

South West England

FREIBURG STUDY TOUR

Planning • Public health • Urban design

WHO Collaborating Centre for Healthy Cities and Urban Policy
South West Regional Public Health Group
17-20 September 2008

**Summary Record
and
Photo Report**



Freiburg study tour

Investigating policy and design for healthy communities and sustainable settlements

An urban field trip instigated by the South West Regional Public Health group and led by the WHO Collaborating Centre for Healthy Cities and Urban Policy based at the University of the West of England, Bristol.

Purpose

To learn from the realities of progress towards healthy communities and sustainable settlements.



The summary report

This report arises from a study visit to Freiburg, Germany.

It has been produced to assist with communication and transmission of learning and knowledge from the study visit. It is not meant to be a comprehensive evaluation of the situation in Freiburg compared to that in the UK and in the South West. It provides a flavour of what we can learn for the development of healthy sustainable communities in the UK. For better understanding, speak to some of the participants or better still, plan a visit yourself.



This report was shaped by the participants' reflections arising from the daily 'learning zone' and final reflections session. It was compiled and edited by Marcus Grant, with additional text and additional photographs from Kiron Chatterjee and Paul Pilkington and transcribed material from the participants' feedback forms. Thanks also to Hugh Barton and Kate Burton for comments on preliminary drafts. © UWE

Participants

Cornwall	Mark Summers, Estates manager Cornwall PCT Adrian Welsh, Cornwall County Council Tim German, Cornwall Sustainable Energy Partnership
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Dorset	David Phillips, Director of Public Health, Dorset PCT Paul Willis, Group Manager Transport, Dorset County Council
Swindon	Jane Leaman, Director of Public Health, Swindon PCT
Bristol	Hugh Annett, Director of Public Health, Bristol PCT David Bishop, Head of City Development, Bristol City Council
SW Regional Public Health Group	Gabriel Scally, Regional Director of Public Health Kate Burton, Public Health Manager, NHS South West
UWE staff	Kiron Chatterjee, Senior lecturer, Centre for Transport & Society Paul Pilkington, Senior lecturer, Centre for Public Health
UWE co-ordinators and facilitators	Hugh Barton, Director WHO Collaborating Centre for Healthy Cities Marcus Grant, Deputy Director WHO Collaborating Centre for Healthy Cities Alison Hindley, Freelance translator

Foreword

No matter how much you are committed to and think you have a clear view of a course of action there is nothing quite like seeing it in operation to take your breath away. The very certainty of knowing that it can be done is remarkably energising and inspirational.

There are of course so many good reasons for creating sustainable communities, from combating climate change and improving physical and mental health to increasing community solidarity and mutual support. But there are plenty of obstacles as well. As we in the South West confront the implications of very substantial population increase and the challenge of creating new communities we need to learn from other places as to how we can transform our approach to development of the built environment.

I and all the others who took part in the landmark visit to Freiburg are in debt to the local officials who gave so willingly of their time and experience. I would also like to thank my colleagues in the University of the West of England who took an idea of mine and made it into one of the most valuable and pleasurable learning experiences in which I have ever participated.

Gabriel Scally

Regional Director of Public Health

for the Department of Health South West and the South West Strategic Health Authority

Report structure

The study tour

Aims

Visit programme

Freiburg briefing

Values and Strategic Direction

Why has Freiburg developed in this way?

Policy

How are they going about it?

Delivery

What they are doing?

Examples of solar innovation

Other inspiring innovation

Reflections: The learning zone

What can we learn?

What can we apply easily?

What impressed us most?

The questions we should be asking in the South West.....

○

Freiburg study tour

investigating policy and design for healthy communities and sustainable settlements

Aims

The purpose of the trip was to see how a healthy, sustainable city works in practice, as an inspiration for policy and action in the South West.

- What such a city feels like, how it looks, both in relation to the whole settlement and specific parts
- How the current pattern has developed over time – what contextual, technical and political factors enabled progress – what organizational forms and collaborative styles have or haven't worked
- How people, communities and businesses have been and are involved in the process, and with what lessons learnt
- How current behaviour and lifestyles differ from the norm, particularly in the new 'car-free' area of Vauban, and what attitudes residents have
- How far behaviour – particularly but not only active travel – has been influenced or facilitated by physical characteristics of the land use/transport system and the design of the public realm
- How far changed health outcomes have been expressly related to the progressive changes in the urban environment
- How the market in land and buildings, and the related policy areas of housing, greenspace and transport have been managed so as to deliver the eco city

SOUTH WEST OF ENGLAND FREIBURG STUDY TOUR

Programme

Accommodation

Mercure Hotel Freiburg Am Muenster,
Auf der Zinnen 1, Freiburg, tel. 0761/38510
Close to the Munster Platz in the heart of the city

Wednesday 17th September

Travel overland, where possible to Freiburg.
Arrival at Hotel.

