level a conservatory and decked terrace. It's a far cry from the Uxbridge suburb where she lived previously, where even painting the front door purple raised eyebrows'.

'Working in a conventional house it's hard for other people to take your work seriously and I was pretty isolated,' she says. 'That's part and parcel of being an artist. But being in the same street as a community of artists raises the bar professionally and by association lends a legitimacy to what you're doing.'

Live/work, she says, has made an enormous difference to her 'socially and professionally'. 'I've had such huge benefits from the live/work lifestyle. I'm a single mum and this has made it possible for me to work. I have flexibility – when one daughter comes home at 3.30pm and wants to talk about her day I can get her a snack and settle her down to do her homework, then the other comes home at 5.30pm.'

Parenthood she credits with helping structure her working day. 'You train yourself. If you have children you can't afford to make yourself exhausted. I make myself go for a walk each day just to get out of the studio.'

'When I first moved here I worried that I was taking my daughters into an adult world but everyone here is open to having children around.' Indeed her older daughter has just been offered a place at Oxford, conditional on her gaining three A-grade A-levels.

And for the girls there is added kudos. 'They moved here young enough to not see anything unusual in it,' says Elizabeth, 'until their school friends came round and said, "Wow, you live in an art house!".'

Painter Elizabeth Chisholm in her ground-floor studio

5 Victoria Works, Lewisham

Industrial buildings sold as unrenovated shells for conversion to live/work

Victoria Works, it could be argued, is a second Havelock Walk in the making. Right now, it is live/work on a much more modest scale. Most of this Victorian mews is still in use as light industrial premises, with just two live/work units at one end.

A few minutes' by foot from Havelock Walk, Victoria Works is likewise located in Forest Hill, just off London's South Circular Road, and the buildings are of a similar style – sturdy brick-built, two-storey industrial. The two units are at the far end of the mews, past the car mechanic's garage and the joiner's workshop.

Both were bought five years ago by live/work developer Jeff Lowe and sold as unrenovated shells – one to an architect, the other to photographer Paul Murphy and his artist/writer partner Helen Sykes.

Couple Paul Murphy and Helen Sykes run their businesses on separate floors of this live/work unit. 'I've been so much more productive since coming here,' says Paul

Paul Murphy and Helen Sykes' search for a live/work unit had first taken them to Havelock Walk. But developer Jeff Lowe had a better suggestion. 'The unit up for sale here was only 1,000 ft^2,' says Jeff. Instead he sent Paul off to check out one of his more recent purchases: a Victorian warehouse called Victoria Works.

'It was obvious the buildings hadn't been occupied for a long time and were starting to decay,' recalls Paul. 'The rear garden had a World War II subterranean bomb shelter and it was overgrown with huge sycamore trees and a bed of leaves nearly four foot deep.'

The prospect of bringing the building back to life prompted a genuine sense of excitement. For Paul in particular the recent discovery of the building's heritage was an added bonus. 'From 1874 to 1927 it was part of the Forest Hill headquarters for A&G Taylor, described as the world's largest photographic company and photographers to the Queen.'

And after five years of renovation works the property is looking stunning. 'It has haemorrhaged money mainly because it's so old, very big and required extensive work,' says Paul. 'But we have the space we'd always yearned for. Even though we both work from home we can close our office doors and feel like we are leaving work behind when we venture off to cook or watch television.'

Having previously tried and failed to work productively in a three-bedroom house, they were able to apply the lessons learnt to Victoria Works. 'Everything has its place,' says Paul. 'We were able to design the storage and working space based on what hadn't worked in our cramped house in Blackheath.'

Paul's offices are downstairs, immediately to the right by the front door. Directly ahead is the kitchen and an open plan dining/living room area with large windows facing their private garden, with the bunker still intact. Upstairs are two bedrooms with en suite bathrooms. Overlooking the garden is a large room they plan to use as a print room, gallery and lounge. Helen's office opens onto the gallery, giving her too a view over the garden.

Helen and Paul have chosen starkly different locations for their work. Paul sits with his back to north-facing windows. This, he says, directs his focus onto a colour-corrected computer screen which benefits from semi-darkness.

The main light comes from a row of Apple Macs in this and his adjoining office. Shots taken on location are scanned then manipulated as digital files on his Macs. Most of his clients are international advertising companies and the files are sent via high speed broadband.

Helen's office is a cosier construction, with a south-facing window that gets the sun all day. 'I kept thinking 'why doesn't Paul want to be upstairs?'. It's the best place,' says Helen. 'There's no

Paul Murphy and his partner run two businesses from separate parts of their live/work unit

way I'd want to be down there – I want a view.' The cat concurs. 'Having your pets around you is one of the perks of live/work,' says Helen.

The room is styled to create an atmosphere conducive to writing. 'I need all my stuff around me, reference materials and so on, so I tend to squirrel things away in here,' says Helen. For art working, she relocates to the gallery. 'It's also got a good light for showing your work,' she adds.

'I've been so much more productive since coming here,' says Paul. 'I spent nine years working in a studio. They're expensive and my concentration was always being broken as I'd have to stop at a 'decent' time to commute home. I now probably have an extra three or four hours a day I can use for my work and I no longer have to worry about expensive train fares.'

Perhaps more so than Paul, who frequently works on location, Helen says she would welcome a networking facility – to socialise or brainstorm. 'If the government encouraged smaller live/work units there might be a place for meeting or some way to share ideas – as you can in an office.'

But she does not miss commuting. 'When I was travelling into town everyday we didn't know anyone on our street. Here we're on a lane with lots of people doing different things – a mechanic, a joiner, an architect. It's a much better experience from a work perspective, not as disassociated as working in a larger building.'

She also points out the environmental and economic benefits. 'You're not clogging up public transport or creating fumes on the road. It's recreating the village community that disappeared overtime as everyone began commuting to work in the city. We go to local cafés and shops to have lunch and buy things here rather than in the city or in huge shopping centres.'

'Live work has great advantages over commuting so long as you are able to maintain a healthy social and active lifestyle away from where you live,' concludes Paul. 'We would highly recommend it to anyone who thinks they can do that.'

paulmurphy.com helensykes.com

6 Bristol Paintworks

Mixed use scheme with live/work alongside B1 business units, with a new live/work phase in the pipeline

Bristol Paintworks is a large 10 acre creative quarter designed and built by Verve Properties as a mixed use scheme on the site of an old industrial estate overlooking the River Avon on Bath Road in Bristol. The site opened in 2004 and is still expanding with a new live/work quarter planned for the next phase.

The Paintworks supports hundreds of jobs, with a range of businesses from large media companies like E3 to a dentist (appropriately called The Toothworks). 'We deliberately chose a mix to emphasise creative business,' says developer Ashley Nicholson. 'We would not sell to investors or to lawyers, accountants and financial advisers etc. Now the identity of the site is established, however, we are loosening up the mix.'

Though predominantly offices and storage spaces, the site includes live/work units and some residential properties. The overall look is 'modern business', with glass-fronted ground floors and large number signs for each unit. Each property is on a 999 year lease, though some are rented initially.

There is also a car club and an informal hub: a loft style café called the Boca Bar, where many local businesses hold meetings. Underneath a very large events area can be hired at a discount by resident businesses, subsidised by the full market cost charged to non-resident users.

The emphasis on creative businesses is strong, not by restriction but a seemingly natural process that has seen them congregate here to be near one another. Arguably it is one of the best examples of a modern use of an old employment site, with new mixed uses being found for old buildings and brownfield land.

'For live/work to work well, we think that the buildings need to be designed as attractive workspaces, not as residential,' says Ashley Nicholson. We don't do bog standard commercial unit design. It is the quality of the commercial buildings that make them appropriate and attractive as live/work spaces.'

The next live/work phase will be mews style, 'with smaller ground floor workspaces and living space above, facing back onto an outdoor area for sitting out and barbecues,' he says. 'These will be more affordable than the larger live/work spaces to extend the reach of the scheme to many more people still growing their business.'

Mixed use live/work – what works at Bristol Paintworks

The site demonstrates the benefits of having:

- a developer that runs the scheme hands-on with an ongoing presence
- live/work and B1 commercial premises as neighbours, with all buildings designed to look like businesses rather than residential
- internal space the buyers can shape to their own preferences, with each live/worker buying a shell they then design and finish
- allowing flexible changes of use between live/work and commercial, but not to residential
- enhancing a live/work atmosphere by encouraging owners of residential units to work on site, within easy walking distance.

Claire Menzies (below) is director of Ignition Design Group, which is looking to supplement its commercial space with a live/work unit that would let its Leamington Spa-based production director stay over in the week. 'It would be fantastic if he could use the live/work space that way in the evenings, perhaps the mezzanine floor being his living space. But we'd also like the idea of the space generally feeling more home-like than a normal office.

'Flexible use of live/work space can really help us make things easier for our staff, especially those who have to commute long distances or stay overnight nearby in grotty B&Bs. We have 14 staff and around 50 subcontractors and many of our staff do work from home. One works in London four days a week, with one day here. I live in Bath, but my staff are more local and many cycle or moped to work here. My staff all told me we should consider the Paintworks for our premises and I went with that.'

www.ignitiondg.com

Helena Angelides runs an interior design service. Having studied design in Los Angeles, where she had a live/work unit, Paintworks was an easy choice when she returned to the UK.

'Had I not found this live/work unit, I would have expected to work from home but I'm sure I wouldn't have found premises as good as this. I really loved designing this from scratch. I couldn't face being in a cramped space working from home – I was used to California and the openness there!'

'There was no gas, electricity or water when I bought. Verve assumed people would sort these out themselves. This was daunting but it did give me the opportunity to completely control my own space. I took possession of the property for just under £200,000 in February 2006, and must have spent around £50,000 doing a fit out. I was given six weeks between exchange and completion to do this, which was very helpful.'

'It really has helped me having a business here. People are so impressed by the scheme and clients visit me here to see sample books, etc.'

Helena has used the space around the stairs on the ground floor to create little zones for kitchen, eating and work areas. 'As you walk around the open space, each area changes your impression of what space you're in. I think having the mezzanine bedroom floor and the stairs up to it fairly central, rather than out to one corner, is a particularly good idea for live/work.'

How does she find the proximity to neighbours who don't live there? 'When they start to go home that's a good reminder to me not to work too late. Having said that, some keep working until 9 pm or later at night so I can be sitting here having a glass of wine and feeling guilty because I'm not working!'

For Helena the main appeal is not commuting. 'But also I appreciate having people around – this is a very buzzy place. I can go to the café, wave hello to people who I know who are not just residents or live/workers but businesses. That means we all have more security, but there's also a good neighbourly atmosphere. They've done a very good job with the 24-hour security too – and the landscaping is great.'

Helena visits clients in various locations. 'My work often includes going to showrooms in London as well as to visit clients, and it's only a 15 minute walk to the station. I rarely have to use a car.'

www.helenaangelides.co.uk

'Previously this was a used car salesroom. Occasionally people turn up and ask: Where's Steve?'

'I got a residential mortgage on this property, but it wasn't easy. Most lenders just didn't seem to understand live/work'

'Smaller businesses, which are ideal for live/work, are more likely to collaborate. We certainly have the facilities here in terms of the café and the events space'

7 Electric Wharf, Coventry

Converted mixed use factory site with live/work alongside residential and business units

Electric Wharf is a mixed-use scheme on the site of a former power station in Coventry. Developed by Complex Developments Solutions Limited, it comprises well-used ground floor creative retail spaces and a combination of live/work units and unrestricted live/work, allowing for residential use, on higher floors.

The scheme is a showcase conversion of a derelict historic building into a community of small creative and IT businesses, living and working in a low energy, high tech environment within easy access of the city centre via new, traffic-free bridge over the canal.

Phased development has created 68 live/work lofts and 18 ecohomes for sale, high-tech offices for small to medium-sized businesses and an internet café within the shell of the old turbine halls and boiler house. Around 80% of materials from demolished areas were reclaimed and reused in the construction, including old bricks and steel.

Some 'unrestricted' units have become residential but in others live/work uses continue despite the lack of restrictions. These live/workers are often well connected to the retail and commercial businesses on the ground floor.

'We wanted to do something to keep the building because we thought it would make a fantastic development,' says developer Ian Harrabin. 'Everyone else was looking to knock the turbine halls down and it was very unusual to re-use them.'

Electric Wharf is one of many live/work schemes making new use of buildings whose original purpose has become redundant

Calum Brannan runs the social networking service People Party, supporting a network of 400,000 UK clubbers. His company has three staff working regularly in the live/work unit plus a PR agent who works freelance from home.

Calum's was one of just six successful companies from the 300 competing for a slice of a £5 million regional Creative Fund in 2007, enabling £250,000 of investment in his business.

Previously Calum, 18 and from Coventry, was employed in London by one of the original members of the TV programme *Dragons' Den*, Doug Richard. Richard, chairman of Library House and CEO of Trutap, a company specialising in mobile texting, was impressed by Calum's extensive network of text contacts wanting regular clubbing information.

'I was commuting all the way from Dulwich to King's Cross every day. So when I saw Electric Wharf, I knew it was an ideal place for me to expand my own business. My friend John Dalziel, who is a breakfast DJ on Mercia FM, showed me his new live/work unit here. I was amazed and acted straight away. My main challenge was getting a mortgage on my 18th birthday!'

Even before he heard of Electric Wharf, Calum wanted to work from home, perhaps in a conservatory or garden shed. 'I always did business as a hobby from home. I went serious when I reached 18 and got some seed investment to help me with my own ideas.'

So what was the appeal of this site? 'I really liked the heritage of the place. The fact that it used to be a lightbulb factory gives it a certain edge, the best place to be in my home town. I like being near other businesses too. We service some of the businesses here, for example with online services for an investigator based below. And we have three or four collaborations ongoing with design and PR companies based here.

'This really is a bit of a creative village, as the marketing says. Lots of the residents who work or live here are creative people, even those who don't work in their units tend to be from that kind of background, which creates a cluster in its own right.

'Having live/workers and residents on the same site makes business premises on the ground floor safer in the evening, and vice versa for those of us here in daytime. We all look out for one another 24/7.'

Electric Wharf businesses can also easily draw on Business Link's advice service and are eligible for special grants, such as the Creative Fund. But for Calum another selling point was feeling professional. 'This is a place I can bring clients and they will be impressed', says Calum.

Business partner Lesley Hooper works regularly in his unit. Another partner spends two days a week home working in Basingstoke and three days staying over at Electric Wharf. People Party also uses interns – students from Coventry's Henley College doing work-based training.

Calum's only regret is the failure of early plans for a café. 'We could certainly do with something like that, or better a hub facility – I would be interested in virtual office-type facilities if that were possible.'

Eventually Calum expects his company will need to expand. What will they do? 'Ideally I would like to stay here, but perhaps take on an extra office space in the same building.'

www.pplparty.com

'Best of all is the friendly community spirit here. It's a much less isolated way to run your business from home'

8 Broadheath, Coventry

Live/work as part of enterprise and youth centre in deprived inner city area

Broadheath Young Persons Enterprise Centre is part of a project called Broad Horizons in the deprived Foleshill area of Coventry. The scheme, which incorporates eight live/work units, is managed by Midland Heart housing association in partnership with various public sector agencies supporting enterprise as well as youth services on the same site.

The project's original concept was to encourage enterprise among younger people in the area. Changes in funding saw the approach modified, with youth provision being completed 18 months prior to the enterprise facility on the site. The Enterprise Centre is part funded by the Local Enterprise Growth Initiative (LEGI). This area of Coventry is the only part of the West Midlands to receive LEGI support.

Within the Enterprise Centre there are plans to make full use of LEGI funded pods. Each of these pods (basic rooms) has 12 PCs. Six have mentors to help people write business plans, etc. The reception is open from 8.30am to 9.00pm. There is also a computer training room, the only facility of its kind in the area. However, use of the rooms by community groups (for example children excluded from school) does not seem to be a very conducive atmosphere for encouraging enterprise.

The ideas behind this scheme were reported in an earlier Live/Work Network report, *Homes that Work* (2003). This report raised questions about how appropriate it would be to combine live/work and enterprise with non-business activities such as support of young people with special challenges and needs.

Visiting the scheme four years later, those doubts seem to have been well-founded. Staff at the enterprise centre reported a struggle for the enterprise aspect to be prioritised in the early years. The live/workers at the time of our visit in late 2007 had been in place for one and a half years, but the enterprise centre's delayed completion had restricted opportunities to promote enterprise in the area.

The units are well designed, with mezzanine floors for sleeping space. But what should have been an excellent supportive infrastructure with an enterprise centre next door has not yet delivered advantages that we could determine, beyond helping live/workers to access grants available generally in the neighbourhood.

The smoked glass-fronted entrance to the whole building has a single reception for all users. There are many spaces here, such as recording studios, rooms with PCs and meeting spaces, which are shared with community groups. This appears to have reduced the enterprise impact and feel of the scheme to date. This is now changing as the enterprise project gets more fully under way.

An attractive communal space at the heart of the scheme just overlooked by the live/work units would have been a very effective space for live/workers and other enterprises to hold meetings in the summer, barbecues etc. But because the area is shared with youth services, only people with a Criminal Records Bureau (CRB) clearance form are allowed to work in the building or use the open space, according to Zoe Bradley, recently seconded from the Chamber of Commerce to run the enterprise centre.

It is worth noting that the CRB system came into being after this development was built, so perhaps could not have been anticipated. But it does demonstrate the risk of establishing projects that try to combine live/work and enterprise with other unrelated public sector facilities. These may well end up undermining enterprise activity.

Foleshill has a large Asian community and there may be some concerns that this scheme does not appear to be reflecting the diversity of the local community. Any enterprise centre and live/work units at this site should ideally incorporate a significant people from the local Asian community. Our conclusion here is that live/work should not be treated as a 'project' but as a type of property that enables enterprise by reducing costs and the time wasted by commuting.

Broadheath's live/work units were created within renovated old school buildings

The enterprise centre is shared with a youth services project. Above: the reception

Left: The courtyard that the live/workers are not allowed to use unless they have Criminal Records Bureau clearance

Greg Barnes is starting up a web development business. 'I was looking for somewhere to live when I left university and noticed an article in the *Coventry Evening Telegraph* about this scheme. I saw that costs of having a unit were under £300 a month for combined work space and home.

'To me that was a very good price for the size of property. Plus I really liked the way that the units were designed for work use with unusual layouts that make that easier. I particularly like the mezzanine floor approach which seems more like some kind of London loft.

'I was previously working in an accountants' office. I found that being an employee and working in an office gave me no choice over who I was working with and when. Here I control my own time, I can work when I want and with who I want. But home work in itself can be isolating. Being next to other live/workers is a much better approach if you work this way.'

Restricted access to the communal area and some services is, he feels, a drawback. 'We are not allowed to use the Youth Centre facilities or the open garden space, which is never used as far as I can see. There was an evening when one of the live/workers, Natasha, and I went to look at the garden and sat outside, but we were immediately asked to leave and told that we didn't have clearance to work with children!

'We were originally told we would be able to use the building's facilities as an office and have a website promoting this scheme, plus use of the reception facilities. But actually we have to rent the meeting spaces. I tend not to meet clients in the enterprise centre as I don't think the set-up has been well thought through yet.'

As a neighbourhood though, he likes Foleshill. 'I feel secure here and we have our own parking. We are also now finding that the new team running the enterprise centre are starting to motivate us and do more with us.'

He says he will give his business idea another year. But if his business doesn't pick up sufficiently, he will consider moving out to get a job.

Greg Barnes: 'Here I can control my own time and work when I want'

The somewhat imposing front entrance to the projects

Natasha Graham is a photographer and fine art designer. 'I had previously been working from home but in cramped conditions in a part of town I did not feel was very safe. The WBDA (Women's Business Development Agency) was very helpful supporting me. My business mentor with them at the time came across this project and suggested it to me.

'I thought it would be suitable because I have an eight year old daughter, Hannah. This is a secure and quiet space where I can be near business mentors and have enough space to do the work I do. I'm always working my own hours and I often find I do work after Hannah has gone to bed.'

How has the unit affected her work? 'It's good to have the use of the enterprise centre as a business address – I'm not sure you would always want to give your home address to clients.'

In hindsight, she thinks it would have been useful to let the properties only once the builders had finished their work. And she thinks more communal space would be helpful, for example to dry clothes. 'It's particularly annoying that we are not allowed to use unused open spaces for networking and socialising.'

Designer Natasha Graham lives in the unit with her daughter

9 Hylton Street, Birmingham Jewellery Quarter

Converted warehouse with high spec live/work also being used as flexible office space

Six live/work lofts and two offices were completed in 2006 by live/work specialists Viti Developments in a grade II listed terrace in Birmingham's jewellery quarter. Formerly workshops for silversmith William Hasler, supplier to Liberty's in London, the scheme may form part of a new wave of live/work spaces in Britain's second city.

