

# Freiburg-Rieselfeld

## Freiburg-Rieselfeld : urban expansion and public transport

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## 1 Context

### 1.1 Background

The city of Freiburg im Breisgau is located in the south-west of Germany and is a municipality in the federal state of Baden-Württemberg. It has a population of about 200,000 including a large number of students. Freiburg is called the German ecological capital because of its integrated planning strategies and its excellent public transport system.

Since the mid-1990s a new residential area has been developed at the western outskirts of the city. In the 1980s Freiburg had a lack of residential land and there was no more developable residential land designated in the preparatory land-use plan. The City Council therefore decided to use the 320-ha 'Rieselfelder' area owned by the city for a new residential area.

The Rieselfeld area had lost its function as a natural waste water filtering area already in 1986. Today approximately 240 ha of the area are designated as landscape conservation area and 78 ha for residential development (Stadt Freiburg, 1995).

### 1.2 Objectives and Policies

The project Freiburg-Rieselfeld is a counterpart to the Potsdam-Kirchsteigfeld project (see Case Study Potsdam-Kirchsteigfeld) in that it is an example of a new residential area developed with innovative planning procedures. The new area has a compact settlement structure with 4,800 residential units for 10,000 to 12,000 new residents and 1,000 new work places in the service sector (Stadt Freiburg, 1992).

The developers of Freiburg-Rieselfeld did not have the high claim of the developers of Potsdam-Kirchsteigfeld to create a mixed-use suburban community. Their emphasis was on the compact settlement structure in order to both save land and promote public transport. The urban design principles were (Stadt Freiburg, 1993; Humpert, 1997):

- to solve the conflict between landscape protection and the recreation demands of the residents,
- to develop a biological concept for the area and integrate it into the regional biological network,
- to meet high ecological standards (climate, soil, water, energy, etc.).
- to create a residential area suitable for families, women and elderly people,
- to plan a high-density, compact residential area,
- to develop a forward-looking transport concept with the priority on public transport and non-motorised modes.

Because of its well developed public transport system and the attention paid in the past to pedestrian and cycling traffic, Freiburg has already an unusually high share of walking, cycling and public transport trips (60% of all trips) and a corresponding low percentage of car trips (see Figure 1). When developing the Rieselfeld project, the planners aimed at continuing this tradition (Socialdata, 1998).

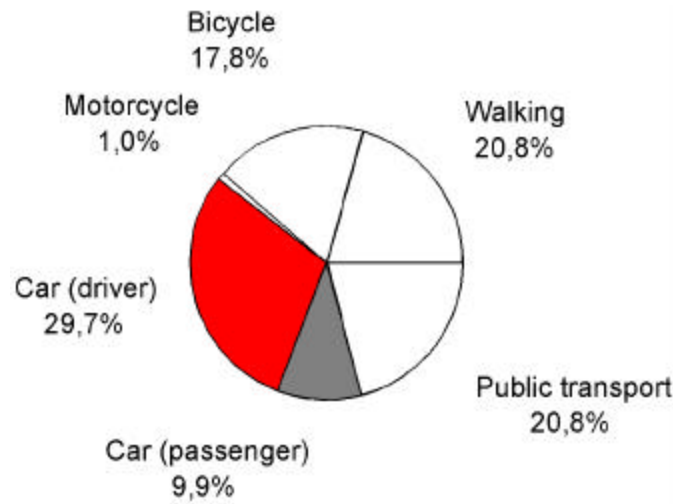


Figure 1. Modal share of Freiburg in 1998 (Source: Socialdata, 1998).

## 2 Implementation

### 2.1 Planning Process

In 1991 the City Council agreed to develop part of the Rieselfeld area for residential use. In the same year an urban design competition was conducted in co-operation with the citizens of Freiburg and different associations and institutions. The proposals of three winning urban design teams were the basis for the urban design of the new residential area developed by the city planning department. After the decision of the City Council to adopt this concept, construction started in 1994 and was completed in 1998 (Stadt Freiburg, 1992; 1997b).

Administration and management of the Rieselfeld project were integrated into the city planning and building control departments. The project team consisted of representatives of several city departments (planning, real estate, civil engineering, education and social security) and other agencies. This organisation has proved to be very productive.

### 2.2 Financing

For the implementation of the project the City Council created a public-private partnership between the city and the developers in the form of a development agency, which helped to integrate private economic know-how and the personal and financial resources of the private developers with those of the city.

For marketing the residential, retail and office floor space, the development agency applied a specific marketing strategy. To ensure that the project paid for itself, the agency had to make 110 million Euro by selling the land to individual investors. The marketing was based on the high-quality and efficient way of construction and on the development of a maximum of 30-40 residential units per investor. The high urban design standards and the strict regulation of rights and duties of the investors were important arguments for the successful marketing of the project. The continuous co-operation between planning and marketing proved to be very productive and flexible.