Thursday 18th September

- 9.00 Meet in the hotel lobby
Briefing for the trip and the day
Walk to the Rat-haus.
- 9.30 Lecture and Q & A with the Freiburg Director of
Planning, Wulf Daseking (at Freiburg Town Hall)
- 11.30 Coffee
- 12.00 Take the tram to Vauban
- 12.15 Guided tour of Vauban with Wulf Daseking
- 1.30 Lunch in Vauban or back in the city centre
- 3.00 Lecture/discussion on transport policy in Freiburg by
Andreas Hildebrandt of the Freiburger Verkehrs-AG.
- 5.00 Learning zone: Group seminar in the hotel
First impressions and questions to explore
- 7.30 Dinner, with Wulf Daseking

Friday 19th September

- 9.30 Lecture and Q&A with Rainer Unmüssig of the
Regional Health authority.
 - The structure of health services
 - The relationship between health and planning services
 - Freiburg's health cf. other German cities
 - The possible impact of built environment policies on health

11.00 Coffee

11.30 Free time (and lunch) in the city centre

13.45 Meet at the railway station bike hire centre

14.00 Cycle out to Rieselfeld

14.30 Guided tour of Rieselfeld with the architect, Herr
Siegel, meet at Jean- Monnet-Str. 39, Rieselfeld.

16.30 Cycle back
Learning zone: Group seminar in the field
Neighbourhood development and the
Health Map

19.30 Dinner

Saturday 20th September

Morning: Learning zone: Final group seminar

Afternoon: Free

19.30 Dinner

21.58 Train leaves Freiburg, change at Karlsruhe
and Paris

Sunday 21st September

10.29 Arrive back at St Pancras, London

Freiburg briefing

investigating policy and design for healthy communities and sustainable settlements

Introduction to Freiburg

At a time when concern about climate change and obesity is increasing, Freiburg in the Rhine rift valley has attracted great interest as a city which has successfully “bucked the trend” towards higher carbon emissions and a more sedentary lifestyle; a trend of car dependence. For three decades a progressive policy has been pursued – triggered initially by fears about the effects of acid rain in the city’s back yard, the Black Forest. The full pedestrianisation of the historic centre has been followed by a comprehensive, and in many ways visionary, land use/transport strategy based on walking, cycling and public transport.

The latest urban developments – the new neighbourhoods of Vauban and Rieselfeld – put principles of sustainable development into practice to a degree rarely seen anywhere in the world.

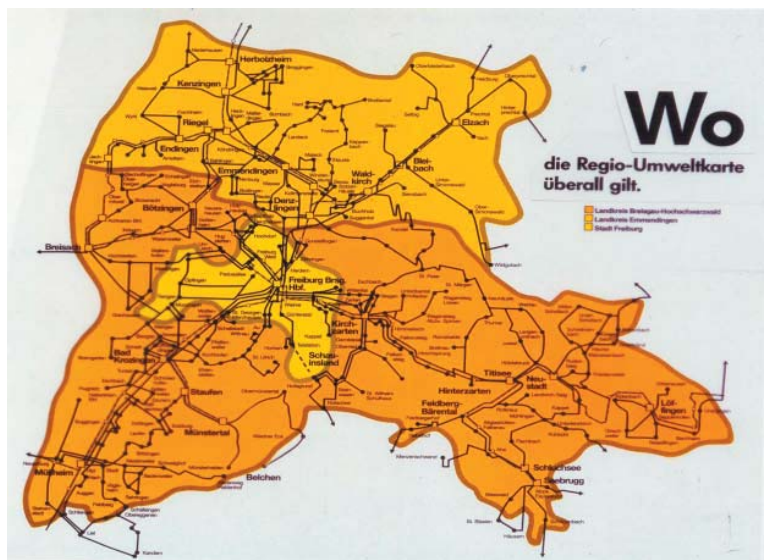
Vauban, for example, has established extensive virtually car-free areas, where children can play freely. Social capital and community are strengthened by user-cooperative provision of housing and a high quality of liveability is maintained whilst also incorporating sustainable energy and water strategies.

Freiburg represents an example showing that culture change is both possible and desirable. From a highly dependent car culture in the 1950s, car ownership is now the lowest in Germany and car use is down to 16% of trips.

Although longitudinal health studies have not been carried out, we know from pieces of evidence emerging in the UK and Denmark that the cumulative effect of their approach on health must be significant.



The historic city and outer suburbs set within the Black Forest



The transport network

A service with guaranteed connections reaches out from the city to the surrounding settlements