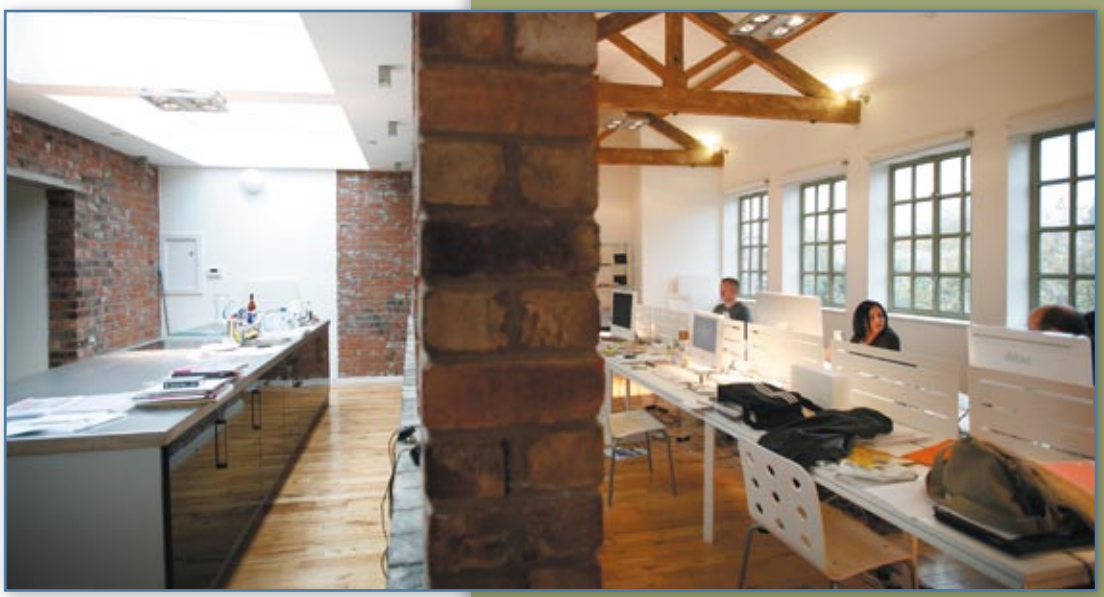
Immediately next door is another building earmarked for live/work units, to be developed by regional housing association Midland Heart (whose schemes feature elsewhere in this section). The old Lessars spectacles factory will become 13 one, two and three bed live/work units for commercial rent aimed at jewellers and related craftspeople.

The emphasis in Viti's building has been on high quality renovation. The 125-year leasehold live/work units (varying from 65 to 135 square metres) have solid wood flooring, exposed brickwork and high ceilings. Work:live ratios are flexible but each unit must be used in part to run a business. The city council waived its usual policy (50% minimum workspace for live/work) for this scheme as a pilot.

An interesting outcome, now the units have been sold, has been the preference of many owners to use them primarily as commercial. Viti was surprised to find companies prepared to pay a higher cost for live/work space to use the units primarily as workspace but with the flexibility to use them as live/work in future.

'In retrospect perhaps we overspent on the specification here because we assumed the quality had to meet the needs of people living here as well as working here,' says Viti director Hannah Martyr. 'So, for example, bathrooms and kitchens have been put in with a high specification.

'We were surprised to find more demand for commercial use than living use. This in itself is not a problem with the local authority because it is happy to see live/work use turn into work only rather than residential. Having said that, we do have people using the spaces for living but in ways perhaps traditional live/work plans have not anticipated.'



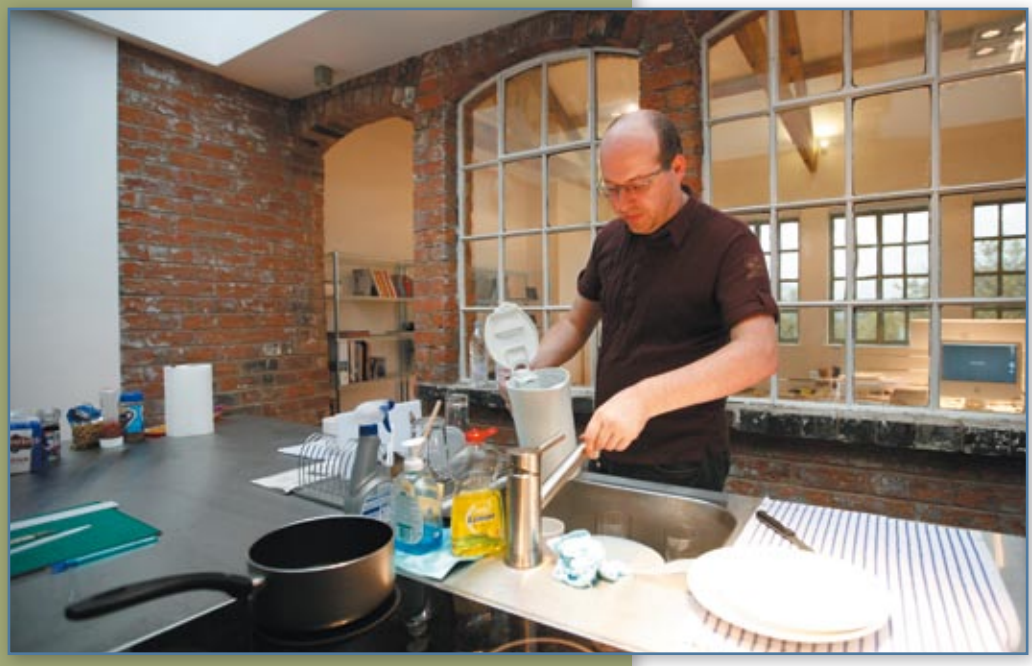
Bal Bachu runs Bachu Design, a branding and corporate ID company with exclusive contracts with plc companies. He has occupied his unit since July 2007 and regards it as ideal for him and his five staff.

One of Bachu Design's senior executives, Robert Cunningham, stays in the unit during the week most nights. 'There is a mezzanine floor which is perfect for me to use and I do end up staying here for the convenience of not having to commute every single day,' Cunningham says.

Bal Bachu adds: 'I suspect some companies with a reasonable number of staff will find live/work spaces like this very appealing because it gives them the flexibility to stay over rather than commute.'

The other appeal to all those who work here is the comfort of apartment-style facilities, including a central cooking and food preparation area, plus quality bathroom and bedroom area.

The experience at Hylton Street suggests that in some locations with a well established commercial reputation, the high quality of live/work design can prove appealing to those seeking a workspace as well as a live/work space. If the units are large enough, buyers appear to be happy to pay a premium to buy the ability to occasionally or partly use the unit as living space – with the option to do so more in the future.



Robert Cunningham stays at the unit during the week

Bal Bachu (below): 'When we need to, we can stay overnight rather than commuting home'

Viti's scheme is next to a proposed affordable live/work development at a spectacles factory

10 West Ferry, Limehouse, London docklands

Housing association rented live/work scheme – affordable and market rents

West Ferry in Tower Hamlets was the first housing association live/work scheme in the country, completed in 1999. The focus of the scheme was very much on encouraging work, with in the early years business support from the East London Small Business Centre and financial incentives part of the package. To qualify for a tenancy, all residents are asked to demonstrate they have a viable business plan.

All 27 'studio' units are built to accommodate the weight of light industrial machinery and with wide doors. All but nine were originally let as shells, with the remainder built to a more conventional apartment model. The industrial-style architecture and the allocation of all the ground floor units for B1 work-only use are clearly intended to discourage live/workers on the higher floors from using their units as solely residential.

West Ferry is well-documented in previous Live Work Network publications and some early concerns remain valid today: there are no hub facilities for example. A 50% introductory rent designed to ease the financial pressures on start-up businesses was later withdrawn, though Peabody says this is now under review. In 2003 we described the location as 'a quiet area out of hours'. The rapid expansion of London's Dockland areas means West Ferry is now in the heart of a thriving business district, with all the associated benefits and disadvantages – among them a big rise in traffic noise and pollution.

Residents have also raised concerns about how the scheme is now managed. An on-site manager who left a year ago has not yet been replaced and residents noted great difficulty contacting anyone able to help with management or maintenance problems, including the recent failure of the intercom system.

Peabody has attributed recent difficulties to a 2005 switch from an estate management approach to neighbourhood teams supported by a call centre. However, in response to customer satisfaction surveys (including at West Ferry), the trust now employs a permanent commercial property team which will deal directly with its live/workers. A community meeting for all live/workers is planned to introduce the new team and discuss local needs.

Avshalom Gur has grown a major fashion business at West Ferry

Avshalom Gur is a fashion designer. Within six months he expects to move on from West Ferry. The move is not a criticism. Both his business and family have grown too big for the space.

Avshalom now rents two live/work studios at West Ferry – one used solely for business – along with a second studio in Islington and a flat in north-west London. 'It doesn't make sense to pay rent on so many studios and my staff don't know where I'm going to be from one day to the next. Nor do I!' he says.

Avshalom is a West Ferry success story. Setting up his own business was a calculated gamble he took after working for years as a high street fashion consultant. 'I'd taken a small studio in the East London Small Business Centre to test the water and they asked if I'd heard about this scheme. Not having to commute or rent elsewhere made sense and it was being offered at a great rate for the first five years.'

Three years down the line he expanded into the studio next door. 'This space has allowed me to create and grow professionally, but the business has grown. I've also acquired a wife and two kids. Both the units here are now more work/work than live/work.'

Avshalom has one full-time assistant handling administration as well as helping out creatively. Next door two full-time staff supervise the cutting room and a large team of fashion students. Most are from UK fashion colleges but they include some from as far afield as Austria and Japan. 'In London Fashion Week we have 10 to 15 people working in this studio,' he says.

Light, power and sturdy floors and lifts are the main requirements for Avshalom's business and his wireless broadband is in heavy demand. 'We've no passcode so others in the building use it.'

The big advantages of live/working here, he says, are the Docklands Light Railway station immediately across the road, the flexible unit sizes and the neighbours, who get on well.

But while he says his units are spacious, he says they appear larger than they are. 'It's good if you need a big office but not if you need to make a mess.'

He is not happy with recent management of the scheme. 'Three years ago Peabody were brilliant, they took a very personal approach and we had tenant meetings, but since then the team has changed. There is poor communication and maintenance.'

The discount introductory rate that enabled Avshalom to take on his first unit has also been withdrawn. 'Friends of mine who were interested in taking on a live/work unit now can't afford it.'

Gripes aside, live/working has proved a winning combination for him. 'It's great for workaholics: you can pretend you don't have an addiction. For creative people work is their passion. I only need four hours sleep and I'm happy here working at 4am in the morning.'

www.avshalomgur.com

Full-time staff and student placements in Avshalom's 'work/work' unit

Sue Chadwick is a jeweller. Her move to live/work three years ago was accelerated by a landlady less than delighted by her use of a blowtorch and drills in the bedroom. 'She wasn't too impressed,' admits Sue. 'I wasn't sure I could afford somewhere to live and also rent a studio. So when a friend asked if I'd tried housing associations, I applied to Peabody – then waited.'

Sue submitted her business plan through the East London Small Business Centre, but just missed out on the 50% introductory rate. 'I had to get a part-time job to afford the unit and the idea was I'd give that up but we were able to come to an accommodation.' Sue still works a few days a week as a personal assistant to supplement her earnings.

The big draws for Sue were natural light and no damp plus, given the tools of Sue's trade, superlative sound insulation. 'I looked at live/work units elsewhere but they were in big old buildings divided up into loads of units with wafer thin walls and no windows. These were solidly built.'

Among the advantages she lists the jewellery equivalent of a Tupperware party. 'My party nights are my biggest sellers,' Sue says. 'And I'm not leaving a studio in Hatton Gardens at 1am so there's a safety aspect too. The free parking is fantastic. Silver is very heavy, and I wouldn't want to take it on the tube so I need a car to go to places to display and sell jewellery.'

The neighbours she says are a real bonus. 'I like the idea of being in a community of like-minded people at different stages of growing their business and we all plan barbecues, share stationery and run to the supermarket for each other.'

Of course there are also challenges, not least getting into work mode. 'I use the café round the corner just to go outside, think, plan my work day then come back as if I was arriving at the office.' She does, she concedes, feel guilty if she takes time off.

A hub facility, she says, would be a welcome improvement. 'Somewhere to use a photocopier would be fantastic. We were going to ask Peabody if we could keep one unit for meetings, admin and socialising – we even looked at converting the top of the rubbish store but we need a manager here now to discuss this.'

www.suechadwick.co.uk

'I hadn't pictured getting anything as big and I do feel more professional here'

11 Quebec Wharf, Hackney

Warehouse converted into live/work for sale

Quebec Wharf is a Grade II listed former granary converted into 10 live/work units and four flats by developers Investland in 2003. Its restoration met with widespread acclaim, winning London *Evening Standard*'s 2001 Hot Property style award.

The entrance to the building sits on Kingsland Road, a busy thoroughfare that runs from the gateway to the City of London, through to Dalston then Tottenham. To the rear it overlooks the tranquil waters of Kingsland Basin, an offshoot of the canal once used to transport materials to and from the warehouse.

The canalside area is gradually changing with warehouse conversions and new high-rise residential developments sprouting alongside still neglected Georgian buildings and the sprawling 1960s council estate of Downham.

Heavy brushed steel and timber gates controlled by an intercom separate Quebec Wharf from Hackney's public. Inside the courtyard is a second security door. The main features are dark glass, wood clad and stone facades and an absence of street noise. There are no communal facilities and the design does not particularly encourage neighbourly interaction.

The location, however, is one of Quebec Wharf's bonuses. The road is well served by buses and just a 15 minute walk from mainline Liverpool Street station.

Quebec Wharf was Investland's first venture into the live/world market and to its credit more recent neighbouring schemes have incorporated features lacking in Quebec Wharf, such as discrete work and live areas. One of these looks set to be Hackney's last live/work development.

Francis Loney is a photographer. Quebec Wharf has now been home and studio to him for five years, but finding somewhere suitable, he says, had taken half as long again. 'Two and a half years!' Francis recalls. Buying his Quebec Wharf unit stretched his budget to the limit but financially made better sense than renting and buying separately. 'And I am still,' he says emphatically, 'a huge fan of live/work.'

Francis specialises in theatre, corporate and product photography with beauty and fashion thrown in. His studio takes up roughly one third of the open plan living, kitchen and dining area but his lighting rigs and backdrop screens can fold back to give a more residential feel. 'When I'm feeling energetic I roll all the backgrounds up and turn that into a living area with a lounge,' Francis says.

His preference, he admits, would be a more obvious separation between his work and live areas but he is rarely tempted to forego work for relaxation, crediting his self-discipline to a stint of National Service.' I have to give myself a little lecture now and then because I just tumble out of bed and that's my work office as well.'

His unit has one bedroom with en suite facilities and a second bathroom that helps separate an area designated the 'second bedroom and office'. Currently it is used as a dressing room for clients and storage space for the now redundant but still cherished tools of his trade, accumulated over a 50 year career. Most of his work is now done digitally, with the help of an iMac and high-speed broadband.

Francis would be the first to say it hasn't been plain sailing at Quebec Wharf. One drawback has been the slow arrival of the much vaunted East London line tube extension, now promised for 2010. There have also been, he adds, problems with the plumbing and inadequate protection against water ingress from the canal.

His chief gripe is with an apparent lack of planning control over other buildings around the basin he believed were listed. As a vocal member of the residents' association, Francis is campaigning to ensure future redevelopment treats the basin's historic architecture with the sensitivity and respect it merits.

Hackney Council's vocal withdrawal of support for live/work also irks. 'I pay a fair percentage in business rates and these are outrageous. I also had huge trouble organising insurance because the insurers had no idea what live/work is.

'Then two years after I moved in I got a letter from the council saying they didn't recognise live/work! I think they're being very naughty abandoning it,' he adds. 'All the figures show homeworking is on the increase and anything that frees up space on public transport must be a good thing. My own carbon footprint must be miniscule.'

'I'm 70 now and have no intention of retiring'

12 Hayle Foundry, Cornwall

Rural affordable live/work for rent in a heritage regeneration scheme

Hayle Foundry is a regeneration scheme to bring back into use an historic foundry that is very much key to the town's heritage. Hayle was one of the main towns where Cornish copper and tin ore was treated and exported in the industrial era.

Harvey's Foundry Trust, working with the South West RDA and Penwith council, decided to include an element of live/work at the Foundry Farm central courtyard to the whole scheme.

Here, housing association Guinness Trust has recently let three live/work units to local craftspeople who were also in housing need. All parties acknowledge that there were many hoops these live/workers needed to get through to occupy their units.

The Foundry Trust insisted on active craft use, not on creative businesses using technology. The council required them to be in housing need and local. And Guinness required the tenants to be established in their business, with a reasonable turnover of well over £20,000 to be able to afford the combined shorthold tenancy upstairs and the market cost and business rates of the workshops below.

The ground floor workshops were let on three year commercial leases. These are linked, through mutual clauses, to the assured shorthold tenancies for the first floor residential accommodation.

'The first floor was provided as grant-funded social rented accommodation, with rents set affordably using national criteria (around half the market rent here)', says Ryan Hosken, Guinness's development project manager. 'The ground floor is not subsidised, so is leased at open market value. The combination of the two compares favourably to the costs of separate commercial homes and workspace. The floors were designed to be separate, as originally the scheme involved the commercial space remaining in the Foundry Trust's control and Guinness just taking the flats upstairs.'

Having the upstairs residential parts completely separated (with no interior access) may undermine the live/work concept in the future. But despite the perhaps over-complex approach adopted in the past to live/work here by the three parties, the units have been successfully let to ceramicists and glass artists. And more live/work is being considered in future phases of the Foundry's regeneration.

Lessons have been learnt from the drawn out process in phase one. 'Future phases of live/work units or workshops will be less restrictive in their target markets, with a wider creative business cluster becoming the aim for the area,' says Laura Christon, project development manager with Harvey's Foundry Trust.

There is a vibrant café within the Foundry scheme, as well as craft and incubation units

Dave Pascoe was a crabber in Hayle for five years before he switched from landing lobsters and crabs to creating a range of high quality glass products at his craft workshop. 'I heard about the live/work units here through an agency called Creative Kernow. At the time I had been asked to leave my flat with my partner and we had been living in a combination of parents' homes and caravans up by the sand dunes. So getting an affordable live/work unit here was an opportunity I jumped at.'

Dave was already aware of live/work before he applied: 'I think many creative people know about this approach to property. It's like the atelier craft units in Europe or lofts in New York. Cornwall has so many self-employed people running creative businesses from home – there's real potential for live/work here.'

He is very keen on the end to his daily commute, though the heat generated by some of his glass work (which includes architectural commissions) means he has kept his kiln at a workshop off site. 'I also love the sense of community here,' he says, citing the presence of others in the workshops and live/work units as well as the hip new Salt café nearby and some bigger design companies now based at the complex.

'Environmentally, this live/work approach is important to me too,' he adds. 'I cycle to my other workshop and I am now in walking distance of shops and facilities in town. This is the way we should use workspace buildings. And I really value the quality of the building design here.'

His main worries are the costs and restrictions that apply because of the separation of floors into two different tenancies. 'I don't mind the separation – though having stairs inside would have made sense. How can I run a cable for my broadband between two separate floors? Is this even allowed?' Guinness says it will consider this request favourably.

He points out that he pays full band A council tax on his upstairs flat and business rates on the market rent workspace below. If the two floors had been part of one property, costs might have been lower.

He also wonders what happens if he and his partner have children. 'This is a very nice place but it's one bedroom. If we have kids we can't really stay. Now that really is a shame because I would love to remain a live/worker here. Our only hope is that Hayle gets more live/work space and this includes larger properties so that family businesses and creatives can stay here and build up a vibrant live/work community.'

www.oceanglass.co.uk

5 What live/workers want: understanding the market

What are the underlying trends driving the live/work market? Here we summarise what live/workers have told us. Most used to run their business from home but wanted a more professional well designed space. They value the unique design of live/work property and the control it gives them over their use of space. But they would like to see more shared 'hub' facilities to reduce isolation. And they are unhappy that live/workers are required to pay taxes that would not apply to home-based businesses

The total number of live/work properties in the UK is currently impossible to gauge. This remains a niche market, but we do know it is a fast growing one. Live Work Network tracks and reports all known live/work planning applications and approvals. It has detected a growing spread to new urban and rural areas across the country, far too many to list here. The days of live/work as a predominantly London phenomenon are long gone.

Many in the property and planning professions remain unfamiliar with the live/work concept, or even bewildered by it. But for those running businesses from home, and importantly those occupying live/work units, live/work is common sense.

Dual use of a property as workspace and home cuts the cost of taking on separate premises, reduces the need to travel to work, improves work-life balance and creates an inherently convenient and flexible approach to modern working. It also appeals to those concerned about global warming.

There is no 'typical' type of live/work business. However, we found that live/workers in existing schemes are often:

- experienced home workers who wanted a better use of space
- likely to use web/new technology, especially for selling their services/goods
- often but not always in 'creative' or 'knowledge economy' sectors.

The market for live/work property therefore appears to be largely the existing self-employed (or company directors) working from home.