The development of the whole project was financed mainly by land sales (approximately 115 million Euro) and development fees (22.5 million Euro), but also from public and county funds (7.5 million Euro) in form of subsidies, land management and pre-financing. The revenues, approximately 145 million Euro, were brought into a trust-company fund. With these revenues the project team had to finance public buildings (52 million Euro), streets and utilities (35 million Euro), landscaping (13 million Euro), planning, managing and marketing (19 million Euro), and public relations. These costs amounted to approximately 144 million Euro. To pre-finance the development of the public and social infrastructure, the development agency had to take a credit of 40 million Euro from the state bank of Baden-Württemberg.

The total public and private investment for the project amounted to approximately 1,350 million Euro. The investors include many owners of small and medium enterprises.

### 2.3 *Public Participation*

The City decided to inform the public about the new project from the very beginning. The city planning department had many discussions with different citizen groups to get an idea of their visions and objections. Furthermore, a citizen council with local representatives was established by the City Council. The citizens of Freiburg could participate in the planning process in seven teams with different subjects:

- alternative residential patterns,
- energy,
- planning for women,
- ecology: construction ecology,
- ecology: landscape planning,
- transport,
- housing.

After three months of work, the teams presented their results to the City Council and the city planning department. The City Council decided to integrate some of the suggestions made into the urban land-use-plan. This intensive participation eventually led to the establishment of a citizen association for Freiburg-Rieselfeld (Stadt Freiburg, 1997c; 1997e).

### 2.4 *Urban Design Concept*

The compact settlement structure of Freiburg-Rieselfeld is characterised by a perimeter development of 4-5 storey apartment houses (see Figure 2). A compact 'urban edge' is planned along the 300 m long main street of the new residential area.

On the ground floor of the apartment houses along the main street supermarkets and smaller shops, doctors' offices, social infrastructure, and other services are located to prevent the development of a dormitory town.