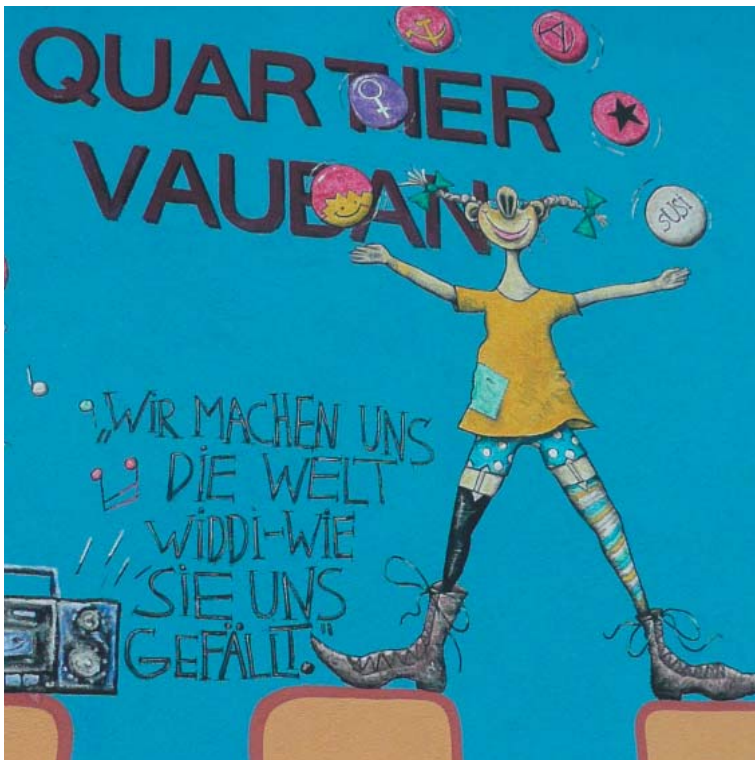


Good quality public facilities in the newer suburbs

This gymnasium with green roof functions also as a view point for the surrounding public park

Values and Strategic Direction

Why they have developed Freiburg in this way?



"We are re-making the world in a way we find appealing"

(Translation of Vauban motto)

- Strong values have driven the nature of development in Freiburg, with the aim on improving quality of life and promoting environmental sustainability.
- As a political approach this was galvanised during successful local opposition to the building of a nuclear power plant in the late 1970s.
- Strong leadership and a powerful team of local political, economic and technical personalities provided momentum to the vision over a period of some 20 years.

Development of the city vision

After the second world war bombing devastation, the centre was rebuilt on the original medieval ground plan. Despite this, dissatisfaction grew with how the city was developing. Concerns included the domination of car traffic on the streets (acknowledging that streets are the 'face' of the city) and the loss of small plots and diversity. Protests against a proposed nuclear power station and concerns over acid rain then motivated a green movement that has been integral to the city's development since then.

The 'Green City' label attached to Freiburg encompasses a number of ideals or visions for what the city should be, importantly environmental protection and quality of life are both central.

Concern with increasing traffic was not a unique concern of Freiburg in the 1960s. Studies were commissioned in many cities in the UK at this time. However, in 1969, Freiburg initiated an urban transport policy that approached the problem in a very different way to UK cities. It gave preference to environmentally-friendly modes of travel (pedestrians, cycling, local public transport) and, most importantly, sought to develop the city and its neighbourhoods to minimise the generation, and the impact, of traffic.

Key early steps were pedestrianising the city centre, developing a cycle network and retaining, extending and updating the tram network. Successful attempts were then made to ensure further initiatives, whether in new housing, transport planning, city investment, economic policy, maintained the vision and worked towards its fulfilment.

Policy

How are they going about it?

► Keeping the vision alive...

Over the past 25 years Freiburg has been using even small steps towards the same single goal of improving quality of life and promoting environmental sustainability. The politics is important here with a strong green movement.

► ...but also being pragmatic

Although there is strong vision centred emphasis, they are not slaves to ideology but take a quite pragmatic route. The successful tactic lies through, in compromise, taking a smaller step towards the same vision; and not a larger step, but in the wrong direction. They recognise that a mixture of 'top-down' and 'bottom-up' is effective.

► Strong control over the development process

They have used every aspect of development management at their disposal; often being also the land owners to help move city progress toward their socio-environmental goals.

► Courage and commitment

They have taken risks and made counter-intuitive moves. One example is responding to rising public transport costs and dwindling passenger numbers by slashing ticket prices.

► Active community involvement

The combination of far-sighted planning and citizen participation has ensured that citizens themselves have bought into, and in some cases, extended the vision. For example in 2005, citizens in 19 working groups discussed every potential construction area leading to the current Land Use Plan 2020.

► An integrated design led approach

Town planning is fused with a creative design-led approach. Solutions to complex resource and land-use problems are found through creative problem solving. Results displaying greater levels of integration and synergy are always sought; in contrast to more 'technical', but less creative complex problem solving, through the simplification of separation and zoning.

► Working with the natural elements, water, sun and vegetation

Their approach deliberately values and includes 'free' natural assets. Greenery, trees, water and sunlight are all made use of to improve quality of life and quality of the natural environment. Good quality and well-maintained semi-natural areas blend-in effortlessly at the boundaries and edges of residential zones. The local katabatic wind from the hills sweeps air pollution away every evening - the height and placement of tall buildings is strictly controlled so as not to interrupt this important natural process.

Housing areas abutting the central park area and community hub, Rieselfeld



▶ One element - many functions

Finally, an important element to sustainable solutions in the policy arena is the 'one element - many functions' approach. This ensures that different potential 'silo' problems are solved in a joined-up manner, with plenty of creative synergy. This is a systems approach at its best.



'Solar garage' Vauban

Main multi-storey garage at the entrance to Vauban sends a strong value message doubling as a net energy generator



Cycle hub Freiburg station

Multifunctional low impact transport hub; cycle hire, cycle parking, cafe; travel bureau with solar electric and solar thermal collectors.