We did not find any home working employees in live/work spaces that they own or rent themselves. The appeal of live/work is largely confined to **small businesses seeking more professional premises without abandoning the advantages of home working.**

Case study findings

Our case study visits confirmed a number of preferences among live/workers in existing developments, some expected, some surprising. These include:

- the main appeal of their live/work space is that it is **unique** (being unlike normal residential property is a selling point) – many specifically referred to the building's or area's heritage
- shell building – allowing the live/worker to **customise** their internal space – is popular
- self contained workspace within the unit is also popular, with **separate access** from outside and from the living area – especially for families
- the **advantages** of a well designed live/work space outweigh concerns about conditions of use etc
- shared **hub facilities** are frequently called for, as is active management of the site (to reduce isolation and maximise collaboration)
- **communal space**/outside areas encourages casual community interaction
- there is resistance to paying **taxes** such as business rates (when home businesses don't).

Live/work makes home working easier

It was the **disadvantages** associated with ordinary home working that many live/workers were seeking to avoid in their choice of property. These include:

- too little space to run the business as it expands
- unprofessional premises – does not look businesslike to clients (or feel professional to user)
- workspace intruding on personal home life
- wrong dimensions for nature of work – inadequate sound insulation, no room for staff, doorways too narrow etc
- loss of home life space (eg kitchen table)
- children disrupting work and vice versa
- isolated location – not near other businesses or facilities
- difficulty employing staff/contractors at home
- lack of storage.

Flexible live/work use

The commonest use of a live/work unit is for the owner to be joined on an ad hoc basis by associates and collaborators, not necessarily regular staff.

There would appear to be a lack of understanding among planners, business advisers and economic development agencies about this. It is clearly hard to track the GDP created by this collaborative working that is common in live/work. However, it is evidently helping business to expand their shared turnover with minimal risk.

For live/work businesses, using non staff to help deliver contractors is a highly flexible way to increase capacity without risking costs that could jeopardise the business. For those on live/work cluster schemes, this process is easy to encourage compared to the more isolated individual home-based businesses, whose neighbours are less likely to be potential collaborators.

We did also find an alternative mode of use of live/work units in our case study visits. Some units are owned or rented by companies with more than one or two staff. These units are used much more intensively for work.

In some instances the living quarters are used by the owner only at certain times of the week to avoid commuting. Or they are used by staff members for the same reasons.

It would appear that planners are often happy to allow flexible use of designated live/work property for either work-only or some manner of live/work use as above.

This finding from our visits raises questions about the assumption in some quarters that live/work is most likely to be abused as a residential space.

It also raises questions about how appropriate loft-style live/work spaces – those that are open space apartments without ground floors, etc – are for larger companies. It may be that the market for live/work in the future concentrates more on smaller loft spaces for small micro businesses living and working in the same space with larger, perhaps semi-detached or detached properties, for family style businesses or for people who have a number of staff regularly working with them who want to separate their work life and their home life more professionally. Both these property types are commonplace in the USA.

Home-based business and families

Those with families who work from home in residential property find many aspects of home working family-friendly. For example, there is less time spent travelling to/from work (and less stress), creating more time to spend with the children. Home workers also consistently report increased productivity compared to office working. This can also mean more time off for family life. Home working usually means being closer to schools, enabling parents to pick up children more quickly. With more flexibility over when to work, home workers simply have much more control over their work/life balance.

However, there are significant downsides to home working in a residential property, that purpose built live/work property can help to address. Children can often not accept the sanctity of work space within the home and can potentially resist the office door being shut. There are also challenges in terms of what to do during school holidays when working days are far from peaceful.

Professional workspace

For these families but also for self-employed home workers without children, there is a risk of clients and others seeing the home as unprofessional premises. Above all it can be difficult to expand a home-based business and employ non-family members. For example, when the owner goes on holiday, is it appropriate for staff/associated to have access to their home?

Live/work space directly tackles these drawbacks, giving home-based businesses the advantages and convenience of home working but also providing separate space for work and home life.

Live/work market segments

Live/workers are as varied a group as the self-employed. Nevertheless, our research and experience of the live/work sector in the UK broadly points to these distinct market segments – each with its own live/work property and facilities needs:

Type of live/work unit	Market	Needs
Family business (for sale)	Mature business people second careers	Space for several employees 'Business-like' premises for meeting clients Specialist support
Family business (affordable)	Move up from home working	Support for marketing Sharing expensive facilities such as hi-end technology
Contemporary business (for sale)	Established professional singles, often young	Business/social buzz Sharing expensive facilities such as hi-end technology
Contemporary business (affordable)	Starter businesses	Incubation style support. Mentoring and access to hi-end technology/clients

Factors driving demand for live/work

Based on our research and interviews, we have identified six main drivers behind live/work's appeal:

1. Information technology

The increasing use (and lower cost) of broadband and other means of conducting business at low cost are a major factor

2. Lower cost of combining workspace and home under one roof

This is a major factor for small business. Smaller businesses are much likely to be home-based to save on costs. A fifth (19%) of micro businesses said the reason for working from home was cost (DTI - ASBS 2005)

3. Work-life balance and flexibility

Time is increasingly seen as a precious asset. In particular, being home-based is a key motivator for aspiring women entrepreneurs (70% compared to 56% men). The over-35s are also keen to work from home – 66% compared with 57% of the under 35s. These figures are an indication that the presence of children and work/life balance are important issues (DTI - HSE 2005)

4. Aversion to commuting

There appears to be a growing preference to avoid stressful, costly and time-wasting commuting. Over half (52%) of business owners agreed that 'being able to work from home' was a motivation for them starting their business (DTI - HSE 2005)

5. Concern for the environment

Homeworking is increasingly associated with reducing the carbon footprint. Not only do home workers not commute, they consume less fuel than those who use two separate premises which each need their own electricity and heating fuel. This is starting to appeal to buyers and can be used as a marketing factor

6. Productivity and control over work environment

The ability to redirect previously wasted time to work has strong appeal. So does the ability to better shape workspace areas and/or increase flexibility of property use.

Steve Double walks his son and daughter to school *(see page 22)*

A resilient and growing market?

All significant UK, European and US studies predict **significant ongoing growth** in home-based working, driven by advances in new technology, resistance to the stress and time-wasting of commuting and in many areas the rising cost of both residential and business premises.

Given live/work's geographical roll out in very recent years beyond London and given all the factors listed above, the demand for live/work property would appear to be on a strong upward curve. For more on the prospects for the market, see section 6.

Meanwhile, with the property sector experiencing a downturn in the UK and the USA (to a greater extent), how is live/work demand responding? Zach Schneiderman, director of California live/work developers Creative Environments, told us live/work values there are withstanding the downturn much better than residential property. See section 7 for more on this.

In the UK, Simon Harris, director of the sales agency Cityscope, which specialises in London lofts and live/work, reports the same phenomenon. 'By emphasising the uniqueness of live/work, we are adding value to the product among buyers,' he told us. 'The less like ordinary residential property, the more live/work appeals, we find.' Cityscope is advising developer clients and those selling live/work units to feature the working function of live/work property heavily in marketing materials. The company's turnover has expanded rapidly during 2007 and 2008, while the residential market in the capital has been contracting.

Beyond creative live/work quarters

At the moment, UK live/work occupations tend to be mainly in the creative industries and new technologies, though we have also found occupations such as therapists, recruitment consultants, commercial property managers, educational service providers, and niche product specialists (including waterbed and juke box providers!)

In some ways, this follows a similar pattern to the US experience, where cultural industries lead the way, particularly in regeneration areas. It is also worth noting that these are the industries that current policies tend to encourage – as in the briefs for a cultural industries quarter in Sheffield and a jewellery quarter in Birmingham, the Huddersfield media centre or the deliberate linkage with an art school at Burslem.

It is also generally expected that live/work will include a B1 work use, which limits the mix of uses possible at present – for example, live/work cafés or retail, or low-level engineering operations.

There tends to be more anxiety about such uses, due to the potential to be bad neighbours. However, in US live/work quarters, a wider range of uses is allowed, though there may be stronger guidance on the location of such uses.

There is scope for being more innovative in thinking about live/work development, and not pigeonholing it as bohemian/artistic or high tech – though these do have niche appeal. One area that needs to be looked at further is retirement live/work, which could extend many people's ability to work beyond retirement age. There is considerable evidence that many over-50s are looking to start businesses, and there are various government backed initiatives to encourage this, as well as support available from organisations such as the Princes Trust and PRIME. Access to affordable workspace is a key issue.

6 Growing the UK live/work market

Once a London trend, live/work developments have started to appear across the UK in cities, market towns and rural areas. Leading the trend are specialist niche live/work developers, often with a background in commercial property and creative quarters. How can their example influence mainstream builders to embrace a concept many still find challenging? And how should financial institutions respond?

The live/work market in the UK is at an early stage in its development. Live/work schemes are no longer restricted to London lofts and converted warehouses. Approvals are now being granted across the UK in both urban and rural locations (see the property finder website www.liveworkhomes.co.uk for examples).

However, unlike in the USA where there is a mature and large live/work market, the concept here remains unusual. For both planners and developers, live/work can often challenge their comfort zones.

Live/work – outside the 'comfort zone'?

Many traditional planners still prefer to zone land with different purposes. Live/work is a hybrid of employment and residential use. This can prove very challenging to those who continue to want to separate the two (a process which arguably belongs more to the Victorian era when work was noisy, smelly and dangerous than to the digital era). And in many cases local authorities haven't got any policies on live/work or precedents to judge schemes against.

But resistance to change can apply just as much to developers. Many progressive planning authorities have told us how they have tried to explore what live/work schemes can bring to their area, but encountered resistance from local housebuilders. They would often rather be allowed to build straightforward residential on employment land. The result is to see the idea left in limbo or cynical marketing of residential style property as live/work with few regrets if that is how it ends up.

Live/work often works best, our cases studies show, where both developers and planners are prepared to do things differently, recognising that live/work is not residential housing and treating it as a type of development requiring its own unique approach.

Pragmatic, committed live/work developers should look for open minded councils and planners. A perfect site in a district which will fight anything innovative is of little value. Meanwhile progressive local authorities wanting to encourage live/work quarters would be advised to engage specialist live/work developers rather than trying to persuade resistant housebuilders to do something they don't yet understand or believe in.

Citing emerging planning guidance may be useful here. The draft PPS4, for example, contains a paragraph (30) which states: 'Changes in the local economy, or technological innovations which lead to new ways of working, may result in proposals coming forward which were not anticipated when the development plan was drawn up.

Local planning authorities should... consider these proposals favourably unless there is good reason to believe that the economic, social and/or environmental costs of development are likely to outweigh the benefits.'

In other words, those who argue *against* live/work should be asked to justify their own position with evidence and clarity. In favour of live/work there is the rise in homeworking, growing concerns over global warming, improvements in IT, aversion to commuting and appeal of work-life balance. Live/work is hardly going against the grain.

So the question should not now be *whether* to develop live/work – but *how*.

Growing a mature live/work market

Live/work is currently a niche property market in the UK. In time, given the drivers of global warming and advances in technology, it may yet become a relatively common type of property (as it is in the USA now – see section 7).

In the UK we have seen new parts of the property sector emerge sometimes quite rapidly: shared ownership and buy-to-let property are two examples.

Holding back such a rapid growth in live/work are the following factors:

- live/work is a higher risk form of development than residential – units can only be sold to those who can or do run a business from home
- live/work can also incur additional costs – VAT on workspace, disability access etc
- conditions of use that do not apply to residential
- the unfamiliarity of the new requiring higher marketing spend
- choice of residential mortgages is more restricted, especially if workspace makes up over 40% of the total floorspace (see box, page 59)
- for these reasons it is usually developed on low cost/employment land rather than on residential sites.

With land ownership in the UK largely in private hands and with extremely high values placed on residential land, live/work is at a disadvantage. Mainstream plc housebuilders know well how to work this land market. In contrast, the small but growing group of specialist niche live/work developers are minnows. They do however have the advantage of any group pioneering a product whose appeal is growing.

For the UK live/work market to grow successfully, it will need to gradually become more mainstream. A number of factors will make this more likely:

- a policy framework at national and local level to support genuine live/work development
- a tax approach to live/work that does not penalise owners for openly running a business from home (at the moment capital gains, VAT and business rates can all apply to live/work – they rarely do to home-based businesses)
- marketing of live/work as a way to use property to reduce the owner's carbon footprint as a major selling point
- exemplar schemes that planners can benchmark against
- examples of private sector live/work schemes that can influence mainstream housebuilders to enter the market proactively
- live/work obtains its own use class.

There is likely to be a sequence here. With government and many regions now including live/work in their spatial, economic development and business support strategies, a policy framework is (slowly) emerging. This report is intended to be part of this process. It includes proposals (section 12) to further this.

Exemplars

When planning authorities ask for examples of exemplar schemes they can compare live/work applications against, this report can be used to begin to answer that request.

However, it must be understood that many private sector live/work developers have not to date remained involved in their schemes after completion and sale. They have not always seen the advantages of retaining evidence of genuine live/work use of their properties to use to demonstrate track record at future applications.

This means that, with few exceptions (including some in this report, notably Bristol Paintworks and Havelock Walk), there are not many exemplars where the developer has followed the experience of the live/work residents. Housing associations, by contrast, often do know who is in their units and what they do.

For this reason, **it would be more helpful for the public sector to concentrate less on asking for exemplar schemes and more on creating them...**

Planning gain

Rather than take the traditional approach to section 106 agreements (fixed percentages of affordable housing, contributions to education etc), planning gains required of live/work schemes can take a different approach.

Recognising that live/work is a *sui generis* use (it is not a residential use class), it is possible to require developers to contribute **economic development gains** as the key outcome, eg hub facilities.

Many developers will also see these as helpful for enhancing the value of the units they sell.

Sequence of a growing UK live/work market

1. National and regional policy framework put in place, influencing local authority policies and local development frameworks
2. A programme of regional exemplars is launched, with specialist live/work developers creating model schemes on public sector land. Lessons are learnt and knowledge shared across the programme
3. Department of Business, Enterprise and Regulatory Reform publishes policy recognising enterprise and environmental contributions of live/work and home-based business
4. Tax treatment of live/work is placed largely on same footing as home-based business with wider government approval of both publicised
5. More live/work developers build schemes with hubs and affordable units and track work use by occupants
6. Global warming concerns lead to a stronger focus on how individual property can be used for mixed use, to cut commuting and construction carbon emissions
7. Live/work is more widely marketed as a low carbon footprint product
8. The success of the niche live/work sector is recognised by housebuilders. Some begin to set up their own live/work teams and subsidiaries. The market goes mainstream
9. Housing associations develop mixed tenure live/work schemes, with some developing a reputation as specialist live/work developers with hub management experience
10. Live/work quarters become a common part of the built environment in urban and rural areas, with residential land increasingly used

Land value and live/work

Because live/work is a new concept and has greater risks than residential development, live/work in the UK is almost always built on low value land. Typically this will be a brownfield employment site where live/work represents a better economic contribution to the area than low value old economy uses.

Many live/work schemes are also renovated old factories and workshops (hence the number with names like Paintworks, Jam Factory, Ironworks etc). Again, previously places of work not homes.

The value of live/work when sold is closer to residential (see right). But special costs and risks undertaken by developers make this a little more complicated in terms of profitability than some would claim.

Nevertheless, there can often be a significant uplift in land value from the old use to the live/work use. If this were not the case there would be few live/work developments.

The key opportunity for planners and public sector land owners is to ensure that as much of the uplift as possible (allowing for viability) is invested in the local economy.

Take land in Cornwall for example. An acre of employment land may be worth around £150,000. The same acre of residential land can be worth perhaps up to £1 million. If a live/work scheme raises the value of this acre to, say, £900,000, this uplift can be used to help cover costs of building a hub facility and some affordable live/work units on site.

Valuing live/work

Mainstream surveyors we have spoken to in researching this report told us that the most common way they value live/work is to add together the separate residential and commercial floorspace values as if the two were not part of one unit.

The reality we have found is that the retail value of live/work can be much closer to residential values, especially on well designed schemes with extra facilities such as hubs and with a reputation as a special place to be based.

It should be remembered that live/workers are often people who otherwise would be running their business from a residential property, without paying a lower amount for their work room. The home owners among the two million home-based businesses – the vast majority – have paid full residential prices for their workspaces.

On the other hand, where VAT/business rates and conditions of use apply, these factors may reduce live/work's sale price under residential.

A sensible assumption, in our view, is to assume a small discount from residential value for the whole property – perhaps 10 to 15%. But there is no set formula. An attractive live/work unit can have a special value to someone who does not want separate work premises and home.

Generally, the higher the quality of the live/work property, the greater its relative value set against residential nearby. As the market matures, the distinction may gradually disappear. In the USA we have discovered that live/work property can achieve a premium over residential because it enable buyers to avoid commuting costs and the need to buy a separate workspace.

Developers, when negotiating with land owners to buy land for live/work, will need to take into account how their bank will value the properties – especially in times of risk aversion following the sub-prime mortgage scandal and the cooling of the UK property market. So it cannot be assumed that they will be able to finance land purchase with the values mentioned above.

Mortgages and live/work

Planners creating policies on live/work should remember that the availability of residential mortgages will make a huge difference to a scheme's viability. This is because commercial mortgages are typically 2-3% higher than residential and run for 15 years not 25.

According to Nigel Denmeade of mortgage brokers John Charcol, which specialises in live/work loans, 'the lending industry has gradually started to ease restrictions on live/work mortgages. Today it is possible to get a good choice of loans for units with 40% or more workspace. But it is still very hard to get much choice if the workspace goes up to 50% or more.'

Many mainstream lenders have lent on live/work. But their experience is often in particular city areas. For this reason they are often reluctant to lend direct across the UK, to avoid the extra staff time costs that do not apply to standard residential property valuations etc. Some will make loan facilities available only through brokers who will deal with these complications on their behalf. Others have set complex conditions that have repercussions in areas such as taxation.

Importantly, there is a trend to liberalise live/work lending. Where until recently workspace proportion over 30% saw many lenders pull out, today there are many lending at well over 40%. It is to be hoped that the very few who consider 50% or more will be joined by others who recognise live/work as a special market in its own right.

However, planning policies which emphasise floorspace as a measure of genuine live/work are often poorly thought through. A policy of 50% workspace, for example, will currently today make live/work development almost impossible in that area. What surely matters most is the nature and value of the live/work business to the local economy, not the size of its office.

For more on this visit the mortgages section of www.liveworkhomes.co.uk

Using public sector land

Local authorities, regional development agencies, English Partnerships, government agencies and departments and housing associations already own sites where live/work quarters may be an appropriate use.

They are also, in their enabling role, able to negotiate land deals with owners and builders who are reluctant to build commercial premises on mixed use sites. For example, a planning authority could give consent to residential development on a large mixed use site as a trade off for taking ownership of the B1 part. This can then be packaged up for development as live/work by a suitable live/work developer with a strong track record.

Where the public sector owns land, it has a great deal more power to influence the quality of live/work development than relying merely on the planning process.

Here is an opportunity to create significant exemplar schemes. In our proposals for this report (see section 12) we suggest this approach as a 'next step' to creating a more mainstream live/work market.

This does not mean the exemplars should be idealistic public sector live/work 'projects' (eg all rented units aimed at struggling start-ups). Evidence from our case study visits and our previous work for the Housing Corporation (see report *Homes that Work* 2003) show this approach often fails.

However, by engaging innovative market developers to create vibrant live/work quarters with hub facilities and affordable units in the mix, schemes can be created which will provide lessons for the future. Developers can be required from the outset to offer significant services to the occupants and to track the experience of the live/workers for a specified number of years.

In our experience, based on the case study visits, many developers will be happy to consider this, because:

- evidence of work use will help them achieve approvals on future applications
- hub facilities can help sell a scheme to potential buyers.

The worst approach to public sector land assets is to just sell them to the highest bidder, whatever their intentions. This may increase coffers in the short term. But it may also leave the land used for purposes that do little to enhance the economy or the sustainability of the community. A well designed live/work scheme can, by contrast, deliver both.

Where the public sector owns a potential live/work site, a canny approach would be to agree some kind of overage (profit share) with developers rather than trying to maximise receipt from land sale at the outset.

It should also be noted that live/work developers do not usually buy employment sites valued at anything much higher than employment use. If a local authority seeks to sell employment land for closer to residential value to a live/work developer in the knowledge of what is intended, a huge opportunity will be lost. This is because:

- there is a strong risk that genuine live/work developers will not proceed, leaving less committed developers in the frame who may undermine live/work use or try to obtain residential permission later
- less money will be available in land value uplift to cross subsidise hub facilities, affordable live/work etc.

Demand and future demand

Demand for live/work units, we found in our case study visits, usually comes from those who already run a business from home. The reasons they gave us included:

- needing more space than they have at home for their business
- not wanting to lose the advantages of home-working when their business expands
- wanting to professionalise their workspace and business reputation
- wanting a greater separation of workspace and living space on the same premises, especially those with families
- the appeal of working near other like minded businesses, to counter the isolation of home working, collaborate and boost motivation
- shared facilities on live/work sites – eg hubs – adding to the appeal.

We believe that areas with high proportions of home-based businesses (which can be tracked by data showing self-employed people who work mainly from home) will usually have a larger potential market of live/work buyers in the local area.

In our research, we found very few examples of live/work schemes which did not have high demand. If a live/work scheme is attractively and intelligently designed and is in an area with obvious appeal to people who run businesses from home, demand is almost certainly going to be strong.

Where planners seek evidence of demand from a developer, it should be borne in mind that there is no easily available data. There are estate agents and commercial agents across the UK. There are barely any live/work agents.