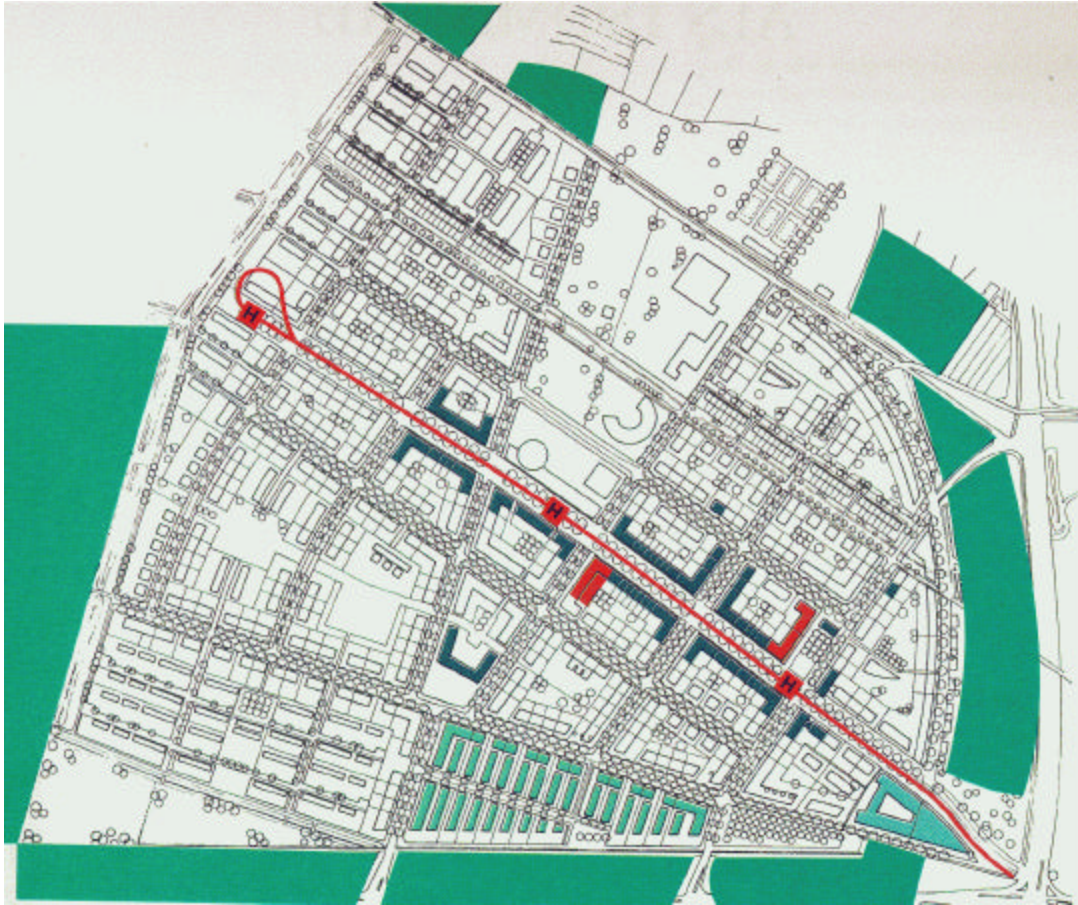


Figure 2. Freiburg-Rieselfeld: urban design concept (Source: Stadt Freiburg, 1997e).

The development of small businesses and services on 1.5 ha in the southern part of the area potentially provides employment for part of the residents. In addition there are several new public infrastructure facilities in the area, such as a high school, an elementary school, five kindergartens and a community centre (Stadt Freiburg, 1997b).

Following a decision of the City Council, fifty percent of the residences in the area are subsidised social housing.

### 2.5 Transport Concept

The tram is the most important travel mode in Freiburg-Rieselfeld. An existing tram line (Line 5) was extended into the area with an investment of 7 million Euro. This line links the area with the excellent public transport system of Freiburg. In addition, a new tram line (Line 6) runs along the main street to the terminal Maria-von-Rudloff-Platz since September 1997. Inside the new community there are three tram stops. The distance from each residential building to the nearest tram stop is no more than 400 m or five to seven minutes walking. Another positive aspect is the attractive time table: the trams between Rieselfeld and the city centre of Freiburg run every 10 or 15 minutes between 05:14 h and 00:14 h (Stadt Freiburg, 1997b; BBR, 1997).

Besides the tram system, there are park-and-ride facilities at the outskirts of the area and several parking lots for shop customers along the collector streets and the main street. Parking for residents is exclusively in underground garages to prevent the parking of vehicles in the residential streets. A maximum of 50 parking spaces can be reached by one ramp to minimise noise pollution.

Several measures for the improvement of bicycle traffic were carried out. All collector and residential streets have bicycle crossings. The bicycle routes in the area are connected with the bicycle network of Freiburg and the surrounding area, and each tram stop has bicycle stands. To increase the quality of the area for walking, cycling and children's play in residential streets, area-wide speed limits of 30 km/h were introduced. To minimise obstruction by car traffic, there are only three road accesses to the quarter, two at Opfinger Straße and one at Mundenhofer Straße (Stadt Freiburg, 1997b).

### **3 Assessment**

The Rieselfeld project well illustrates the benefit of close integration between urban development and municipal transport policy. On the one hand, compact urban expansion promotes the use of public transport. On the other hand, the orientation of the municipal transport policy on public transport is not possible without compact urban expansion. Important elements of this interaction are the measures to promote public transport not only by new lines but also by giving priority to non-car traffic in the area. The planners consistently followed both a push-and-pull strategy.

Another significant aspect of the Rieselfeld project is the good balance between public and private investments, which created the framework for a successful co-operation between public and private actors and the integrated consideration of ecological, economic and social issues. No serious problems in the implementation were encountered. The reasons can probably be seen in the early information of the public and the attention given to citizen participation.

### **4 Conclusions**

Freiburg is called the German ecological capital because of its integrated planning strategies and its excellent public transport system. Since the mid-1990s a new residential area has been developed on the Rieselfelder area at the western outskirts of the city. The compact settlement structure of the development is characterised by 4-5 storey apartment houses with shops and offices on the ground floors along the main street and tram line. The development of small businesses and services in the southern part of the area potentially provides employment for part of the residents. Two tram lines, one of them new, connect the area with the city centre of Freiburg. Within the area traffic calming measures make walking and cycling more attractive.

The case study illustrates the benefits of a close integration between urban development and municipal transport policy. Compact urban development promotes the use of public transport, while efficient public transport is only possible with compact urban development. Important elements of this integration are the measures to promote public transport not only by new lines but also by giving priority to non-car traffic in the area.

Another significant aspect of the project is the good balance between public and private investment, which created the framework for a successful co-operation between public and private actors and the integrated consideration of ecological, economic and social issues.

The productive co-operation between planners, developer and marketing practised in Freiburg could be a model to follow in all European countries. The integration of land-use and transport planning demonstrated in the case study is in principle transferable to all European countries. The urban design and transport concept developed for Freiburg-Rieselfeld could serve as a model for future suburban developments in cities with a demand of dwellings and office space and a commitment to environment-friendly urban transport.

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