Community church, Rieselfeld

This iconic church houses both Protestant and Catholic congregations in separate but flexible spaces under one roof.

Examples are many, including:

Coherent strategy between policy areas

The development of the transport system has been closely related to the broader development of the city. For example, high density development focused along tram lines and tram network serving new developments.

Coherent strategy within policy areas

In transport, the strategy combines traffic restraint and encouraging alternatives (extending public transport network, promotion of cycling, traffic restraint, channelling of motor traffic, parking space management).

Building strong, mixed communities

In new developments high quality public facilities (e.g. nurseries, schools) are provided so that high income households are attracted. Crime is designed out from the start so that problems do not perpetuate. A variety of housing tenures and types are required. This is enabled by using a diversity of smaller investors and developers in housing.

The approach leads to visual variety, and results in a close match between building design and human need; the heart of well functioning residential areas and diverse communities.

Notably, however, there seems to be an absence of a formal connection between the planning and public health authorities and functions as we would recognise them in the UK.

Delivery

What they are doing?

From observation, presentations and reflection on this study tour we have all come away with many lessons. For ease these lessons have been organised into the following headline key objectives that seem to be underlying the approach.

▶ 1 Making places to live fulfilled lives

Lessons

- Secure the infrastructure needed for success
- Shared facilities at all scales
- Recognising the role of environments of quality

▶ 2 Supporting community interaction

Lessons

- Residential urban realm should not be a car park
- Motorised traffic speeds should be kept low within neighbourhoods

▶ 3 Prioritising the ease of local movement

Lessons

- Differential permeability
- Open, green and overlooked

▶ 4 Paying attention to the role of public transport

Lessons

- Public transport is designed and run for maximum modal share
- Make it the natural choice to use public transport
- Public transport is essential advance infrastructure
- Public transport can be the backbone to a city
- Exert public control over public transport

The nature of the systemic and joined-up working means that the lessons can also be arranged in many other patterns and also that each lesson may contribute to several of the key objectives. The way they are organised in this report is just one way into these agendas.

I Making places to live fulfilled lives

The tour of the 78 hectare development of Rieselfeld, led by the architect Herr Siegel, emphasised how residential development has been planned to enable the population to live fulfilled lives.

- **Lesson:** Secure the infrastructure needed for success

This is a key driver and they have 'gone all out' for supporting every means possible



Secondary school an integral element of Rieselfeld

Unlike in the UK much of the school is unfenced and open access thus promoting integration and community use



Local shopping

Priority to local, neighbourhood shops over large, edge-of-city supermarkets (Vauban shown here)

The development is connected to the city centre through a regular tram service, which runs straight through the centre of Rieselfeld.

Development was not allowed to proceed until this line was operational, in order to ensure low impact habits on travel were embedded with residents from the very start.

The tram enables residents to access the amenities of Freiburg within 15 minutes. However, significantly, Rieselfeld does not rely on the city for its services. The settlement contains a central area with both primary and secondary schools, a shared Catholic-Protestant church, shops, a proposed supermarket, and a community centre with book shop and places for residents to meet.

Each quarter of the settlement has a nursery, and there are play facilities and cycle tracks throughout. Rieselfeld also has health centres, a police station and an outdoor market twice a week.

Accommodation is in good variety with flats, maisonettes and 3 or 4 storey terraced houses. Although housing density is high, there is a large amount of green space throughout the development and all flats have a garden / private space. Flats are privately owned but the estate is managed by a company.

- **Lesson:** Shared facilities at all scales – city, neighbourhood, street, home

As part of the ‘one element, many functions’ approach sharing is encouraged at all scales.

At the smallest scale, outside the home, the private garden area often opens onto either a shared semi-private or semi-public garden space. At the front, a small front garden will usually blend into the ‘home zoned’ street as a shared living area. Restrictions keep fences and hedges low.

Public buildings in the neighbourhood effortlessly provide further opportunities for a shared sense of community. Their design and management lends themselves to this.

For example, Kindergartens are placed at the centre of some of the sub-neighbourhoods in the semi-public zone; shielded from full public view by the surrounding blocks but also protected by affording open views in and out of the children at play.

The reverse of the behind high walls and screens approach taking hold in the UK.



Communal bicycle parking along a street in Vauban



Shared Catholic/Protestant church in Rieselfeld



Local Kindergarten in Rieselfeld

- **Lesson:** Recognising the role of environments of quality



Nature for people's health and biodiversity
 Examples include the conservation area next to Rieselfeld and plenty of trees and vegetation within housing and streets.



High quality and safe urban public realm
 Attention to detail and liberal use of natural stone, wood and thoughtful design.

This building is part of the social heart of the community which comprises a library, arts gallery, sports facilities, medical centre and cafe with both a civic square, housing a weekly market and a park.



2 Supporting community interaction

- **Lesson:** Residential urban realm should not be a car park

Open views

Community interaction also appears to be promoted through the design of the residential plots, with high density of apartments, no fences between plots and encouraging residential recreational developments/constructions on the areas of green space (such as tree houses etc). This is most evident in Vauban.