Although it may be possible for developers to advertise locally and conduct surveys, this can be costly because the real appeal of a scheme requires designs, images and materials that show what is on offer. This level of detail is not usually expected of either housing or commercial development.

A better approach may be to seek qualitative evidence, for example interviews with potential buyers that show the kind of live/work they seek, combined with an analysis of home-based business data.

None of this addresses one important factor. Live/work can provide a magnet for inward investment from relocating businesses who may not be living nearby. In rural areas live/work premises can also make it easier for people to return to their area of origin and for younger skilled people and graduates to remain.

Future trends that may create extra live/work demand

The factors behind the demand for live/work in the UK seem likely to continue or accelerate. These include:

- rapidly improving technology/broadband making it easier to work and communicate from anywhere
- use of websites rather than physical premises as a 'location' from which to sell goods and services
- high house prices making it harder to afford separate workspace
- aversion to the cost of and time wasted by commuting
- work/life balance becoming more valued – eg being close to schools
- restricted land availability in the UK

Live/workers – next stage home workers

Live/work is property that is designed from the outset to offer workspace and home all in one unit or curtilage. In this sense it is a more professional type of property for small businesses than residential property.

The backdrop for the live/work market is the growth in home working in the UK. With most home workers (those who work mainly from home) being self-employed, this is the pool from which demand for live/work will largely emerge.

The 2001 census showed that:

- more than **two million** people in England worked mainly at/from home, **9.16%** of the working population
- in rural districts the proportion was higher at 11.79% – over 600,000 people
- over **one million** self-employed people in England were working from home
- 55% of self-employed were 'home workers'.

Given upward trends in more recent surveys, it is highly likely that the next census will show a further large rise in the number of home-based businesses. We are now closer to the next census than the last.

Labour Force Survey snapshots also show these figures rising year on year over the last five years, with home-working (including employees) up from about 2.9 million in 1999 to almost 3.3 million in the spring of 2004. 64% of home-based workers are self-employed.

The proportion of self-employed that are teleworkers has roughly doubled since 1997. It was estimated that there were 2.4 million teleworkers in spring 2005. In addition, most teleworkers (62%) are self-employed (Labour Market Trends, 2005).

The DTI's Annual Small Business Survey (ASBS) 2005 showed that 41% of all small and medium enterprises (SMEs) in the UK are now home-based. With the vast number of businesses classified as SME, this is clearly a significant figure. And it is one that looks set to grow. The relationship between homeworking and enterprise is now well established.

Within this context, it can be argued that demand for live/work, especially when the product becomes more familiar, is set to grow and grow.

Census 2001 snapshot	Self-employed home workers (number)	(% of total workforce)
England	1,053,100	4.69
Rural districts	371,800	6.88
Urban districts (excl London)	539,700	3.93
London	141,600	4.27

7 Live/work world – lessons from the USA

Live/work is a major part of the US property market, with schemes in many cities and most states. Creative live/work quarters and lofts are common, as are family live/work properties and live/work neighbourhoods with owners living above their offices and stores. How can the UK learn from this more mature market?

It is not commonly understood in the UK that the USA has a very large and growing live/work market. While we cannot assume that the live/work market here will grow in the same way and as rapidly, it is still useful to consider lessons from the country with the most mature live/work sector.

Learning is not all one way however. Americans often express admiration for the UK's policy approach to live/work, with the public sector playing its part in terms of planning, landowning and even development (housing associations). Certainly there is no national guidance on live/work in the USA, there are fewer examples of grant-funded hubs and there is no equivalent of the Live Work Network. There is also less acknowledgement of live/work's lower carbon footprint.

Market segments in the USA

As in the UK, live/work schemes vary enormously in style. Each state or even city has a different preferred approach to live/work, but there appear to be three main market strands:

Family live/work houses

Typically owned by family businesses, with the ground floor set aside for the business and two or more floors above for residential. In urban areas there may not be gardens. Whole streets and neighbourhoods are designated for this market. Uses are diverse, including owners living above retail premises and typical town centre services

Live/work lofts

Often large open plan spaces in renovated old warehouses or new buildings with live/workers on different floors. The market ranges from extremely 'upscale' live/work penthouses (eg film industry professionals overlooking the ocean in California) to neighbourhoods where use of buildings is changing as the area 'gentrifies' with artists and single people often the first to move in

Artist and creative clusters

Many towns and cities support live/work uses for old large buildings that are transformed into centres for new creative business quarters that help to redefine the area. A number of specialist not-for-profit developers are leading this market in cities right across the USA. For example Artspace and Place (see box on the WAV project in Ventura, page 67).

The distinctions between these categories are not always sharp. What is striking is how typical it is for live/work quarters to be supported and included in area masterplanning.

Nevertheless, the live/work concept is (or was) very much an American one. From the 1980s onwards, areas like Soho in New York were at the heart of a new national trend in warehouse conversion. 'Live/work lofts' arguably started here, with artists the first to see the potential of the area as it started its (in retrospect) rapid move up market as a desirable area.

On the west coast, pioneering architects such as Thomas Dolan of the Live/Work Institute (see www.live-work.com) led the creation of high quality live/work properties of various types around the Bay area in California.

So the USA has a live/work heritage and a large number of enterprising developers and architects creating a familiar name for live/work. Many cities and towns have put a great deal of effort into establishing live/work quarters and creative clusters.

To understand the scale of the US live/work market, a useful exercise is to set up a Google news alert for live/work units.

Whereas in the UK there may be one or two stories a week, the USA examples of new live/work schemes come in daily from a wide variety of states. For example, at the time of writing, a scheme at Mehana in Honolulu was being developed where it 'up to one-third of the 1,100 homes are expected to be live/work units'.

One way to judge the strength of the US live/work market is its response to the property market downturn. In interviews with live/work developers for this report, we found a surprisingly bullish response. 'If anything demand is growing,' said Zach Schneiderman, MD of LA-based developers Creative Environments.

'With economic uncertainty, there seems to be a strong appeal in combining workspace and home costs all in one, plus saving time and money by giving up the commute.'

What's similar, what's different?

In common with the UK market, there is a tendency to link the concept to loft living (especially in urban centres), creative industries and the perennial concern to make sure live/work units continue to be used as workplaces.

The context differs though. Land values are relatively lower than here for residential property, and closer to commercial values. There is simply more space to build.

The driver behind wanting a live/work unit for the US live/work buyer is much more about the lifestyle choice: improved work-life balance and what the Americans call 'zero commute'.

Typical US live/work markets

At the 'upscale' end of the live/work market, Zach Schneiderman of Creative Environments told us that 'for our buyers, the appeal is the chance to avoid commuting. It can take people an hour to get across LA to their office and the roads are often gridlocked. Live/workers are people who value time – for business and lifestyle reasons.'

A more common phenomenon than has not yet matured in the UK market is the family business live/work property. It is quite usual to find properties with the ground floor reserved for workspace (often with shop front type windows) and two or more floors of living space above.

In urban areas these will often have no garden of their own but shared open spaces. They will also often have well-designed loading bays and well thought through rear areas where vehicle access is allowed, encouraging safe pedestrian areas on the frontage. Considerable care is taken to insulate out noise transfer from work premises to home and vice versa.

Creative quarters and 'artspace'

A key ingredient in the US market is the live/work quarter bringing often creative or at least IT-savvy freelancers and small business people together in a neighbourhood. Live/work properties that are scattered among residential property are less likely to succeed.

Artspace owns more than 560 live/work units in 14 projects across the US, and a soon to be completed development in Buffalo, New York, will take that number well into the 600s. New developments in Fort Lauderdale and Seattle will tip it over the 700 mark before the end of the year.

Live/work planning in the USA

Many US cities have detailed building codes that include a coding for live/work property. Some adopt a 'flex code' that allows buildings to be used flexibly on a spectrum from, for example, business to residential.

It is not uncommon to see different floors of a building designated for different uses, some floors (typically ground) with some kind of flex use but others firmly residential only.

'Some codes restrict flex use to an ongoing mixed use,' explained masterplanner and architect David Sargent. 'In other words, there is a requirement to use the space for work as well as living.'

Artspace is a non-profit real estate developer for those in the visual arts, and includes retail and performance space alongside live/work in its portfolio. Sculptors, print makers, filmmakers, musicians, dancers and theatre people occupy their units, all of which are rental.

'It's clear that cities all around the country have realised that this is a phenomenon that exists and has real potential for economic development,' says Roy Close, Artspace's director of resource development.

'The standard economic model is you build an industrial park on the edge of town and hope you'll be able to persuade businesses to locate there,' he says. 'And they do – they move from the middle to the edge of town! What cities are discovering is that it makes much more sense to bring a bunch of artists into the centre who will make the neighbourhood fashionable. Non-artists then move in and over time the neighbourhood changes. It's known as the SoHo effect.'

This is what happened in the Minneapolis warehouse district in the 1970s, which is how Artspace came into existence. 'We were created by the Minneapolis Arts Commission, a rather low-key agency of the city government,' he says.

The warehouse district became a victim of its own success, at least as far as the artists were concerned. 'In the early 1970s it was a down at heel district where nobody really went – there was no reason to,' he says. 'But the space was available and cheap and it became a very hip place to be. And so naturally the restaurants moved in and so on. It's now the liveliest area of downtown Minneapolis. But there are very few artists left because they've been priced out of existence.'

It was this that led Artspace's board of directors to transform the organisation into a non-profit real estate developer. The first of their new projects opened in 1990 and they've been growing in scale ever since.

Live/work in Santa Barbara, California

Creative live/work for sale

Keeping space permanently affordable is never easy, but often it's the artists who cash in, says director of Boston-based ArtistLink, Jason Schupbach, whose organisation provides live/work units for sale to artists, designers and architects.

'Artists are just like anyone else,' he says. 'They want equity, and at some point they say "we're sitting on a goldmine here". They don't want to be poor their whole lives. But if you're doing rentals, like Artspace, then affordability is central because your market is people coming straight out of college.'

ArtistLink has very close links with Artspace and works with developers and state government to share best practice and lobby for policy change. Both organisations are members of LINC (Leveraging Investments in Creativity).

'A lot of towns think they can bring in artists and that will be the saviour of their downtown area,' says Schupbach. 'That's happened in many communities. But there's been a definite trend across the world – from Palermo to Buenos Aires to east London – of artists moving into a run-down neighbourhood and colonising it and it ending up super-gentrified. We very much focus on permanence of ownership so the artists don't get kicked out.'

It's important not just to think that, simply because you build a live/work artists' community, regeneration will surely follow, he warns. 'There's a lot of really interesting stuff that starts to happen. But you have to be very careful. You need to be sure there's a demand, really study your market. This is where market surveys, as Artspace do, are ideal – three people interested for every live/work unit you're going to build is a pretty good ratio.'

Live/work – America's heritage

Extract from *Homes that mean business* by Anthony Hallet

From colonial days, American entrepreneurs have launched and maintained business ventures in, under, and next to the family home. Shopkeepers lived above their shops and farmers lived on their farms.

Then came the industrial revolution, which redefined the workplace. Factories grew overnight and were too large to build in a founder's backyard.

Still, most ventures that grew into multinational conglomerates can trace their roots to the family homestead. Henry Ford, widely recognized for innovating 'assembly line' manufacturing, built his first motorized vehicle in a garage behind his home in 1896.

During the first half of the 20th century, American entrepreneurship slid. Two World Wars and the Great Depression left little room for new enterprise. Factory jobs and the economic Post-War boom provided attractive alternatives to the rigors and uncertainties that come with self-employment.

After World War Two, planned communities and zoning emerged. Suddenly, architects, community leaders, developers, and others were in essence saying: 'We don't want you operating a business in our neighborhood.' This thinking has had a tremendous negative impact on our economy.

Walt Disney started his business from home. More recently Michael Dell started building and selling computers from home while he was a biology student at the University of Texas. At age 18, he launched Dell Computer Corporation while still in college.

In 1974, two young electronics enthusiasts named Steve Jobs and Steve Wozniak started building desktop computers in the Jobs family garage. Their venture, Apple Computer, became an icon for the new live/work computer generation. There are countless other examples.

Artistlink has around 60 projects in development, 60-70% of which are live/work. However, it is still unsure of the long-term impact of the sub-prime mortgage crisis. 'We don't know how many will get going. Things are still adjusting right now,' he says.

'The important thing to remember about live/work is it's about saving money when you build,' he says. 'Don't overspend and keep things simple – very simple work area, very simple kitchen. People like a blank slate that they can adapt.'

What's the appeal?

US live/work expert Anthony Hallet, author of *Homes that mean business* (download from www.liveworknet.com), suggested at a previous Live Work Network conference that four factors lie behind live/work's appeal in the USA:

Live/work helps entrepreneurs: Foregoing the cost of maintaining separate home and office facilities frees up capital for business expenses. Removing the commute gives the owner more time and flexibility to attend to business matters. It can often save other costs, such as child care.

Live/work clusters are economic development engines: A small cluster of 25 units in a community not only means 25 new families have moved in, it also means that 25 new businesses have opened. If each hires only a few people over the course of a year, that adds up to 100 new jobs. Plus they all spend more in the local neighbourhood.

Live/work is good for the environment. More than one million new businesses are launched in American homes each year. That's one million less daily automobile commutes. It's also one million less duplicated spaces, including the financial and environmental cost of heating, cooling, electricity, water, and other utilities.

Live/work is good for the neighbourhood. Many housing developments turn to ghost towns during the day while adults are at the office and kids are at school. Live/work quarters are active all day long. This can keep the neighbourhood safer – more eyes are on the streets during the day.

US websites to visit

www.live-work.com

www.creativenvironments.net

www.placeonline.us

www.artspaceusa.org/neighborhood

Case study: WAV project, Ventura, California

Chris Velasco is president of Place, a specialist non-profit developer of artist live/work clusters. His schemes, while formerly working with live/work developers Artspace, have been developed as far afield as Minneapolis, Texas, Pittsburgh and Iowa.

Velasco's background is in helping cities – especially those seeking to reinvent themselves for the modern economy – to create visible change buildings, often landmark or disused buildings converted into live/work blocks aimed at the creative sector. 'The live/work schemes we build help to redefine the nature of the neighbourhood,' he says. 'It's an environmentally friendly way to land a creative cluster into an urban area, attracting not only those whose work is creative but potentially opening new markets for those who want to buy their services or products.'

Place is currently working with the city of Ventura, around a one-hour drive north of Los Angeles, to develop a new live/work quarter. 'We are using this scheme to breathe life into a relatively rundown part of the city and to reinforce the new creative identity being nurtured on Main Street,' says Elena Brokaw, director of community services at Ventura City Council.

The scheme is known as WAV (Working Artists Ventura), pronounced 'wave' to reflect the coastal city's surfing heritage. 'We are using live/work as a way to firm up the reputation of downtown Ventura as a cultural district,' says city manager Rick Cole.

Already the area, which with its thrift shops and retro cafés has echoes of the 1950s, is seeing new galleries and gourmet restaurants breathe life into the city centre, countering the shopping malls that dominate the outskirts.

WAV will offer affordable living and work space for over a hundred artists of every kind – painters, sculptors, dancers, poets, musicians, filmmakers and more. 'The artists will bring to life a theatre/gallery with performances, art openings and neighbourhood gatherings,' says Chris Velasco. 'Arts-friendly small businesses including coffee houses, galleries, cafes, wine bars and jazz clubs will draw foot traffic and contribute to the vitality of the community.'

Supportive housing services will be provided to those at the lowest end of the income scale while market-rate condominiums with ocean views serve higher-income households.

'WAV represents the vanguard of innovative sustainable cultural facilities,' says Velasco. 'The entire community will be designed and built to the highest standards of green technology, including recycled materials, water and energy conservation, and renewable power from the sun.'

Although well known as a surfing hotspot, it is hoped the new ingredients will also add to Ventura's old fashioned charm.

8 Planning and development – the current context

The UK planning system is keen to promote more sustainable communities. Encouraging mixed use development is key. But live/work as an innovative form of land use does not sit comfortably in the system, and there is a lack of policy to guide development decisions. Here we examine the current and emerging policy context, and look at possible ways forward

Live/work development should press all the right buttons in current planning thinking. It is about mixed use, travel reduction, vital communities, reduced resource consumption and promoting enterprise. But in a planning system still substantially based on separating employment and housing, it poses numerous challenges.

Up to now, live/work development has been seen as a kind of 'problem child' in the planning system. The hybrid nature of live/work means that it is treated as an exception that requires special measures to constrain it from slipping between use classes in the way it is occupied.

Live/work has not yet become a mainstream or regular kind of development. For this to happen, there probably needs to be a rethink on the way development is thought about as a whole. This report recommends some of the directions such a rethink might take (see section 12).

National government has issued guidance and launched initiatives that imply a role for live/work, but until very recently has not explicitly mentioned it. Some local planning authorities have worked up strategic policies based on their experience and assumptions. Others have relied on ad hoc approaches as they respond to planning applications and appeals. As a result, coherent policy has been slow to develop.

National policies and initiatives

Despite the lack of planning policy for live/work and other home-based work, there has been a concerted drive to promote home-based working as an element of flexible working, mainly to promote work-life balance. Government campaigns in this direction have focused primarily on employees.

Yet the evidence shows that most people (64%) who mainly work from home are not employees but are running businesses. This is a growing trend. The implications of this for planning have not been systematically thought through.

One planning area where home-based working is now being promoted is in transportation planning. The government's *Smarter Choices* sustainable travel campaign (DfT 2005) recognises home-based working and land use choices as key elements of travel demand management. Local authorities are increasingly incorporating sustainable travel in their local transport plans. In practice, however, nearly all the practical focus is on public transport and road pricing, rather than reducing the need to travel through creative approaches to land use.

The use that dare not speak its name

For the past ten years or so, national land use and transport planning guidance has been edging towards support for integrating work and residential uses in the same premises. But until draft PPS4 in 2008 there was no mention of live/work by name. 'Homeworking' and 'teleworking' made their way into transport and rural policies in the 1990s, as possibly beneficial to transport reduction and the rural economy. The former departments for trade and industry and for employment were strong advocates of home-based working, publishing guides and case studies. Their successors have taken this on.

Transport reduction, mixed use, competitiveness and benefits of sustainable communities are to be found in recent revised or draft planning documents – notably PPS1 on sustainable development (especially the draft supplement on climate change) and PPG3 on housing. But still national policy baulks at advocating *mixed use in one building*, as opposed to neighbouring different uses.

What this means is that when developers of live/work and people opposed to particular developments meet in a planning context, each side is straining to interpret the generalised guidance, like scholars squeezing the last ounce of meaning from a sacred text. Clearer national guidance is surely required.

EMERGING NATIONAL PLANNING POLICY

Live/work – a *sui generis* use

The first explicit mention of live/work in government planning guidance came in circular 03/2005 (on change of use of land and buildings). This describes live/work as a *sui generis* use – a description that seems entirely appropriate. It's not residential, or employment: it's both and 'of its own type'.

Live/work in the Barker review

Live/work units are featured in the recent review of land use planning by Kate Barker for HM Treasury. She recommends: 'a marked reduction in the extent to which sites are designated for single or restricted use classes – the need to ensure provision for live/work units is relevant in this context' (recommendation 6).

The review's **analysis of a more responsive planning system** also states: 'Technological innovation and globalisation... implies including an emphasis on the changing nature of the economy and employment. Planning needs to take better account of the changing economy... Increased live/work uses mean that the boundaries between housing and employment use classes are now blurred.' Barker's wider call for planners to take a positive approach to changes of use was adopted in the 2007 Planning White Paper.

Live/work in PPS4

The new draft Planning Policy Statement 4 (PPS4) also encourages flexibility on allocating uses to employment sites, and adapting to innovation. It specifically mentions live/work development, calling on planning authorities to 'take account of the changing spatial working patterns that advances in information and communication technologies allow, such as live/work units'.

Draft PPS4 also notes in its evidence base that the *DTI Annual Small Business Survey*, published in 2007, 'showed that 41% of all businesses are now home-based... The proposed policy recognises that new ways of working and changes in technology have an impact on spatial planning and this **should be factored into plan making.**'

Eco-towns and new settlements

The government's prospectus for the development of 'eco-towns' as flagship developments for low carbon living explicitly calls for live/work as a key ingredient for eco-towns: 'encouraging working from home through live/work units or in local resource centres, supported by wi-fi and other IT networks'.

Increasingly now, live/work is also being included in outline plans for new settlements – not only eco-towns – such as those at Harlow North, Thames Gateway and Northstowe.

Rural and urban live/work policy

Live/work is also seen as potentially integral to rural economic development. One of the main terms of reference of Matthew Taylor MP's review for the prime minister on sustaining the rural economy is: 'investigating the potential for increasing the provision of live/work space within rural communities'. National policy guidance as outlined in the Urban White Paper also states that a 'flexible approach to live/work units' should be encouraged.

REGIONAL STRATEGIES

Little planning policy exists at regional level that specifically mentions live/work – though as regional spatial strategies are reviewed, more seems to be on the way.

The draft south west spatial strategy includes several references to live/work, including in the policy SD4 on sustainable communities: 'Providing homes which are adaptable to the changing needs of individuals and provide an opportunity for live/work space'. The supporting text on small rural business includes: 'To reduce the need to travel, it will also be important for new homes to be built with live/work space to enable home working'.

The draft south east spatial strategy also includes live/work in its policy on ICT and changing working practices: 'New technologies and new forms of working practices may prompt demand for different types of premises.' It lists live/work units alongside telecottages and adaptable office and home spaces.

Most RDAs are involved in initiatives supporting homeworking or 'teleworking'. The involvement of three RDAs in this project indicates a significant level of interest. In strategic thinking on new spaces for working, the regions appear to be leading the way.

In general, however, we have found a greater level of support for live/work in the economic development parts of the public sector than among planners. A typical example is the draft West Midlands regional economic strategy, which has a policy for 'promoting live/work developments where appropriate as a contribution towards the development of sustainable rural communities'.

London policy

The current London Plan also has explicit policy on live/work. This sees live/work as a key ingredient for thriving and sustainable suburbs and cultural quarters: 'There may be growing opportunities for local activities, including homeworking and live/work spaces.'

'Designation, development and management of cultural quarters can help address the need for affordable workspace for creative industries, provide flexible live/work space, encourage clusters of activity and provide a trigger for local regeneration.'

The Greater London Authority has also produced a *Tomorrow's Suburbs best practice guide* which sees a key role for live/work in bringing employment opportunities closer to residential areas and integrating transport and development.

LOCAL POLICIES ON LIVE/WORK

The main challenge for local planners, perhaps, is live/work's unfamiliarity. The concept is still fairly new, and a hybrid form of development can seem hard to process using existing policies and tools – planning conditions, legal agreements, enforcement procedures etc.

Efforts to create both supportive and constraining policy at local level are also not helped by the lack of clarity in policy at the national level.

As a result, those authorities that have developed live/work policies and guidance have a very wide range of approaches, each in effect creating their **own definitions** of live/work. While generally giving encouragement, most policies restrict the location and form of live/work, restrict the nature of the live/work businesses and in some cases restrict the type of people who can occupy them (see box page 72).

Another current complication is the move towards local development frameworks. Several authorities that previously had policies on live/work no longer have one for the time being. Others who were hoping to introduce policies and supplementary guidance have found that this is delayed.

In the meantime, as developers come forward with live/work proposals, local planners and committee members have to make decisions with reference to more general policies at national or regional level, and general principles in other guidance (eg about mixed use, travel reduction, etc).

Local live/work planning policy has mostly been found in London boroughs – for example Islington, Tower Hamlets, Newham, Merton, Richmond, Lewisham, Southwark, Hillingdon and Camden. There are area-specific policies in Sheffield and Birmingham, and Carrick has policy and guidance in the pipeline.

Camden's UDP policy E4 is a good example of how live/work gets caught between the rock of residential and the hard place of employment in planning policies: 'The Council will grant planning permission for live/work developments provided that they will not result in the loss of any permanent residential unit or in the loss of sites in office, industry or warehouse use where there is potential for that use to continue.'

The supporting text explains: 'Live/work units can provide a valuable contribution to the range of business premises available and may enable currently vacant and financially non-viable sites to return to employment use. However, the Council will not normally permit the loss of sites that it considers can be retained in wholly business use.'

The policy may be well intentioned. But it is essentially about finding a niche for the problem child, rather than looking for ways in to combine living and working in vibrant communities.

Some local authorities have incorporated live/work in area-specific policies. These include Bermondsey Street in Southwark, Barking town centre, Birmingham's jewellery quarter and Sheffield's cultural quarter.

The Barking town centre plan is enthusiastic for live/work development as a way to restore vitality. It 'encourages the development of live/work units that support starter businesses attracting uses including art studios, home-craft industries, architectural, design and advertising offices, multi-media uses including music, film, computer and video games, fashion and publishing… Proposed live/work units should provide low cost, small workshops or office floorspaces with an integral living accommodation'.

This approach recognises the potential of live/work to regenerate an area with new enterprise, and also the need for affordability (an issue addressed further in section 9).

However, it still tries to identify a geographical niche where live/work may work some magic. This raises the question – if here, why not elsewhere?

Southwark's approach to Bermondsey Street, however, takes a different tack. Its supplementary guidance wanted to exclude inappropriate occupations such as artists, photographers and writers 'which do not create employment and are uses which could often take place within a dwelling house. [Such] activity is not in the spirit of live/work use and should not be encouraged'.

The focus here is on this council's own definition of 'genuine' live/work. Ruling out self-employed/sole traders in the cultural industries referred to, however, seems highly questionable in the light of well-regarded live/work developments in the UK, some of which are in our case studies in this report.

A common factor that these policies struggle with is the **relationship of floorspace to job creation** in strategic planning. But in the modern economy, an industrial use that is given over to warehousing/distribution (for example) may well create relatively few jobs on a site – certainly few with high skills and pay. A successful live/work cluster and mixed commercial development would probably create significantly more, and enhance the quality of the area as well.

Hillingdon has produced a supplementary planning document (SPD) on live/work, a rare example of a detailed document as part of a local development framework. This aims to:

- 'encourage integrated and affordable small business and residential development in the borough
- promote partnership between key stakeholders and businesses in the development of live/work spaces
- promote well-designed and enforceable live/work development in suitable locations
- contribute towards the sustainability and economic objectives of the borough.'

The SPD sees live/work as a creative response to the lack of demand for employment land, brownfield site opportunities, town centre regeneration and reduced need to travel. It also tackles the issue of affordable housing: 'Live/work developments should include a proportion of affordable live/work units to be provided on major applications in line with the existing affordable housing ratios.'

This approach aims to prevent less scrupulous developers from using live/work as a way to avoid affordable housing requirements.

Despite the overall positive and proactive approach, the Hillingdon SPD then becomes quite prescriptive about locations and types of business. It also says that the residential element should not be occupied at all by families.

Mixed messages on live/work

It is significant that the concept of live/work is being supported by ministers and in new national initiatives at precisely the same time when policy for live/work is being dropped from local development frameworks.

It is also instructive that at regional and national level, live/work is being envisaged as being appropriate in the widest range of settings. This contrasts with the 'marginal niche' approach in some early local authority planning policy.

In summary, the situation can be summed up as: excitement about live/work's potential, promoting it for new development, an absence of clear policy, and a lack of clarity about what it actually is.

Boxing in live/work

The following are examples of restrictions to be found in some local authority planning policies:

- limiting areas where live/work development is possible – ruling out allocated employment or industrial sites on the one hand and residential uses on the other, leaving some marginal sites and regeneration areas as the main options
- setting minimum dimensions for business floorspace – eg 50 m^2
- setting minimum ratios for business floorspace to residential – ranging from 35% to 65% for the business element
- specifying minimum floor loading tolerances, high ceilings, double (two metre wide) doors, and higher than standard soundproofing (regardless of the nature of the business use)
- restricting business uses to B1 use class
- permitting change to wholly business use, but if that happens cannot at any future time revert to live/work
- specifying that living accommodation cannot be on the ground floor
- specifying that living accommodation must have no more than two bedrooms
- discouraging family occupation and in one case (Hillingdon) setting out a standard condition for live/work saying: 'The premises shall not be occupied by children between the ages of 12 months and 16 years of age'.

These type of restrictive policies stem from genuine concerns about the possibility of the whole use becoming residential. But they can also be highly impractical, for example making mortgages almost impossible to obtain.

Planning approaches to avoid on live/work

Evidence suggest that the following pitfalls may hinder the growth of genuine live/work:

Policy

- applying residential or employment land policies to live/work, despite it being a hybrid use
- defining live/work at local authority level with little research into the reality of live/work businesses
- treating live/work as a sub-set of residential homeworking, prioritising numbers of jobs and employment floorspace above sustaining high value enterprise
- taking a narrow approach to job creation – failing to recognise that micro businesses often grow by subcontracting/partnering, not employing more staff.

Development control

- placing too much emphasis on workspace proportions rather than enterprise impact
- applying conditions of use without being clear about how they might realistically be enforced
- applying conditions of use without taking into account the potential effects on business viability
- applying conditions that are not viable for finance/mortgages, making units unsellable.

Live/work or homeworking?

Much discussion about live/work conflates and confuses it with homeworking. Homeworking – as opposed to live/work – strays into various regulatory grey areas, but is essentially allowed by the planning system when it is ancillary to residential use. It is important for planning purposes to clarify the distinction between live/work and the more widespread ancillary homeworking. Homeworking operates within the residential use class, and does not require planning permission. But as a combined business/residential use, live/work requires a specific planning permission as a *sui generis* development.

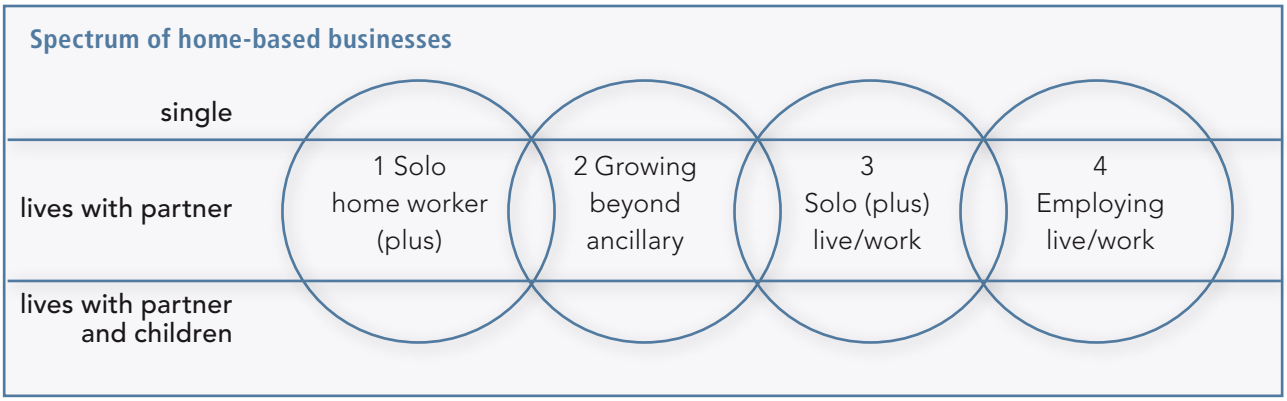
Conceptually, there is perhaps a grey area as owners of larger homes may have an office or studio within the house or in the grounds that may turn out to be larger than many purpose-built live/work units. Unlike live/work, these parts of the home may flex in and out of work use without the planning system being interested. That is, unless the business becomes the dominant use of the premises or starts to have an impact on local amenity (in practice somewhat rare).

The other key difference is that live/work is about enterprise. Homeworking may involve running a business, but an increasing number of home workers are employees working at home some of the week.

So supporting live/work through planning policy should have a strong focus on new and existing small businesses. Live/work as a step-up or a start-up proposition is a cost-effective solution for a wide section of the small business market. Restricting the supply through arbitrary definitions cannot be the way forward.

Existing policy highlights that there is on the one hand a **spectrum** of home-based enterprise and on the other a range of land use circumstances in which these occur. There is also a range of domestic/family circumstances that apply, which often changes over time.

Overleaf is a spectrum of home-based enterprise, showing the range of domestic circumstances that may apply to the home worker or live/worker (with a table explaining the categories).



	Category	Explanation
1	Solo home worker	• simple working from home, most of the time on one's own • does not need planning permission – clearly ancillary use
1a	Solo home worker plus	• as above, but may involve some other people at times – visiting clients, or collaborators in projects, or part-time staff (eg clerical help) • use still ancillary, does not need planning permission
2	Growing beyond ancillary	• as 'home worker plus', but the scale of the enterprise is growing, either by reasons of frequent visits from the public, or employment of additional staff, and/or amount of space in home being used • planning permission becomes an issue
3	Solo (plus) live/work	• the business may be one person or a live/working couple, but the nature of the premises and the planning permission allows/anticipates a higher level of business activity than homeworking, including possible use of the business unit by other staff or collaborators • requires planning permission
4	Employing live/work	• a small enterprise employing one or more staff, with the proprietor(s) also occupying the domestic part of the unit • requires planning permission

Families and live/work

The policies of London boroughs such as Merton, Southwark and Hillingdon (though otherwise supportive) see live/work as unsuitable for families. Planners are here seeking to promote a business-oriented environment by creating places that are child-unfriendly and do not have a strong residential character.

This suggests an absurd scenario: couples forced to give up both their home and their business premises if they dare to have a child. The policy cited from Hillingdon probably also contravenes human rights legislation, and has no hope of being enforceable. This raises a wider question: is it appropriate to place a rigid divide between children and the workplace? Or should communities enable children to grow up close to their parents work?

Need for flexibility

Generally, home-based businesses are likely to slide across the spectrum between categories 1 and 2 and between categories 3 and 4. On occasion, a successful business outgrowing ancillary homeworking may be granted planning permission, and become a de facto (perhaps temporary) live/work operation. In some cases, it may be better accommodated in a designed-for-purpose live/work unit.

The most appropriate policy is one that recognises the range of homeworking and live/work phenomena. It should allow for a degree of flexibility, while ensuring continued business use. The appropriate ingredients of such a policy are outlined in our recommendations, in section 12.

9 Planning and development – in practice

Genuine live/work developers and innovative planners both want the same thing: high demand sustainable live/work schemes with ongoing business use. But each side can often misinterpret the other's concerns in the process. How can both planners and developers learn from each other to improve the UK live/work market?

Developing tomorrow's property in the context of the planning system as it is today brings up many issues and challenges. In this section we explore through a series of case studies lessons that are being learned by both developers and planners.

On the one hand, we highlight what motivates developers of live/work and what they want from the planning system. On the other hand, and in the context of the findings in section 5, we examine what planners want to see from developers and from live/work.

Bristol Paintworks

Designing a business community at a human scale

Ashley Nicholson, director of Verve Property, is the developer of Bristol Paintworks, the innovative mixed-use development featured in section 4.

'For us, it's all about the **community**,' says Nicholson. 'We're interested in running a genuine mixed-use community. ' I get very annoyed when I see the thoughtlessness that goes into most new housing. If you look at what works, it's mostly places that have grown organically, with a mix of people and a mix of uses. I'm very much trying to **replicate what works historically**, with a mix of uses and income levels. But house builders don't really get into that.

'You do get developments where there are corporate office blocks and then round the corner there is residential, but usually there's nothing to knit them together socially as a community. So we're trying work on the smaller human scale.

'The advantage of live/work is to **engage with the human element of sustainability**. We want our schemes to have a sense of value to them. We are less focused on particular eco technologies, and take a pragmatic approach to things that we know make a difference. For instance, we heavily insulate our buildings and capture sunlight and we encourage recycling, car clubs, internet facilities – pragmatic sustainable initiatives. But it's human activity, not technology, that is the key to sustainability. If you can get people to live and work at the same location it cuts down travel and makes life there more affordable.'

There is no local planning policy on live/work at Bristol, and at first the planners were unfamiliar with the concept and therefore wary.

'At first down at Paintworks, the planners didn't want to give us residential. But we wanted a business community, not a business park that only operates 9-5. So we went for live/work, as that provides the social oversight and fits well with the site being sustainable. The planners reacted suspiciously, fearing back door residential. We helped them to become more confident about it, by showing them that we were designing **workspaces that people can live in**.

'If you design live/work as residential, then they are more likely to end up as just residential. But if you design them as workspaces, they will be occupied as that.

'So the accommodation has got to be more work than live in the design. But they've got to be capable of not being penalised by being classed as business. If planners specify that it's got to be 60% work and 40% residential, you'll end up paying VAT on 60% of the purchase price. That makes it very onerous.

'What is sensible is to give it a **more flexible planning permission but design it as a workspace**. Otherwise what's happening is an artificial restriction.

'For me the real solution is one of design. If you put on restrictions, you have problems of enforcing them. And it can make them unmortgageable and you end up with punitive business rates. If you can get past only being able to get an 80% mortgage and paying the VAT, then you get caught on the business rates. £3,000 per year is a non-starter for many.

'So if people are going in on the basis of affordability, then you penalise the people you are trying to help.

'Now we're trying to introduce smaller buildings and make it more affordable. In Phase 3 [new live/work] we're trying to recreate an old mews style, each unit having a workshop downstairs. They have workspace of about 500 ft^2, which is great for a lot of uses.

'It's a very pleasant environment, but essentially it's a business one. There's little risk of them becoming residential: the tendency has been to slide towards work rather than live. In fact most of the genuine live/work you find is quite industrial in design.'

Nicholson thinks there is definitely a market for live/work, but how big is it?

'It's very difficult to quantify. People say, 'I knew what I wanted, but wasn't really sure what it looked like or how it fitted together'. Until they can actually see it and walk around it, they don't really know what they are looking for.

'Other people are more driven by affordability. They are at the bottom end of the residential market.'

Once the Bristol planners were on board with the concept, Nicholson says they were very supportive. Building standards posed a greater problem.

'Developers are being forced to up the spec all the time. Here that added about £15,000 per unit without much additional value. At the bottom of the market, which is what we are aiming for, you can't pass on the additional costs, so that's why developers usually prefer to build executive homes.'

He feels that the government and local planning authorities need to work harder to learn about live/work. 'They need to understand why people actually want to live and work in the same place, and how this works.'

Planning and developing live/work in Cornwall

Carrick district council in Cornwall has seen a number of live/work applications approved in recent months. One more ambitious scheme going through its planning paces is the former film studios at scenic St Agnes.

At the time of writing the application had just been turned down by the committee, despite the recommendation of officers to approve.

Karl Roberts, head of development services, feels that live/work can often be an appropriate solution for a district like Carrick, both in the rural and urban areas.

According to him, the proposal at St Agnes fell because the committee wasn't convinced by the business case put forward, and was concerned whether business use would continue. Local objections focused on its being seen as an overdevelopment of the site in a sensitive area, a fear that it might be a back door to 'yuppie housing', and a desire by some to see the site used for affordable housing.

He feels two things in particular would help with live/work applications: 'The first thing is having a clearer picture from government. Draft PPS4 is a first step, but a draft doesn't carry any weight. The second thing is having other schemes that people can visit and say "now I understand what a live/work scheme is". Words are fine, but people always like to see for themselves.'

St Agnes live/work – the developer viewpoint

The St Agnes proposal is an imaginative scheme to redevelop the site of the former South West Film Studios. The development seeks to create a mixed use development of film studios, offices and 36 live/work units. A hub for use by live/workers and local people was part of the proposal.

Planning consultant Paul Fong, of Hunter Page Planning, has worked on the St Agnes project for the developer. HPP has been the midwife of numerous successful live/work applications around the country. According to Fong, 'the St Agnes proposal has all the trappings of a fantastic scheme, so we certainly won't give up on it.

'There were worries it might turn into a pure residential development, though there were belt and braces conditions to prevent that happening. The planning officer said the conditions were enforceable because the design is right. There were also worries over demand, despite evidence in a strong background report and from a local agent.

'The site was clearly suitable for live/work, rather than for yet more tourist-focused development. The client wanted uses that would relate to and strengthen the use of the film studios there. Live/work is a sustainable employment use that sits very comfortably with the studios, so we proceeded upon that line with live/work as a significant component of mixed use.

'We responded to local discussions, and made modifications to the design. We also negotiated contributions for affordable live/work and community benefits. Part of the project is to have community facilities – and we agreed a hub would be up and running from the outset. That's the right thing to do both for the live/work occupiers and the wider community.'

He thinks more explicit policy is a must. 'PPS4 is a start. More explicit policy would have been so helpful at St Agnes. A different use class would have been most helpful. Then officers could have said it was, say, Class C8. That could have had a different impact on councillors.'

'More and more developers are coming to us,' Fong says. 'Live/work is becoming a recognised way forward in terms of sustainability. But moving it forward is difficult because of a lack of understanding.'

'On the live/work side of things, I don't think it is anything in particular that developers are doing wrong,' says Roberts. 'It's more about going for best practice and showing what different schemes have delivered. Developers who can do this will fare better.'

Carrick is one authority that was in the process of developing a specific policy for live/work when its proposed core strategy was kicked into touch by a government inspector. 'We're in a bit of a policy vacuum at the moment,' says Roberts. But he believes that live/work will play a future part in the policy framework.

'I think live/work will play an ever increasing role, rather than continuing the traditional split with employment in one place and housing in the other. I think the issues are more around practical ways to retain genuine live/work use.

'I think live/work can work in most places. If you look at the number of employees per Cornish business, once you take out the public sector and the docks, it's about five employees per business. In principle it works quite well for Cornwall, it's just a question of getting more schemes off the ground.'

Live/work for regeneration and employment – Spaceworks

Alex Shaw of Spaceworks has been involved in live/work developments for more than a decade. He first became interested in the concept and practice as resident of a live/work loft in New York. Shaw's developments range from one in Clerkenwell in the 1990s, a mixed use development combining residential, commercial and live/work, to the recently approved Hangar 45 in rural Wiltshire.

His developments also include one of the first consents for live/work in Hackney. At the time this was new to the planners there, and they took up the idea with enthusiasm. According to Shaw, 'not only have all the live/work units continued in dual use. Several of our residential lofts also combine living and working. It's because they are large enough – around 2,000 ft^2. People want flexible spaces, great living spaces that are also great to work in and that they can adapt to their needs.'