Mixed tenure and dwelling types

Social mixing is a key feature in both Vauban and Rieselfeld. In Vauban in particular, those from a variety of social backgrounds live in shared blocks of apartments, being accommodated in a variety of dwelling types. It appears that such social mixing is successful, with residents happy with this and also crime being low.

Car parking

Both Vauban and Rieselfeld limit access to cars; restricting their presence to underground parking areas or parking lots on the outside of the developments. The car free / low car environments are seen as supporting community interaction by making the environment safer and a place for social mixing.

The radical step taken in Vauban to not allow cars to be parked within the neighbourhood, instead only allowing cars to be parked at great expense at two large garages at the edge of the neighbourhood, results in a street environment very different from that usually



A Saturday morning table tennis game in the street, in the next street it was badminton and in a third one a mother and her 5 year old son were kicking a ball about.



Car-free street in Vauban (which is largely a car free neighbourhood)



Large garage at edge of Vauban for residents parking

experienced. The calm street environment promotes children's activity outdoors. It is an example of how residential space can be used differently when it is not needed for non-access movement **and storage** of motorised vehicles.

Apart from the absence of cars, the street scene sometimes appeared not to be so dissimilar from the UK. In Rieselfeld provision is made for residents to be able to park their cars in undercroft garages or in small parking areas near to their homes.

On some Home Zone streets cars were parked on one side of the street and partially hidden by a covering. Given the density of development movement of traffic appeared minimal within the area.

We were told car ownership in Rieselfeld is 283 cars per 1,000 inhabitants, and 80 cars per 1,000 inhabitants in parts of Vauban; which is very low compared to the UK and rest of Germany/Freiburg and may be attributed to the comprehensive public transport and walking and cycling infrastructure and viability of close by locations for local facilities.



Undercroft parking takes cars off the street in Rieselfeld

• **Lesson:** Motorised traffic speeds should be kept low within neighbourhoods

Traffic speed

Motorised traffic speeds are kept low within neighbourhoods so that public realm activities such as walking, cycling, children's play and social interaction are not discouraged.

Freiburg was the first city in Germany to introduce 30 km per hour speed limit. This speed limit is applied in all residential areas in the city now. In the last few years there has been interest in the UK in introducing 20 mile per hour speed limit in residential areas with Portsmouth recently introducing it on all of its residential streets.



30 km per hour speed limit on all streets within Rieselfeld

3 Giving importance to the local movement network

- **Lesson:** Separate the levels of permeability; walking then cycling then driving; but keep it simple.

In addition to the main roads, a grid of routes has been created. These comprise very local pedestrian only routes, paths for pedestrians and cyclists, and streets designed as open home zone living areas.

The total bicycle street network in Freiburg is 400 km in length and comprises 150 km of cycle lanes, 130 km of cycle-friendly roads and 120 km of cycle paths through forest and rural areas. Most of the features of the cycle infrastructure and facilities in Freiburg are known and applied in UK, but the network as a whole achieves a comprehensiveness, continuity and priority to cyclists not seen in UK.

Street networks in the new neighbourhoods (Vauban, Rieselfeld) are in a grid pattern (similar to older neighbourhoods), allowing efficient use of land and good connectivity. With access to motorised vehicles being not permitted on some streets the ease and directness of movement for pedestrians and cyclists is high.



Pedestrian and bicycle only street in Vauban



Home Zone in Rieselfeld



Designated bicycle street

- **Lesson:** Open, green and overlooked

With such a physically child friendly environment, informal play opportunities abound. Perceptions of safety and actual safety of children is further enhanced through providing overlooking of all public areas from windows and the many balconies. This would equate to a 'designing out of crime' approach.



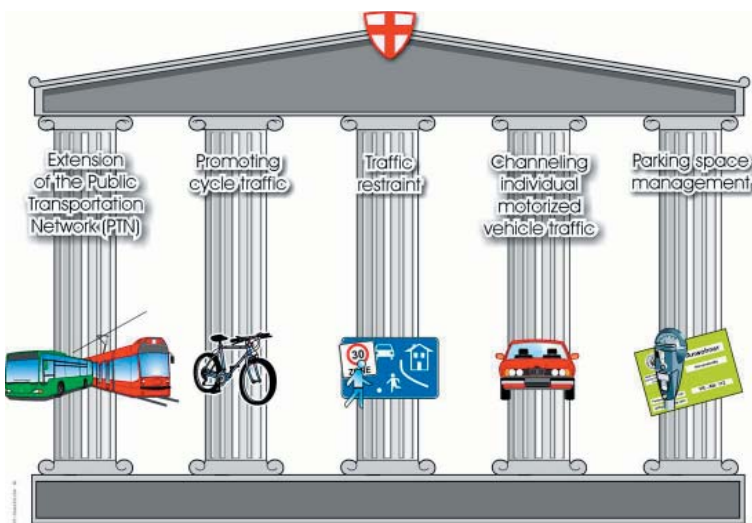
Overlooked play area in Rieselfeld

4 Paying attention to the role of good quality public transport

- **Lesson:** Public transport is designed and run for maximum modal share; income and viability flow from this goal

In the late 1980s the regional government introduced the Cybernetics Mobility Concept, with the aim of strengthening environmentally friendly means of transport. This strategy involved five pillars of activity;

- Extension of the Public Transport Network (PTN)
- Promoting cycle traffic
- Traffic restraint (30kmph speed limit)
- Channelling individual motorised vehicle traffic (in the city core and neighbourhoods)
- Parking space management



The five pillars of activity to support public transport



Passenger numbers (blue) and net costs (subsidy required) for running the network (red). From the 1980 to 2007.