It's well known that the planners have become less supportive in Hackney, reversing their earlier enthusiasm as they feared developers trying to get residential development by the back door.

'The three main factors in securing continued commercial use,' says Shaw, 'are the building's appearance, its location, and the design of the units. Spaceworks specialises in revitalising industrial land and mixing uses in former industrial buildings.'

For Spaceworks, one of the keys to persuading planners of the viability of live/work projects is to be able to point to a track record of developing bona fide live/work where both live and work uses have continued.

'I know that local councils can be worried about loss of jobs in the neighbourhood and creating apparently "yuppie homes" that alter the character of the area. But planning policies tend to create isolated ghettos where people either live or work, and you don't get the kind of village feeling where people live and work in their own community.'

The main challenges Alex Shaw has found in developing live/work are:

- finding suitable sites at the right value – this means industrial land in practice
- getting all the stakeholders on board can be a struggle
- for many people, it's all still very new – so there's a lot of education needed every time.

And the main thing that local and national government can do? 'Provide much clearer policies.'

Learning from experience

There are exemplary live/work schemes around, many of which are highlighted in this report. But this is still a relatively novel form of land use in the UK. Two developers with many years of developing live/work behind them are Alex Shaw (Spaceworks) and Jeff Lowe (Havelock Walk).

Both agree with Verve's Ashley Nicholson that:

- live/work is about creating communities – or rather allowing them to evolve
- design is the key to enabling lasting work use.

Jeff Lowe – Havelock Walk and more

Jeff Lowe's position at Havelock Walk to some extent sets him aside from the other residents. He's also a live/work developer. As such he has bought or encouraged others to buy into Havelock Walk as and when properties have come onto the market. But as an artist he has frequently prioritised aesthetics and floor space over profit.

Given planning consent to convert his current unit into two live/work units, he opted for a single unit. 'From a financial perspective this place would have been more viable as two but it works beautifully as one.' Lowe's respect for Lewisham's historic buildings and his evident gift for transforming even 'concrete boxes' like No 6 Havelock Walk have won him many fans in the council's planning department.

Lowe is now putting the finishing touches to a small-scale live/work development in Brockley that the planners alerted him to after earlier throwing out another developer's application to demolish the building and build flats.

'Glynde House had been owned by one family for a long time, using it as a warehouse to repackage bulk pharmaceuticals into smaller packages,' explains Lowe. The colour schemes and use of architectural salvage are distinctively 'Jeff Lowe' but the floor plans also reflect his personal preferences.

'It's the ceiling height that does it for me – I like the way the light comes down into the work area. I suppose I envisaged if I was here I'd be working on prints.'

Lowe voices frustration with what he sees as the sometimes skewed priorities of planning authorities: 'There is little point saying the fourth or fifth floor of a building will be live/work – it won't.' Likewise if a unit has just 600ft^2 of floor space overall, that's not live/work, he says, it's a flat.

'It would be far better for the council to say "where you have live/work make sure it's genuine" and to be more relaxed about other floors. Maybe higher floors can be purely residential or can allow softer work like design.'

The key is Lowe's understanding of why a building would appeal to a creative business. 'I think it's partly coming at it from the angle of an artist. I know what I develop many people would not like, but artists definitely would. A scheme has to make sense financially. But if I was going to make another £100,000 by doing it in a way I don't want to, I wouldn't do it,' he says. 'I think even if there was a recession my properties would sell because there's something of interest about all of them.'

Ross-on-Wye market town initiative

At Ross-on-Wye, the market town initiative has prioritised a live/work development as a key project. Its work is supported by the Rural Regeneration Zone (run by the Advantage West Midlands RDA).

An emerging 10 hectare piece of employment land, recently included in the council's development plan and given consent for business use, is being considered for a mix of business uses with a live/work quarter and hub facility in the first phase. The proposal, which is being worked up in a supplementary development plan, is for a 40 unit live/work cluster on around one hectare to help lever in high quality, environmentally sensitive B1 workspace as neighbours on a substantial part of the remainder of the site.

John Passmore, coordinator of the market town initiative, comments: 'We are still in the planning process on this. But as the landowner, Herefordshire County Council has a great opportunity to control the quality of live/work schemes it wants here and the choice of developer.'

Land value will be a key part of the negotiations. 'We will not just look to highest value. It is what the scheme can bring to the community that matters too, and the impact a live/work scheme can have in raising the value of and aspiration for the majority of the site remaining.' Planning gain benefits being prioritised include a hub facility in community ownership and a number of affordable live/work units – including some allocated for nomination by local colleges for self employed graduates.

'This whole approach,' says Passmore, 'is very much what Kate Barker was calling for in recommending live/work on employment land in her land use review. It is also in keeping with the call in PPS4 for imaginative approaches to employment use.'

The lesson for other local authorities and RDAs, he believes, is this: 'If you want exemplar live/work schemes, don't wait for someone to magic one up near you. Use your own land ownership and the planning system to create them.'

Support for live/work at Lewisham – policy or not

Planners at Lewisham regard live/work at Havelock Walk as a success. The council's now-expired UDP policy was generally favourable. However it asked the secretary of state to delete the policy because of concerns about high live/work property values and the practical challenges of enforcing work use.

Lewisham is not too concerned about the partial policy vacuum. It remains confident about securing genuine live/work using other policies and appropriate conditions. Its new local development framework – like so many others – is strong on mixed-use, developing small businesses, and keeping more local people working in the borough (rather than commuting into central London). There is also a strong emphasis on developing 'creative industries clusters' in the borough. It seems the policy may have expired, but the support certainly remains for more live/work development.

Housing associations as live/work developers

Planners are often more positive about live/work that is managed by a housing association. The report *Homes that Work*, prepared by Live Work Network for the Housing Corporation, provides insights into this area.

The advantage from a planning point of view is that a housing association is in a good position to control work use of live/work units through tenure. Several housing associations have now embraced live/work development, eg Places for People, Peabody, Solon and Midland Heart. Our case study of the latter's scheme at Burslem in Stoke (opposite, and also see section 4) illustrates why associations are moving into this field.

Affordable live/work – Burslem

'We already had one successful scheme in Coventry, so we were keen to recreate live/work success in another area,' says John Webbe, regeneration manager with Midland Heart. 'The project allowed us to regenerate an old building, bring jobs to Stoke-On-Trent, and provide somewhere affordable to live and work at the same time.

'And as a social housing provider, we had experience in accessing a range of grants. We originally spotted the building in Burslem for office use, but soon realised it was the perfect location for a live/work scheme.

'The building was in a very poor state, and had been on the market for many years. It was formerly three shops and the upper floors were used as storage for many years rather than accommodation. Queen Street was the first live/work scheme in the area and it was hard to establish demand for something as new and unique as this. After carrying out a range of research we discovered a need among creative students from Staffordshire University, as well as within the general enterprise set-up as this type of accommodation simply did not exist.

'We promoted the live/work scheme to graduates, who are currently 65% of our occupants. We focused on local art, design and media graduates as the primary market most likely to set up a creative business. Typically our occupiers don't have well-established businesses already. They are mostly new start-ups. For the first year we had funding to work alongside the Business Innovation Centre, which has offices close by, although now we link into a local BizFizz project to support the tenants.

'The first phase of live/work was quite small. The second phase will bring another six units, and then shared facilities with other local businesses could follow. The units all have CAT-5 broadband cable, an essential item for any business. We were able to do this by working with the Business Innovation Centre. The occupiers are on a hybrid commercial lease agreement. Our normal tenancy agreement wouldn't have been appropriate as it doesn't specify homeworking.

'Our first challenge was not the initial planning, but identifying suitable funding. Advantage West Midlands was very supportive throughout, but due to various organisational and strategic changes the whole process took five years, much longer than we originally anticipated' he says. 'However, we've learnt from phase one and made a faster and smoother process for phase two.

'We were very pleased we didn't encounter any problems with planning applications as our plans fitted with the local area policies.'

What will they do if residents stop using the units for working?

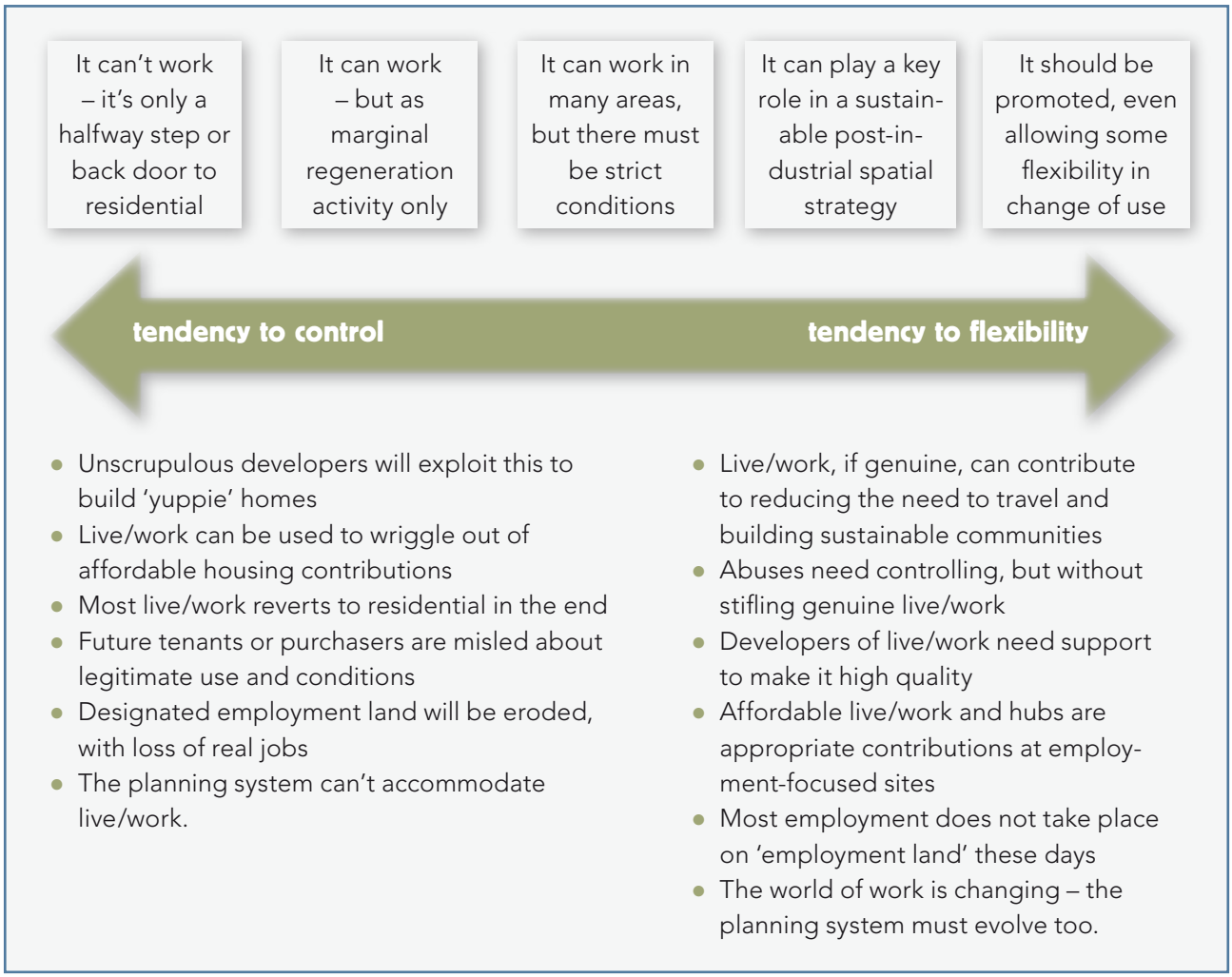
'In principle the lease is quite strict,' explains Webbe. 'But we haven't experienced this yet. We would support them in trying to restart. If this wasn't possible, unfortunately they would have to move out.' Webbe is looking forward to doing more live/work schemes: 'Currently we're getting ready to begin another scheme in Birmingham's jewellery quarter, for 13 units, specially designed for the local jewellery industry.

'We have one bedroom apartments in both Burslem and Coventry. The proposed development in Birmingham will range from 1 to 3 bedrooms. They will be suitable for families as they have separate workshops because of the materials used.

'We've found the local councils to be very straightforward and fortunately they have allowed just council tax, no business rates. We didn't encounter any problems with building control, just changes to fire regulations. It's a great concept and I hope we can do more in the future.'

The spectrum of live/work viewpoints

There is a wide spectrum of views among planners about the right approach to live/work. The figure below summarises the spectrum of viewpoints:



A developer putting forward an application may encounter planning departments taking positions at any point of this spectrum. It is not only officers who have these views. The Carrick experience shows local committee members with views to the left of the spectrum, while officers have views to the right. With a development at Malmesbury in Wiltshire, it was the opposite way around. Officers were against it, but members were in favour.

Critics of live/work

There have been some well-publicised reports commissioned by a couple of local authorities (notably Hackney) to try to prove that live/work does not work in general. Leaving aside the methodologies involved, the critique to a large extent appears to assume that the current planning regime is immutable.

This reminds one of the media chatter around the issue of Peter Crouch's bed at the England team hotel in the last World Cup. Being much too tall for the standard bed in the camp hotel, commentators mused whether his feet or head should be chopped off, or if he should sleep diagonally, in the foetal position, or

with his feet hanging over the end. Naturally, good sense prevailed in the end, and a different bed was shipped in that could accommodate him!

Opponents of live/work within the planning world are concerned to wedge live/work into the procrustean bed of existing use classes and long-outdated concepts of employment land. This approach sees live/work development vetoed altogether, or conditions applied in inappropriate ways – with subsequent surprise expressed when there are problems downstream.

Approaches to density

Current thinking in planning generally advocates higher densities in new developments. The danger is that, unintelligently applied, this designs out the capacity to work remotely or run a business from home. For people across much of the country, this means looking for a home in the £500,000+ price range, and probably an older rather than a new property in order to have the space.

Design for live/work

A consistent theme that is returned to by our consultees is the importance of design for effective and genuine live/work.

For planners, one of the main concerns is of that live/work will turn into pure residential. The design of the building can either facilitate this unwelcome change or help sustain business use. Key features of design can be summarised as:

- Ground floor business space is preferable – the top floor office provided in thousands of new build homes is only suited to ancillary homeworking, and will normally end up as a bedroom
- The design of the work unit and in particular the frontage needs to be more busines-like
- Separate access for the work space is needed for visitors – live/workers want some separation, and do not want customers and colleagues traipsing through the living space
- Work spaces should generally face into public areas, with private space behind and/or above. This encourages interaction with other live/work businesses and social oversight during the daytime
- Shared areas and facilities need to be integrated into the scheme design and have a professional look and feel to them, with separate access for visitors
- Schemes should ideally contain a mix of uses and a variety of ratios between live space and workspace. A 'shell' scheme may initially have advantages in giving the first occupant the necessary flexibility to achieve the required balance internally
- Work space should be sufficient to employ at least one other person
- Businesses often need a good amount of storage space
- IT and communications infrastructure needs to be catered for
- Live/work offers particular opportunities for people with disabilities so the approach to design should be inclusive.

Design should reflect the reality of the likely range of uses. For example, personal services businesses such as physiotherapists will need a lobby or waiting area, while the creative industries may need a wider expanse of workspace, better light, more storage for materials etc. A range of available units is more appropriate than trying to make all units suit all types of work and intensities of employment.

There needs to be a new approach to 'smart density'. Higher densities in urban areas can be achieved, but the internal spaces and layouts need to accommodate more flexible uses during the life course, including working from home, looking after dependants, etc.

In this context properly designed live/work space has to be more than squeezing a workspace into the typical space occupied by a regular apartment or house – this will only encourage reversion to pure residential use.

Solutions may lie in the way taller buildings are designed, and the way in which clusters of live/work units are designed to create a concentration of business activities, plus attractive and effective shared spaces, while avoiding cramped living conditions. We feel there are some challenges here for architects, developers and master-planners to address, especially in the designated growth areas.

Live/work requires a new approach to land

This report concludes that the planning system needs to evolve to deal with the changing world of employment, which is rapidly enabling integration of homes and workplaces.

New tools need to be given to planners to deal with genuine live/work positively, while acting as a disincentive to unwanted residential development by the back door. A separate and specific use class for live/work is a clear way forward, while there remains a use class system.

With little knowledge and experience of live/work combined with its *sui generis* use class (a non-use-class), many planning officers are faced with a more-or-less blank slate of experience, knowledge and guidance. Several of the developers we spoke to felt that turnover of planning staff with live/work experience in planning departments was also an issue.

Another common complaint from developers is a big gulf between the planning system and the market. This is an area where economic development specialists are more in tune with investment and business viability issues.

This suggests that planners and economic development officers should work more closely together on live/work. Where this happens more routinely at regional level, there is more support for live/work.

The case histories in this report show that where planners and developers are both aiming to deliver genuine live/work, the two sides are not so far apart.

What developers want	What planners want
• Clarity in planning policy – at local, regional and national level • A recognition of the economic and social benefits of live/work • Ways to ensure continued work use – by design • Fair and appropriate conditions and application of regulations • Consistency in development control and appeal decisions • Wider understanding of live/work in the planning world • Respect for their aims eg in serving niche markets and creating viable clusters and communities	• A way to protect 'employment land' from development as 'yuppie'/executive homes • Good examples of genuine live/work schemes to refer to • Clarity in national planning policy • A means of enforcing continued work use – by way of conditions and section 106 agreements • Consistency in appeal decisions • A means to secure contributions such as affordable live/work and community use of shared facilities

The table left highlights the positives – what genuine live/work developers and more supportive planners want.

Genuine live/work – that is, with continued work use – is happening, but is often barely noticed. What everyone needs now is good examples to refer to, a clear policy framework, a consistent process and effective tools to make it work. This is why this report proposes a national exemplar programme.

10 Live/work's carbon footprint

With offices and business parks standing empty 70% of the time and millions commuting to perform tasks that can now be done from anywhere, there are big questions to be asked about the way we work. What impact can live/work development have in reducing the carbon footprint of UK economic activity?

Imagine this scenario. The government passes a law to prohibit all home-based working. It decrees that all economic activity must be carried out in a separate workplace from the home. A quick calculation shows:

- there would be an extra six billion commute miles travelled on UK roads each year
- over 35 million additional square metres of employment floorspace would be needed to accommodate them – roughly 15 times the new office floorspace planned in the Thames Gateway.

These figures provide a crude estimate of the contribution home-based working is *already* making to reducing the nation's carbon footprint, and to reducing the costs of infrastructure development.

They are likely to be underestimates too. The figures are based on average commute distances, the percentage who travel by car, and the existing number of people working mainly at home. They do not factor in occasional homeworking by employees or the greater incidence of home-based business in rural areas.

From the economy's point of view, the impact of a clampdown on home working could be even more scary. Two-thirds of those who work from home are running a business. Many of these businesses would probably fold if faced with the costs of separate office/workshop/retail accommodation and regular commuting.

Happily, the government has no such intentions (we trust). On the contrary, many government agencies are moving towards promoting and supporting home-based working.

But one factor that restrains them is being unsure of the precise nature of the sustainability impact of live/work and other forms of homeworking.

In this section we bring together, possibly for the first time, data and new models to illustrate the sustainability impact of various forms of home-based working, and in particular live/work development.

Reducing transport energy

There have been numerous studies on the transport impacts of remote working, most of which focus on home-based employees (see Lake, 2002 and 2008). Despite concerns about 'rebound effects' (eg other household members using the car normally used for commuting), the evidence from measured studies is overwhelmingly that there is a substantial net transport substitution effect.

At the risk of stating the obvious, people working at home do not need to commute. At a simple level, it is possible to calculate the potential saving by multiplying average UK commute distance (8.7 miles, or 17.4 mile round-trip) by the number of working days when a commute journey does not take place. Most employees will not avoid commuting five days per week, but most homeworking self-employed will.

The energy required for the average commute has been calculated at 80MJ, and the CO_2 emissions at 0.31kg per mile, or 5.4kg per 17.4 mile round-trip (see Banister, 2007). The average commute trip takes 27 minutes each way.

Comparing employees with home businesses

Typically at the moment, a teleworking employee works from home an average 1.5 days per week – around six days per month. Comparing a range of savings by not commuting for a typical employed 'teleworker' and full-time home worker, such as a live/worker running a home-based business, produces the following comparisons:

Average savings from avoiding commuting

	Average employed home worker (1.5 days per week)	Full-time home worker (5 days per week)
Distance saved per year*	1175 miles	3915 miles
CO_2 saved per year	364.5 kg	1187 kg
Time saved per year	61 hours	202.5 hours

** calculated on basis of 45 working weeks per year*

There are a number of reasons why the actual savings may be higher or lower in each group. Studies have found that early adopters of teleworking tend to be over 35, on above-average incomes, more likely to be managers and professionals, and have longer commute journeys than average.

People running home-based businesses are also more likely to be classed as managers and professionals, and perhaps more significantly are more likely to live in rural areas (Live Work Network and Commission for Rural Communities, 2005a).

Some studies have found that people who work from home are more likely to use their car for trips out during the day, especially at lunchtime. However, other studies have found on the contrary that total household journeys reduce. Either way, studies invariably show a net reduction in travel when 'rebound effects' are taken into account (Lake 2008).