Pink time zone represents the period of rebranding: cutting ticket prices, rebranding as an environmental service and the introduction of the transferable regional unlimited travel pass,

This combined activity has seen huge passenger increases on public transport (from 27.3 million in 1980, to 71 million in 2007), and a reduction in the number of cars entering the city (from 16,000 cars a day to approximately 6000 cars a day).

This approach involved significant investment and business innovation in the public transport infrastructure, not only in Freiburg but throughout the surrounding region.

Public transport was experiencing a slow decline in Freiburg up until 1980. Then a strategy was pursued to change its image, make the price competitive and improve the quality. The introduction of monthly tickets in 1984 (at a 30% reduced price compared to before) resulted in increased trips and stopped the increase in operating deficit. Since then the monthly card concept has been extended with options for travel in surrounding region.

The political will needed for such a transformation is highlighted through the introduction in 1991 of a regional ticket offering unlimited travel across the region, involving nineteen different transport companies. Costing 44 euros a month, the ticket is heavily subsidised by the regional government, to the tune of 9.2 million euros a year. This money goes to the private transport companies. The subsidy is seen as being a good use of public money in the pursuit of environmental improvement.

- **Lesson:** Make it the natural choice to use public transport

There have been a number of improvements to public transport to increase its attractiveness to the general public. The tram system benefits from priority for trams at traffic lights, provision of low floor vehicles to assist the speedy embarkation and disembarkation of passengers, a dedicated lane for trams once outside the central area, high frequency of trams (every 5-7 minutes), longer vehicles to meet demand, and denser frequency in rush hours.

The 35km tram system connects 80% of Freiburg's residents. Investment in buses, trains and bicycle provision, and integration of these with trams at nodal points (such as the main railway station), ensure passengers can transfer easily between transport modes to travel from all parts of the city and beyond into the city centre. A night bus provision, "Safer Traffic", financed by local communities, enables people to exit the city centre late at night and transfer onto taxis to reach rural destinations.

The success of the developments is attributed to political stability in the Freiburg government, which promotes investment in public transport. It is also claimed that there is strong public support for continued subsidy of the system.

Freiburg has a 35km length tram network which is within 300m of 80% of the city's population.

High density development has been focused along the tram lines where it has good accessibility. This has also improved the financial performance of the public transport system by ensuring high levels of patronage.

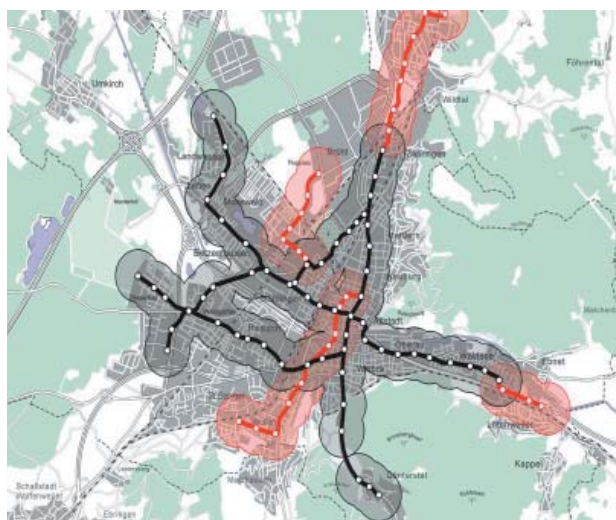
Only trams traverse the city core with suburban bus hubs linking the tram lines to the buses services all the outer areas. This ensures very high levels of tram use, frequency and viability.



Freiburg's public transport operator has a travel shop



Integration of rail, trams, buses, taxis and bicycles at the main station enables easy interchange



Careful planning to ensure maximum number of people are within 300m walking access to tram stops

- **Lesson:** Public transport is essential advance infrastructure



The importance has been recognised of having high frequency public transport services available as soon as residents move into new homes.

In the two new neighbourhoods of Rieselfeld and Vauban extensions were made to the tram network so that early in the development of these areas trams were introduced into the heart of these neighbourhoods, providing good accessibility to all residents.

The effect is that in-coming residents can plan to arrange their lives taking advantage of the tram network before they move and that they do not develop a habit of using cars after moving in and before public transport is introduced.

This can have the impact of reducing the need for a second car (or first car?). Initial implementation of the tram line and also provides confidence to investors/developers and increases property values.

Tram line built through heart of Rieselfeld

The central tram line is vital and started running from the first development phase to ensure even the first residents would not be car reliant.



- **Lesson:** Public transport can provide a backbone to the city

In many ways public transport makes Freiburg work. It provides the people access to support the economy and shapes the civic character both through the presence of trams and buses, and the relative absences of cars - leading in turn to the presence of walkers and cyclists and space.

To carry people on public transport requires only about 10% of the road space compared to private cars with sole occupancy.

There is automated priority to trams as they use shared roads (green signals are triggered). Low floor trams and buses enable use of buses by disabled persons and those with pushchairs and they assist general use for everyone. The frequency of daytime services is every 7.5 minutes for trams, 15 minutes for main bus lines and 30 minutes for other bus lines. This pattern enables short connection times to be maintained for users. To support night time economy of Freiburg and provide access to it a system of night buses and on-demand taxis is operated.



Trams passing through the historic core



Typical core street in the mid 1960s and present. Absence of cars leaves space for people and cycling.

- **Lesson:** Public control over public transport

Freiburger Verkehrs AG, the main city public transport company, is owned by Stadtwerke Freiburg GmbH which owns other municipal companies such as the energy company, Badenova. This means that planning and operation of public transport in Freiburg can be directed by the city's planning department.

It can determine the service characteristics and fares, for example. This is a different situation to the UK where most local public transport services are operated by private companies with little direction possible from the local authority.

Solar innovation



Solar photovoltaics on side of the office block over remodelled train station booking hall



Solar thermal is also used extensively
Here on the balcony of the cycle hub



Ecological renovation

The photovoltaic panels were retrofitted to this block, paid for by building and selling an additional floor of accommodation.

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Solar penthouse anyone?



Solar photovoltaics on house in Vauban



Solar 'village', Vauban.

The houses here are all net generators of electricity. They cost 5% more to purchase but no electric bills - make money selling to the grid.

Other inspiring innovation



Inclusive movement

Low level and flat access to motorised transport.

Pedestrians with disabilities use the blue box to increase crossing times.



Impacts made visible

The transport provider displays total carbon savings of the solar kit on its HQ.

Public air quality display features low level ozone, NOx and SO2 emissions.



High quality social housing integrated into developments



Well designed communal bike sheds for residents



Grass strips under tramlines

Reduce noise for residents, improve the 'greenness' of the environment, allow percolation and filtration of water



Reflections: The learning zone

A series of three reflective sessions, one each day

L1 First impressions and questions arising

Tool introduced: the health map

L2 How does the physical nature of a neighbourhood affect health

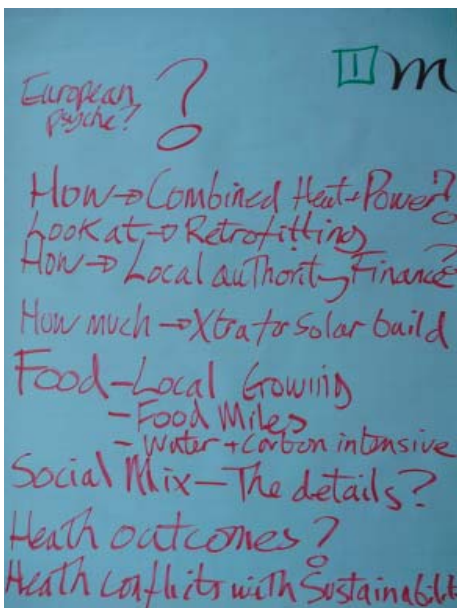
Tool introduced: the spectrum approach

L3 Reflections, impressions and actions

What we will take back with us and questions to raise in the South West

The final reflections recorded by participants have been used in the preceding sections of this report. This section serves as a record of the process.

L1 First impressions and questions arising



The first learning zone session focused on first impressions, and initial questions arising following the first full day in Freiburg. Following paired discussions, the group came back to report the following thoughts.

- Is what has happened in Freiburg transferable to cities in other countries?
- Or was it the result of a happy set of circumstances?
- What drives the moral values and code that appears to exist when developing the city?

A decisive element was thought to be the control the local government held on the land. This enabled it to require developers to build to specifications aimed to meet environmental and social goals.



Health was not mentioned as a motivating factor in the developments in both public transport and the residential areas, with a focus instead on quality of life, environmental protection and improvement.

This provoked a discussion of the important role that protection of health and well-being brings to the broader environmental debate.

- In the UK context, is health a discrete discussion or is it an integral part of sustainable development?

The subsidisation of the public transport infrastructure led to a discussion of whether the government needs to do the same in the UK. Many in the group felt that there should be more commitment from the Government to ensure affordable, integrated and efficient public transport alternatives to the car.



The group cautioned against initial impressions of the city, and whether Freiburg as a whole differs from the “showcase” areas of Vauban and Rieselfeld. There was also recognition that the group had spoken to certain stakeholders.