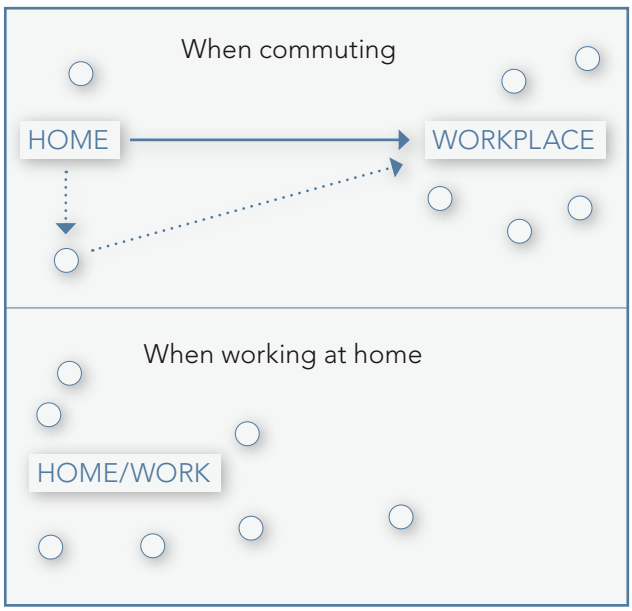
Contracted activity spaces ('doing more stuff near home')

This is an important but as yet under-researched area. There is some evidence that for some families, household activity patterns adjust when someone brings their workplace into the home. Trips, trip mode and who makes the trip can all change (Sustel 2005; Glogger 2008).

For example, a parent who starts to work from home may find they can now walk or take the children to school by bike, and still be able to start work at the same time as before. Previously the school run may been by car en route to work. If that school run had previously been undertaken by the other parent on their way to work, the change in activity is even more significant.

Typical changes in activity are shown in the following illustration (after Saxena & Mokhtarian, 1997):

'Contracted activity spaces'



So travelling by car to a distant workplace tends to generate other car trips and 'trip-chaining' activities – either en route or in the region of the workplace. Such car dependency is exacerbated in the case of most business parks and edge-of-town business sites where facilities such as banks and shopping are not accessible except by car.

Using local facilities

People who work from home are more likely to use local shops and services, and to walk or cycle – providing such facilities exist in the community. For this reason sustainable live/work development should be considered in the context of **creating liveable communities** as well as clusters of live/work businesses.

It is also worth noting that many new residential developments design in a need to travel. Tens of thousands of new homes are being built each year – the largest of which may contain a space for a small home office. But many developments do not reach a threshold to require the creation of local facilities. People working from home may be more likely to create demand for daytime services compared to their commuting neighbours. But without local infrastructure nearby, they too may be forced to drive to shops and other services to a similar degree.

In principle, significant transport reduction is achievable with live/work. But this is more likely to happen where there has been good design at the outset. The approach of generally encouraging working from home in primarily residential areas is much less likely to reduce car trips.

Action needed to tackle car use explosion

According to government forecasts, by 2041 there will be a 44% increase in the number of cars owned in the UK and a 24% increase in the number of trips. This is against a background of a population increase of 11%.

The pressures from this in the south east, south west and the east of England will be acute. There will be huge pressure on the road network with roads such as the M25, parts of the M1 and A1, the M4, M5, M6, the orbital motorways round Birmingham, Liverpool and Manchester seeing 40% growth in traffic (RAC Foundation, 2007b).

The RAC Foundation is a strong supporter of increasing flexible working to relieve pressure on the road network and to encourage responsible and sustainable motoring. It also advocates, however, building additional road capacity and introducing road pricing.

Whether desirable from a sustainability point of view or not, it is unlikely any foreseeable government will adopt the full programme of additional road capacity proposed. Reducing the *need to travel* is therefore a vital component of the basket of measures required to address the mobility crisis facing the nation over the next 30 years.

Smart ways to reduce business travel

Most people working from home do not stay at home all week. Many use their home as a base and travel to meet clients. For others this is not a central activity, but they will still need to travel for occasional meetings and to deal with suppliers such as printers and accountants.

A number of factors can influence the amount that people in home-based businesses need to travel. These include:

- location
- proximity of services, suppliers, clients and colleagues or associates
- use of technologies that can substitute for travel.

Businesses in rural areas will have longer distances to travel, and most accept this as a necessary location/transportation trade-off. However, businesses in many urban or near-urban locations also often have no practical alternative to the car for business travel.

The location of live/work development is therefore important in providing potential access to a critical mass of potential business partners, contractors and suppliers.

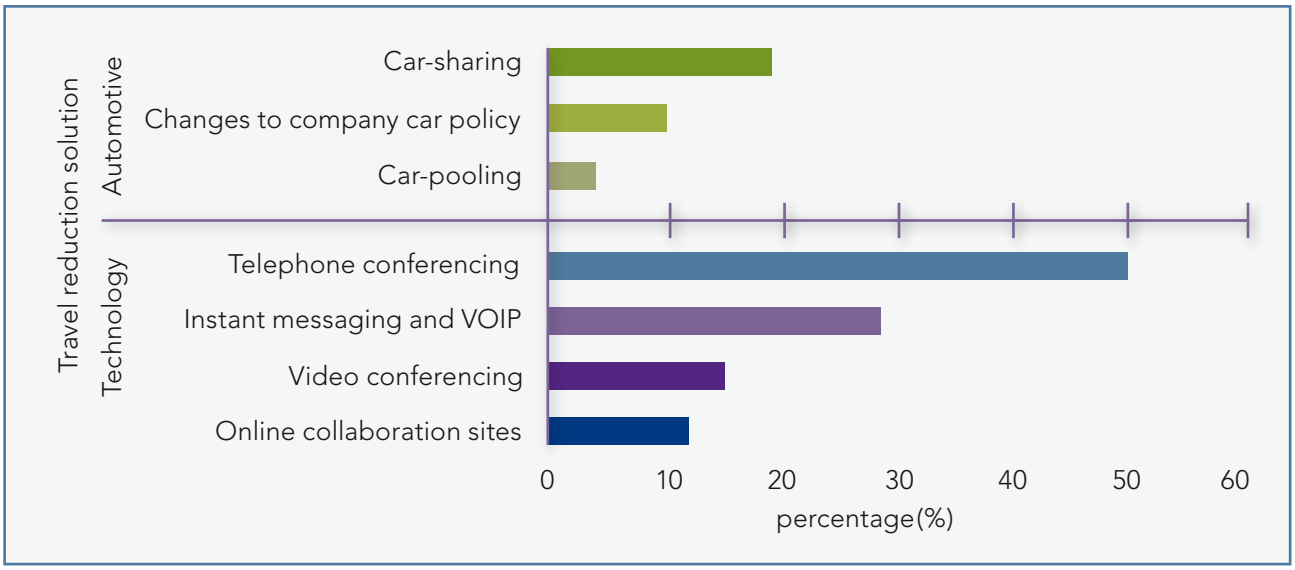
Small businesses, however, are increasingly looking to new technologies to overcome the need to travel.

According to a recent report by the RAC Foundation about travel choices for smaller businesses, 82% of small and medium sized enterprises (SMEs) say the car is central to their business operations.

Most want to reduce their car use, but are extremely sceptical about the practicality of using public transport – 70% of SMEs consider public transport 'not fit for purpose'. Reliability and journey time are the key problems. Buses are seen as being particularly unfit for business travel. Trains are used much more, but many journeys are not possible by rail.

When the report looks at actual initiatives by small businesses to reduce travel, use of collaborative technologies for remote and distributed work emerges as being of high importance to companies:

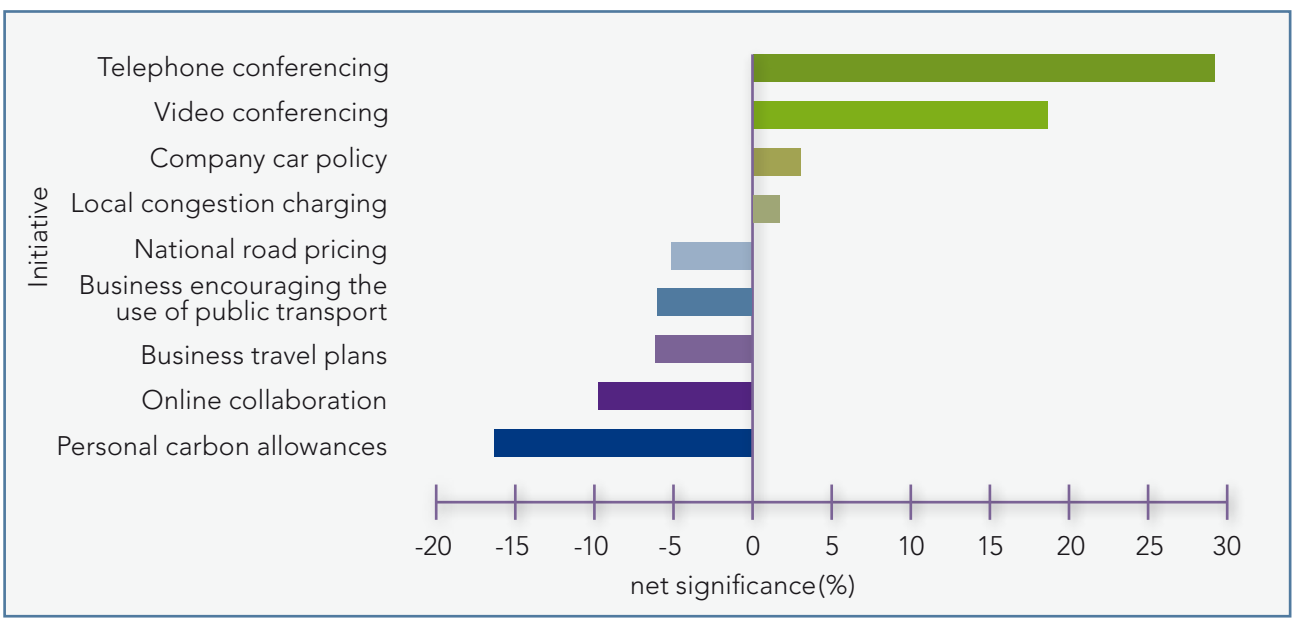
Initiatives already used to reduce business travel by car:



As the report concludes on this issue, 'technology options have been adopted more readily than automotive solutions and were thought to have a greater impact on reducing travel by the private car' (RAC Foundation, 2007b).

And businesses see conferencing technologies in particular as having far more potential to reduce business travel by car than public transport or other 'sustainable travel' initiatives:

Potential ways to reduce business travel by car:



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Using technology to reduce travel

Homeworking businesses are increasingly using new technologies to increase their competitiveness and to reduce the need to travel. Using internet marketing, sales and collaboration helps small home-based businesses to punch above their weight, reducing their own travel and avoiding the physical transportation of goods and paper-based information.

Measuring the sustainability impact of e-commerce and conferencing technologies is a new field. But there are already several studies that indicate a positive impact. A study of 900 BT employees (James 2007) showed that use of audioconferencing resulted in an average of 247 miles per person of avoided travel per call.

This includes air travel – the average saving in land travel was 142 miles, indicating that people tend to use conference calls to replace longer journeys. This results in 45kg of avoided CO_2 per call.

A survey of four Swedish companies (Arnfalk 2002) found that:

- 45-61% respondents said videoconferencing had reduced their own travel
- 15-25% said it had reduced other people's travel
- 17-20% said it had only had a minor effect
- 1-3% said it had increased their travel.

The Department for Transport's *Smarter Choices* report (DfT 2005) concluded that: 'Teleconferencing typically reduces business travel by between 10% and 30% in organisations that promote its use. Many commentators suggest that there is great potential for more widespread use of teleconferencing, however public sector promotion may be needed to ensure mainstream adoption. Business savings could be substantial, in terms of reduced travel costs and more efficient use of staff time.'

There are significant challenges for live/work and other home-based businesses in adopting such new technologies. They don't have the resources of BT or other large organisations to introduce videoconferencing. There are, however, increasingly lower cost solutions becoming available – see section 11.

The research suggests that audioconferencing currently has a greater sustainability impact due to its easy availability and greater frequency of use.

Section 11 on connecting live/workers flags up the major issues here. The key point is that live/work schemes should ideally include hub facilities with shared infrastructure and resources to minimise the need to travel. Videoconferencing is an obvious example. The greater the uptake, the more they will be able to use the technologies to overcome distance and to reduce their need to travel.

Our conclusions on travel are that all home-based businesses contribute to reducing carbon emissions by eliminating the necessity to commute. Beyond this, the adoption of new technologies can lead to further reductions in business travel.

One workplace or two?

Most studies of home working's sustainability have focused on reduced commuting. There has been little research into the carbon impact of having one property (that combines workspace and home) instead of two. As is outlined in section 3, there would appear to be a potential for live/work properties to save carbon by ensuring that single premises are constructed and powered, rather than separate homes and workplaces.

Making comparisons on this is not easy. The carbon impacts of working in workplaces other than the home depend on various factors relating to the nature of the build and the types of activity carried out there. However, we have devised a model for this report which has enabled us to make some initial assessments.

According to the Carbon Trust, the average office creates about 131kg of CO_2 per square metre each year. A typical traditional office will allocate about 12–14 m^2

per person, and estimates of annual carbon impact per person range from 1.5 tonnes of CO_2 up to 4 tonnes per person in poor performing offices.

According to a research report by Chris Goodall: 'There is no typical company, but most large UK service businesses probably have office emissions of 2 to 3 tonnes, air travel emissions of 1 to 2 tonnes, and car travel of about 0.3 tonnes per employee. An average firm will therefore have total emissions of at least 3 and probably 4 tonnes per head.'

A study at the Department of Employment in Sheffield (Wright 1997) measured total energy consumption in the office, in teleworkers' homes and in their vehicle use. This found that homeworking produces around 80% reductions in energy use in an 'ideal scenario' – one where not only the commute trip is eliminated but where the office space is also decommissioned.

This study is a useful reminder that the assumed economies of scale that offices theoretically achieve tend not to occur. This is mainly due to systems and equipment being always on – lighting, heating, ventilation, IT, photocopiers, drinks machines, etc.

In contrast, in the home these are more likely to be on only when needed. The extra lighting and heating sometimes mentioned for home-based teleworking was found to be less than expected.

One of the key points, however, is that around two thirds of an office worker's energy consumption is attributable to travel – primarily their commute travel.

The problem is, the full savings are only achievable if there is *property reduction*. For a large organisation, this may to some extent be possible, by introducing hotdesking, team space and concentrating operations on fewer sites.

For live/workers, there is simply no separate office to go to – a potentially significant advantage.

Oxford University's Transport Studies Unit has carried out the most recent study of the comparative impacts of teleworking versus office carbon impacts (Banister 2007). This proposes a typical carbon cost of using a room for home-based telework as being 173kg CO_2 per year if one day per week, and 865kg per year if five days per week (costs of heating and lighting a room plus equipment energy use).

Carbon saving comparisons

An employee works from home, but there are no changes in the office. Reduction in commuting is offset by duplication of office equipment and additional energy costs in the home without reductions in the office.

An employee works from home, and the office is altered, with smart working, desk sharing and space reduction. There will be additional energy costs in the home, but according to how radical the smart working scheme is and how much property is released, there should be a reduction in energy used per person in the office.

A person works at or from home, and has no other set workplace. This could be someone running a live/work or other home-based business, or it could be an employee in a virtual organisation. There are savings not only in the carbon impacts of the office, but also in not building a separate office in the workplace.

The relative carbon saving of live/work development depends on the nature of the implementation.

It might be argued that a separate work unit of 14m^2 would have comparable impacts to 14m^2 of space in a live/work office. However, the live/work office is only likely to be heated, lit and ventilated when actually in use.

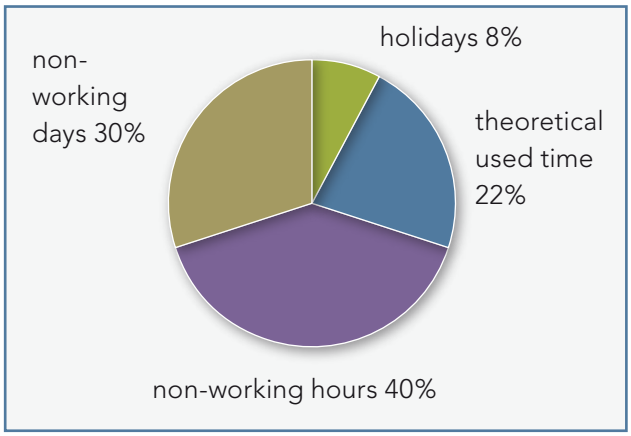
Office users may also tend to be less responsible than home workers in their use of energy – for the simple reason that they are not paying the bills. It only takes one member of staff to want air conditioning or to use the printer/photocopier for these machines to be left running. Common sense suggests that it is harder to control carbon emissions in these environments than in a home-based business.

Integrating the build with residential development will also avoid the carbon costs and the land take and infrastructure costs of separate workplace development on an industrial site. There appear to be no comparative studies yet to quantify this – an area for future research.

Office use in a typical year

It is also useful to consider how office buildings are used throughout the year and compare this with how live/work units are typically used. The following chart offers a breakdown of overall occupancy of an office, assuming a normal period of occupation between 8am and 6pm five days per week.

24/365 breakdown of office use



Given that not everyone is on holiday at the same time, offices are normally in use about 30% of the time. However, the big driver behind desk sharing and space optimisation that goes with flexible working, is that desk utilisation audits show that desks are rarely occupied for more than an average 45% of the nine to five working day.

What this means is that large offices, unless optimised for flexible working, are built to be empty for 70% of the time and half empty for the remaining 30%.

The live/work contrast

The development of live/work quarters with hub facilities offering shared services has many sustainability advantages, easily seen in contrast to the typical ways that offices are used.

In terms of the building and running of such facilities, there is an associated carbon cost that one can assume will be comparable to any workplace built to a similar standard. This will erode some of the savings from its capacity to reduce business travel by live/workers and other people in the community.

The impacts are complex, but in the table (next page) we propose a categorisation of the varying carbon impacts of different types of homeworking scenario.

Live/work's sustainability advantage

In all the issues outlined above and in section 3, there are choices to be made that affect the quality of live/work development and its relative advantages vis-à-vis other forms of development.

Office buildings are also now being built to more exacting environmental standards. Car travel may become less polluting over the next few decades, and may in time become 'decarbonised'. So ideally, live/work development and associated hub facilities should be developed to the highest standards possible, incorporating eco-homes standards for individual units and best practice for collective activity in reducing environmental impacts.

The issues we have outlined in this section have not been directly measured in a live/work setting, and it would be valuable to carry out research to evaluate the carbon impacts of case studies within the different scenarios described.

However, it is clear that the 'live/work' approach to using individual property for mixed use offers substantial sustainability benefits.

Relative carbon impacts of home-based working solutions

	Building impacts	Commute travel impacts	Business travel impacts	Community impacts
Dumb flexibility Employee home-working with no change to office provision	Increase in home energy use	Travel saving depending on number of days worked away from the office	May be savings by skipping initial trip to the office	Minor impact, depending on days worked at home
Smart flexibility Employee remote working with office transformation and collaborative technologies	Increase in home energy use offset by reduction in office per person	Travel saving depending on number of days worked away from the office	Potential for reduction through use of conferencing and other collaborative technologies, plus ability to work from any site	Minor impact, depending on days worked at home
Traditional home-based business Home-based business, with no/low use of ICT	Higher than average home energy use, offset by absence of external office build costs and energy use	Major savings from absence of commute	No impact	Significant impact
Virtual home-based business Home-based business with high ICT use	Higher than average home energy use, offset by absence of external office build costs and energy use	Major savings from absence of commute	Savings through high use of virtual technologies	Significant impact
Basic live/work Live/work scheme with no frills, no hub/ shared facilities	Higher than average home energy use, offset by absence of external office build costs and energy use	Major savings from absence of commute	Expected low impact – dependent on initiative of individual units	Significant impact
Total live/work Live/work, hubs and high virtuality		Major savings from absence of commute	Savings through high use of virtual technologies Savings through shared services and close access to more local businesses	Substantial impact

11 Connecting live/work businesses

In the early days of live/work development, providing broadband was seen as critical. Now it is more often *how* live/workers use technology – not whether they have it – that is the key to success. But connecting live/workers successfully also requires a strong emphasis on face-to-face contact and hub facilities

The rise in all forms of home-based work in recent years is closely associated in the public consciousness with high-tech activities and the knowledge economy.

Research has tended to focus on the rise of technology-enabled remote working for employees, and one of the key assumptions is that 'knowledge work' is the main type of work appropriate for home-based workers.

Provision of good ICT infrastructure is therefore essential for reducing the need to travel among home-based workers, getting them out of their offices and working from home.

The majority of home-based workers in the UK, however, are not employees but are people who are self-employed and/or running micro-businesses. And they are not necessarily in sectors associated with 'knowledge work'. Our case studies illustrate a range of types of work carried out by live/workers. Other studies show home-based enterprise straddling a wide range of business sectors (Live Work Network and Commission for Rural Communities, 2005b; Enterprise Nation/BT, 2007).