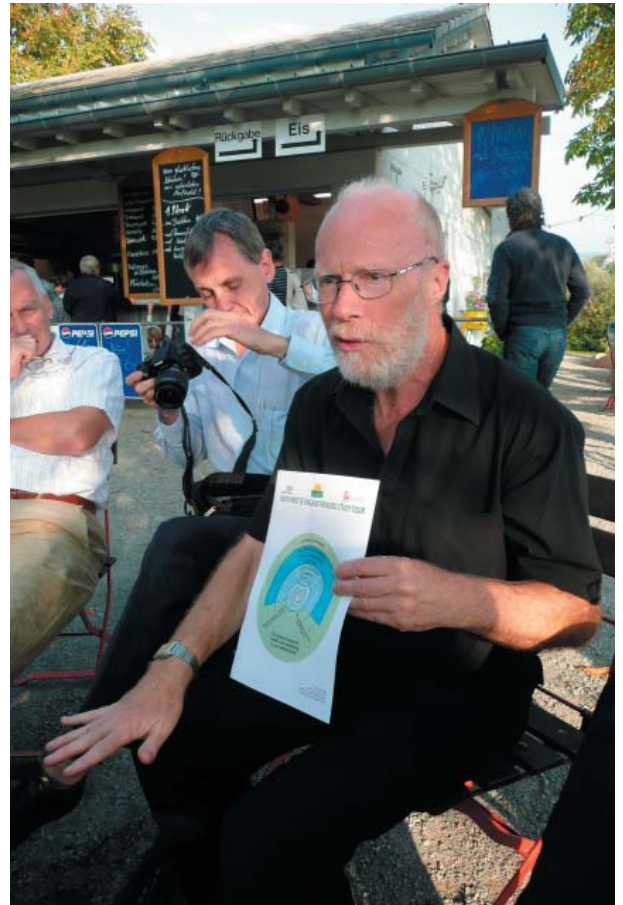
L2 How does the physical nature of a neighbourhood affect health

The second learning zone focused on the issue of density, and how high density developments such as Vauban and Rieselfeld appeared to encourage and promote social mixing while also providing a sense of space through use of green space.



The group contrasted Vauban with Rieselfeld, with some feeling that Rieselfeld was a more ordered, structured environment. The group agreed that there was a sense of community cohesion in both places.

However the group also agreed that it would be useful to hear from local residents about their experiences of living in these places. The group wondered whether any local surveys of community opinion had taken place.



As a summary, Rieselfeld and Vauban offer two different approaches to creating a healthy, sustainable community.

Rieselfeld is a community of around 12,000 people, surrounded by main roads, and could be described as a “neighbourhood cell” with a strong nucleus with quality buildings but has given no real benefit to the neighbouring deprived area to the north.

Vauban is a much smaller neighbourhood, not supporting as many facilities. As a smaller residential area of around 4000 people, it is not big enough to support large facilities as those seen in Rieselfeld. Instead, Vauban ties into a routeway with facilities along it. Vauban appears more integrated into the city.

L3 Reflections, impressions and actions

What I will take back with me:

A sense of warmth, generosity, choice made manifest in the structure, the warp and the weft, of the city and its neighbourhoods.

The 'small plots' approach to development

The very real importance of the built environment to peoples' lives

The way that health and well-being can be enhanced by exemplary urban planning

What is the one thing I can apply easily:

Introduce questions on health impact within the planning process

Dual use of core community facilities

Planning the flow of green and open public spaces for community use

What impressed me most:

The high degree of liveability created in tight urban grain, mixed tenure and high quality housing development

Children playing and socialising in safe areas, not manicured so they lack imagination, the ability for 'wild play' and risk but in the heart of the community.

Removing parking and traffic from streets - the central garage, the undercroft parking, the traffic speed constraints

High density housing can be achieved without crush

Land sale control and proactive design is critical

The long term can be achieved with broad support and sustained political consensus on core principles and objectives

The three major ingredients: Vision, Enthusiasm, Commitment

Proactive design of communities on council owned land

Demand responsive transport linking into conventional public transport routes and schedules

Better use of public land to facilitate better quality of life

Effective co-ordination and planning, turning intention and sound principle into action on the ground

Seamless integration across what in the UK are separate silos (energy, transport, water, community, education) to achieve socio/environmental goals.

The integrated transport: How convenience of the traveller is at the core of system; how the entire door to door journey is catered for.



The questions we should all be asking in the South West.....

- With the 100,000s of new dwellings to be built in the SW; can we afford not to change our approach?
- Can some of our growth areas do better than Freiburg?

Why are we so afraid of public sector control and intervention?

Do we have to have private development companies dominating the process?

How can we prove these approaches reduce health service costs and redirect resources to get it right?

How can we engage the Health Authority to assist with the development of healthy settlements?

How can we use the RSS as a driver for change in ways that achieves sustainable development and quality of life?

How can we develop a financial model to 'pump prime' essential advanced infrastructure and then claw back the finance from the cumulative year on year benefits to the development?

How can we become more proactive and less reactive in bringing forward community development in the round?

How can we achieve equivalent outcomes in our own political, economic and social context?

How do we really exploit the opportunity of the environment as a driver to stimulate the development of a 'new way' across the SWRDA?

How do we develop an integrated transport system with people's quality of life and climate at the heart?

- What are the obstacles to us becoming much more 'courageous' in our decision making?
- What is our vision in the SW for the built setting of healthy, sustainable and vibrant communities? Do we even have one?

How can we engage the transport operators, developers, retail sector and private investors together with the public sector agencies in the mission to create environments for well-being and sustainability?

Notes:



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