There is growth in home-based businesses in sectors such as the arts and craft industries, building-related industries, personal services, food production/preparation and personal services, as well as in the more knowledge-intensive professions in business and financial services, IT and new media.

Scales of technology use

For home-based small businesses, we can identify three dimensions of ICT use:

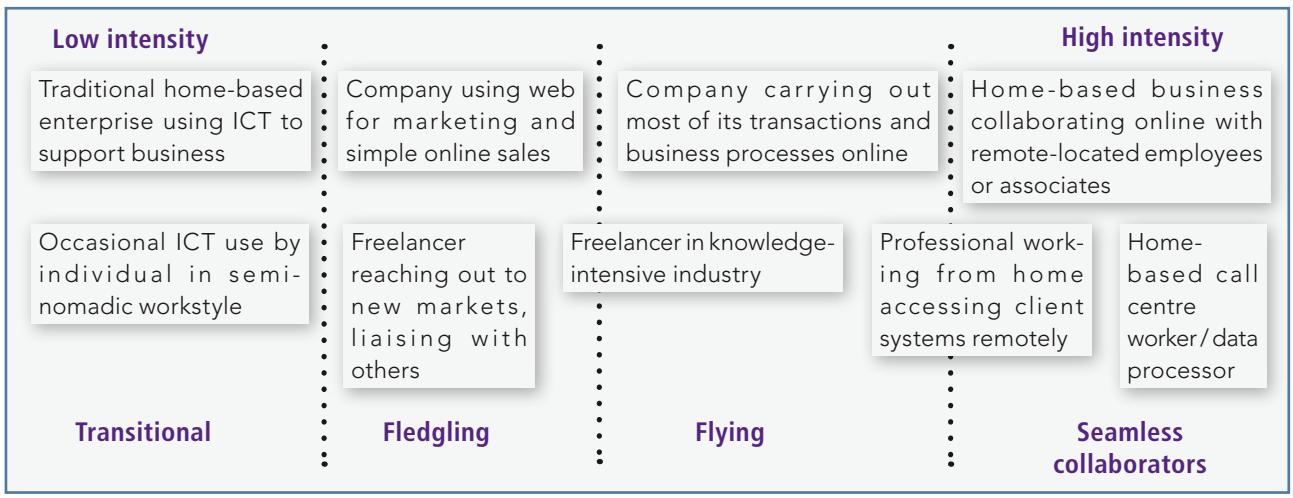
- where use of ICT is already core to the work activity – eg writing, software development, new media design, publishing, virtual call centre work, etc
- where ICT is used to manage internal business functions – administration, accounting, payroll, project management, work sharing between employees, etc
- where ICT use is integral to external relationships – selling, marketing, contracting, collaboration, etc.

Smaller businesses where ICT use is not already central to work activity often struggle to get on the first rung of the ladder of effective ICT use. They don't have the experience, the funds or the time to become familiar with the new technologies. Most will not have the benefit of shared facilities or services operated by a business park or incubator.

Even those businesses in which ICT use is central often struggle with the other two dimensions of ICT use, using the technology and their skills for effective administration, outreach activities and collaboration.

It is helpful to visualise a 'spectrum of ICT intensity' in the activities – or aspirations – of live/work businesses:

Spectrum of ICT use



The following table explores these levels of ICT use intensity further:

Intensity	Examples	ICT usage
Transitional	Craft or technical enterprise becoming 'wired' Freelance journalist or editor needing to move beyond word-processing	• some use of business administration software • email • simple scheduling and workload management • (possibly) simple website
Fledgling	Company using ICT for marketing and sales	• business administration computer-based • email becomes a business-critical method of communication • customer relationship management • developed use of company website and Internet for marketing • simple e-commerce sales
Flying	Company carrying out most of its transactions online Freelancer in knowledge-intensive industry	• invoicing and paying online • collaborating with partners and suppliers online using simple tools • working with computers and the internet is primary way of working • synchronising portable technologies with office systems • use of virtual offices/secretaries etc
Seamless virtual collaborators	Home-based business collaborating with remote-located employees, associates or clients Professional working from home, accessing client systems remotely Live/work call centre operation/ data processing	• using advanced collaboration tools and conferencing technologies • use of smart-numbering telephony and VoIP • remote connectivity to business systems • inventory and order processing linked to customers/suppliers • virtual automatic call distribution • processes becoming paperless

To the start-up homeworking business, the far end of the spectrum may seem unreachable, and may not even be particularly desirable. For example, a self-employed craft worker will have little interest in the aspects relating to working online in collaborative teams.

However there are likely to be competitive advantages and cost savings involved in dealing with customers online, as well as the potential benefits of streamlining business administration.

For companies interested in growing their business, high levels of connectivity are desirable but without a dedicated ICT function may be hard to achieve.

For live/work enterprises, key obstacles to effective use of ICT are lack of awareness and practical support. These are two areas where support from public authorities and effective schemes designed to provide sufficient scale can boost the effectiveness, growth potential and longevity of live/work businesses. During our case study visits, we found a strong desire and preference for hub type facilities among live/workers at many sites.

Hubs and people networking

Hubs, or some level of shared service provision, can provide live/work businesses with the support they need for making effective use of ICT. A live/work business will benefit from the availability of affordable and high bandwidth broadband supplied though a business hub. The availability of (wireless) broadband connectivity in public areas and meeting spaces is also desirable.

So is the availability of the latest version of software and kit for hub users to 'try before they buy'. Hubs can at best operate as exemplars for the use of new technology and new approaches to business.

Expertise and support are also needed to help businesses use ICT effectively and to move on to the next step in their development of ICT capabilities. This may be in the form of a centralised resource, or it may be in being able to work with an ICT specialist live/work company.

ICT-related hub facilities sought by live/workers we interviewed included presentation facilities in meeting rooms and printing facilities.

Most business incubators or 'flexible officing' companies such as Regus, MWB or e-Office would also offer hotdesking facilities, 'virtual offices' with telephone answering in one's own company name, SMS or email message forwarding service, videoconferencing facilities etc.

The scale of any live/work development would be a determining factor in this regard. However, beyond the immediate confines of any live/work development, there are also likely to be many other home-based businesses and small businesses that would benefit from access to such services.

'Connectivity', however, should not be seen as only being about ICT. It is ICT that takes connectivity beyond the constraints of distance. But essentially connectivity is about making valuable connections for business. A successful live/work quarter will enable resident businesses to make connections not only with clients and associates long distance (using technology) but with businesses that are their neighbours or are based nearby.

Face-to-face connectivity enables live/workers to collaborate, subcontract and team up to win bigger contracts. Well-planned hub operations enable live/workers to make the right connections with people they can collaborate with and with whom they can develop long-term business relationships.

Live/work schemes can therefore create clusters of well connected businesses that would otherwise be hidden away from each other in home-based premises. We did not find any live/workers in our case study visits suggesting that their developer should provide broadband direct, but they did often want high powered access in hub facilities.

Coming down the line – new technologies

There are numerous technologies and applications on the market that will become increasingly attractive to live/work enterprises as costs come down over the next few years. These include:

Faster broadband – from fibre to the (live/work) home, VDSL and Wimax. Faster broadband with speeds up to 100Mb/s – providing it is affordable – will help to transform connectivity for small businesses and also their attitudes to mobility and face-to-face interaction

Internet telephony – or 'voice over internet protocol' (VoIP) is already used extensively by sole traders and small businesses, though the quality of the free services often preferred can fall short of acceptable standards. In the near future very affordable business grade VoIP will be commonplace. Solutions that allow a VoIP phone to act as your office phone wherever you are in the world will be popular

Affordable conferencing – for some 20 years videoconferencing has been perceived as tomorrow's technology that never comes. However, major providers are increasingly bringing their products within range of the live/work market. BT research shows audioconferencing remains popular with users however. New services allowing affordable phoneconferencing on the move will also be available soon. A younger generation entering the labour market has grown up with the conferencing and 'virtual meeting' capabilities of MSN, Yahoo and Googletalk. They will lead demand for these services

Virtualisation – providing IT as a service rather than as hardware and applications in the office will be a growing trend. This means keeping files and data online rather than in a machine in your office. From a reduced carbon as well as business perspective, this may well prove attractive. Primary benefits of this approach come from reducing the number of physical servers that are required. Additional benefits come from improved business continuity and disaster recovery. Using greener IT, with lower resource requirements and greater efficiency, can also be a selling point when dealing with customers.

Peer support

One area that has been little explored but that has potential is self-help ICT networking among small enterprises. As few micro-businesses have a dedicated IT resource and often lack the funds to employ IT sub-contractors, a facilitated self-help IT support network for live/workers would have many advantages, and help remove the barrier of isolation that many busy entrepreneurs feel when coming to make critical ICT decisions.

Good examples of this can be found on the website **www.workhubs.com**. A hub that has pioneered this with particular success is Digital Peninsula Network in Penzance, Cornwall. This organisation connects around 200 mainly home-based businesses. Other examples include Bristol Paintworks' events space and café, Enterprise HQ in Shrewsbury and the Huddersfield Media Centre, next to the Creative Lofts live/work scheme.

Live/work schemes enable hubs to be created using cross subsidy from uplift in land value and sales of units, so the hub concept need not rely totally on public grants to be viable. Hubs are proposed for many significant scale live/work schemes currently in planning or development, ranging from Newquay Growth Area (Duchy of Cornwall) to Model Farm (Ross on Wye) and West One (Poole, Dorset).

The model of having hub facilities as an integral part of live/work schemes commands wide support from:

- live/workers – we have found consistent demand for hubs from those we interviewed
- local authorities and RDAs – they recognise that a hub can add value to a live/work scheme by providing services to the wider local economy
- developers – they recognise that hub facilities can add value to their properties at the point of sale.

Emerging homeworking technologies

The advent of effective technologies for location-independent working has helped drive the increase in live/work as it has for all forms of home-based work. Progress is ongoing and improvements in quality and price are impressive (see box opposite for what the near future holds).

Laptops, blackberries and other portable devices are now commonplace and are supplementing or replacing desktop computers. Broadband connection is now available over most of the country, with performance rising and costs declining due to improved technologies and more competition. Wireless networks are increasingly common in both homes and offices, and are undoubtedly an attractive option for live/workers.

There remain issues about the capacity of small live/work businesses to take advantage of the emerging technologies. Developments of sufficient scale can provide the technologies and support for companies wanting to use them. But there are risks for hubs and public agencies involved in business support in providing technology support when this may not be their core area of expertise. So working closely with the main providers and experts in this field is advisable.

Cities, market towns and far flung fields

Some planners have been keen to avoid any significant development outside main urban areas – treating rural locations as 'unsustainable'. However others argue that live/work schemes are a very effective way to sustain such communities. Rural location live/work developments can reduce the isolation of home working and encourage previously hidden home-based businesses to network with one another, with the live/work scheme (and its hub if there is one) becoming the focus for local economic activity and collaboration.

There are constraints, though, in some parts of the country where access to broadband is limited. Developing live/work clusters and hubs requires working with the communications industry to ensure connectivity is essential, and may help to create the critical mass to justify investment in otherwise 'connectivity-poor' locations.

Technology and sustainability

How can ICT make a difference to the sustainability of live/work enterprises? Section 10 covered live/work's overall carbon footprint. Here we focused on three ways in which technology in live/work developments can make a difference in its own right:

- virtual interactions reducing or replace place the need to travel
- choice of technologies and/or virtualisation reducing the energy consumption involved in ICT use
- electronic processes replacing paper and other physical processes.

The cases studies in section 4 showed several examples of live/workers reducing or eliminating the mileage that used to be their daily commute. The main reason this happens may not be environmental. Live/workers often place a high value on controlling their own time and see commuting as a waste of a precious commodity. But there is nevertheless a carbon footprint benefit. Therefore any additional facilities that can support this (eg inside a hub) will also add further environmental value.

Live/work businesses also often have an opportunity to reduce their business travel through online collaboration, use of conferencing technologies, etc.

Specific examples of carbon savings are given in section 10. The point here is that while live/work tends to be in principle more environmentally friendly, the degree to which it can reduce energy and resource consumption is closely connected to choices made about working practices and in particular the use of ICT.

In general, the further a live/work business is along the ICT use spectrum above on page 94, the greater its potential to reduce its carbon footprint.

12 Practical proposals: things to do now

CENTRAL GOVERNMENT

Launch a national programme of exemplar live/work schemes

Ask each region to support the development of **exemplary live/work clusters**, with the aim of delivering quality live/work schemes that have enduring live/work use. We believe this could be given weight by being treated as a national pathfinder programme by central government, with resources earmarked for sharing knowledge between schemes approved under the programme.

Applicants would need to provide their own land, making the programme more affordable and a genuine partnership between central, regional and local government.

Ideas for what exemplars should seek to provide can be worked up in regional and national events with experienced live/work developers, planners, architects and users before any such programme is launched.

Enhance live/work's unique use status

The government should consider introducing a **use class** for live/work. The *sui generis* status is in effect halfway to this. But in the general absence of specific policy, applications will always be determined in relation to policies designed to determine either residential or employment applications.

A new use class supported by clear policy could set expectations for balance of live and work, design quality, overall mix in live/work and mixed use communities, appropriate locations, preference for developing clusters rather than isolated pockets, changes of use, contributions to affordable housing or affordable live/work, other aspects of planning gain, etc.

Such a live/work use class could, if necessary, be tested first in exemplar schemes.

Treat live/work workspace use differently

Rather than specify a use class for the workspace element of live/work, a level playing field with home working should be considered. A **nuisance/hazard/amenity test** could instead be applied, as is the case with some US live/work. Most permissions restrict to B1 use, but in live/work clusters a range of A uses (eg retail, food and drink) may be appropriate and would contribute to the vibrancy of the community.

The principle of separating uses comes from an industrial age when work was expected to be noisy, smelly and dangerous. Most new forms of work (high tech, craft, medical practices/therapies, business services, personal services, teaching, etc) are not. The acceptability of changing use should increasingly depend on the impact on neighbours and licensing regulations, rather than on bureaucratic business use classes.

Improve data tracking

Build into census, Labour Force Survey and other surveys research to find out more about home-based business. Include extent of subcontracting/collaboration with other firms/associates, how they communicate and tools/resources they need to do that efficiently (not just software, hardware and skills but also utilities). Use this to build a picture of potential areas for investment in and support for live/working.

End tax disincentives for live/work

Harmonise tax treatment of live/work businesses and home-based businesses. Remove **VAT** from genuine live/work schemes, to encourage developers to maximise workspace provision. Review the current perverse incentive to play down the workspace part of premises to reduce VAT costs. Also make live/work **exempt from capital gains tax** (as is, in practice, the case with ancillary home-based business).

LOCAL AUTHORITIES

Create live/work quarters, not just single units

Prioritise economically significant live/work schemes, with 'hub' facilities that offer appropriate services and meeting space for home-based and micro-businesses in the vicinity.

Prioritise economic development planning gains

Use section 106 agreements on live/work schemes to require infrastructure such as hubs and affordable live/work units (see below). Require robust site management and monitoring of work use as part of the package.

Affordable provision

On schemes of a significant size, require a proportion of live/work units to be affordable (either for subsidised rent or shared ownership). As live/work is a *sui generis* use (of its own kind), the proportion should be determined based on site viability, not simply reflect affordable housing targets. However, including affordable workspace through live/work is an important element of a sustainable live/work cluster.

Adopt a more flexible approach to change of use

To respond to the realities of business and personal life, a **more flexible approach to change of use** needs to be considered, while still protecting the longer term business use of live/work premises. Such an approach might consider overall tolerances. By way of comparison, a business park might have 10% of units unoccupied, but no planning authority would be able to force businesses to occupy them. Businesses fail, and people retire. They can vacate a separate business unit without any problem. But in a live/work setting this can create a situation of enforcement for planning authorities. Flexibility in these circumstances might allow sub-letting the business unit for a limited period of time, or flexing to another use – but with the proviso that any sell-on or letting of the whole unit must be as a live/work unit.

Create clear local policies on live/work

As guidance for local planning authorities looking to develop policy on live/work, we recommend that local planning policy should:

- take a positive and proactive approach to live/work, noting the important contribution that live/work can make to achieving local objectives
- promote live/work business clusters, with central shared/hub facilities that are also available to support other small/home-based businesses
- recognise live/work as a *sui generis* use in generic development control policies
- on live/work schemes of sufficient scale, look to achieve an appropriate proportion of affordable live/work units
- adopt a flexible approach to the design of live/work units, with more detailed advice in relation to the local context reserved for supplementary guidance
- allow for a range of uses for the work element, according to the local context
- have more detailed policy outlining the kinds of live/work development that is appropriate for different areas
- add references to live/work in policies for reuse of disused/rural buildings.

Involve economic development staff in live/work support

There should be a stronger involvement of the economic development function in planning for live/work. Support of live/work businesses and monitoring of work use of units should increasingly become part of mainstream economic development work.

A new approach to conditions: the three Ms

- require developers to draw up a well-informed **marketing** strategy for sales/rental of each scheme before building it
- **monitor** schemes for at least three years after completion to ensure continued live/work use
- seek active **management** of each significant live/work scheme. Require hubs or at least space for live/workers to create their own shared facilities.

REGIONAL DEVELOPMENT AGENCIES

Coordinate regional exemplars

RDAs should be lead agents to deliver the national exemplar programme outlined above.

Re-use of buildings

Actively promote live/work to organisations including English Heritage, the National Trust and Landmark as an option for bringing back into use existing historic buildings, rather than preserve them as interesting but obsolete follies maintained through donations. Regularly review with conservation staff the status and potential of historic/threatened buildings and commercial/industrial buildings.

Enhance skills, promote regional knowledge sharing

Work with centres of excellence to encourage training in understanding live/work for planning officers, planning policy staff and councillors, including visits to flagship schemes. Promote live/work masterplanning skills.

Further information

www.liveworknet.com
Live Work Network website

www.flexibility.co.uk
Online journal of flexible work

www.liveworkhomes.co.uk
Live/work property finder website

www.enterprisenation.com
Enterprise Nation website for home-based businesses

www.live-work.com
Live/Work Institute USA

www.statistics.gov.uk
website of Office for National Statistics (for census data and labour force survey)

DEVELOPERS

Design

Design live/work to look like live/work, not ordinary housing. Consider providing shell facilities where buyers can create their own appropriate interiors for their business. Where possible, use low or zero carbon techniques to gain planning approval and add value to the sales appeal.

Marketing

Market live/work as a unique and different kind of property to achieve higher sales values. Ensure sales staff do not encourage residential use and that potential buyers are made fully aware of conditions. This will help the development succeed and give you as developer a good track record for future applications.

Scheme management

Make scheme management a strong priority. As with business parks, live/work schemes work best with an active hands-on management approach, for example based in any hub facility. On long lease schemes, this can also add value to resales.

Community contributions

Where viable, offer hub facilities and affordable units as part of the mix. You are more likely to get consent if your scheme offers this – and it will also help the scheme appeal to buyers who see these as benefits. Affordable units can mean 'on site' services provided by neighbours, for example IT support.

‘Fix it’ suggestions for planners

Some ideas to help planners overcome typical barriers to quality live/work development:

Local housebuilders are reluctant to build live/work here

Look at land you own or control, then seek out specialist live/work developers as potential partners. Housebuilders can sometimes be willing to undermine live/work if they feel they should have been allowed to build residential property on a site they own that you insisted should deliver mixed use

There is no hard evidence of demand for a live/work scheme here

Be realistic about what evidence you seek. There are no live/work equivalents of commercial agents with waiting lists. If the area has high levels of home-based business, this is a good indicator of nascent demand. You can ask developers to do surveys and websites, but normally this pre-marketing is only effective once a scheme is going ahead

We want to protect employment land, yet only a minority of the live/work units’ floorspace is employment use

Floorspace is not an effective measure of economic impact. A cluster of 20 or 30 live/work businesses may well be more sustainable than one or two employers taking the site. Would the latter raise local skills/earnings to the same degree? What happens when they close or relocate?

We have no policy under which to measure or allow live/work

That suggests you need one! However, do note that the vast majority of live/work schemes are approved and developed without a local policy framework. See paragraph 30 of the draft PPS4. This encourages planning authorities to look favourably on imaginative or unforeseen proposals for employment sites

We haven’t allocated this site for live/work

Very few live/work developments have been built on sites allocated for this purpose. In keeping with policy emerging in PPS4, it may be better to consider each proposal for new use of employment land on its economic development merits – as advised in the Barker review of land use

How can we determine live/work locations in our spatial planning?

See above. Millions now work from home, many running their own businesses, on land that was never allocated for work use. Allocating a site for live/work could raise its land value too high to make live/work development viable. However, if land is in public ownership, there could be scope for this, with the local authority using site ownership as well as planning to control scheme quality.

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Live Work Network is the UK's leading information sharing agency on live/work property. The Network has over 200 member organisations and regularly advises central, regional and local government on live/work and home based business policy. **www.liveworknet.com**

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Global warming is forcing a rapid rethink on how we use property. With over 40% of UK businesses based at home, the era of separate home and workplace appears to be coming to an end. But what comes next? This report shows how pioneering live/work developers and businesses are already delivering tomorrow's property today.

How should planners and the property sector respond?












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