

4 Four Decades of Planning for Livable Communities: Insights from Freiburg, Germany- Ralph Buehler

Organization: Virginia Tech
Email: ralphbu@vt.edu

Contributing Authors: John Pucher, Bloustein School of Planning and Public Policy, Rutgers University

Summary:

For four decades, the city of Freiburg (population 220,000) has been at the forefront of promoting sustainable transport in Germany. Up to the late 1960s, Freiburg encouraged greenfield development, widened streets, abandoned trolley lines, and built car parking lots. Motorization increased rapidly, transit ridership plummeted, and the city was sprawling. Air pollution, traffic fatalities, and traffic congestion related to the car and other environmental concerns shifted public opinion away from automobile centered growth. Between 1982 and 2007, the number of trips by bicycle tripled, transit ridership doubled, and the share of trips by car fell from 38% to 32%. Since 1990 the level of motorization has stagnated and per-capita CO₂ emissions from transport have fallen. Freiburg achieved a more sustainable transport system by (1) successfully integrating land-use and transport planning, (2) coordinating and integrating public transport regionally, (3) promoting bicycling, (4) restricting automobile use, and (5) encouraging citizen participation throughout the process.

Governments at federal, state, and local levels in Germany determine the sustainability of the transport system. Federal gasoline taxes, sales taxes, and regulations make automobile use and ownership expensive and encourage demand for less polluting and smaller cars. Additionally, the German federal government provides matching funds for local public transport, walking, and cycling projects. Federal, state, regional, and local governments interact in a federally mandated bottom-up and top-down land-use planning process. Lower levels of government participate in drafting plans at the next highest level, but are bound by the higher level plans once they are adopted. At each level land-use plans are coordinated with housing, transport, and environmental plans and neighboring jurisdictions. Local governments draw-up the actual land-use plan. The role of the federal government is limited to ensuring consistency of planning techniques, enforcing planning and environmental laws, and formulating broad spatial planning goals. Federal and state governments provide the framework, but cities—like Freiburg—have been developing and implementing innovative policies.

Integrating Transport and Land-Use Planning

Even though Freiburg started implementing sustainable transport and land-use policies in the early 1970s, the comprehensive transport plan of 1979 was first to explicitly call for the integration of both planning sectors. The land-use plan of 1981 prescribed that new development was to be concentrated along public transport corridors. In 2006, 65% of Freiburg's residents and 70% of all jobs were located within 300 meters of a light rail stop. Freiburg's most recent land-use and transport plans were developed simultaneously and both postulate the goals to reduce car use and keep trip distances short.

Expanding and Coordinating Public Transport Services

In the late 1960s Freiburg's city council decided to stop abandoning trolley lines. Fifteen years later, in 1983 the first new light rail line was added to the remaining 14 kilometers of tracks. Since then, Freiburg has opened four new lines with a total extent of 36.4 km in 2008 and supply of light rail service has tripled. In 1984, Freiburg's public transport system offered Germany's first monthly ticket—transferable to other users. In 1991, the geographic coverage of the ticket was

expanded to include the city and two adjacent counties. Services, fares, subsidies, and timetables for bus and rail operators are coordinated regionally. The monthly ticket offers unlimited public transport travel within the entire region for about \$60. Over 90% of passengers have monthly or annual tickets. Freiburg's transit system has become one of the most financially efficient in Germany—only requiring 10% of operating subsidies.

Making Cycling a Viable Transport Alternative for All Trips

The bicycle is a feasible option for all trips and all destinations in Freiburg. Between 1972 and 2007 Freiburg expanded its network of separate bike paths and lanes from 29km to 160km. This network is complemented with 120km of bike routes through forests, 400km of traffic-calmed roads (30km/hr or less), and 2km of bicycle streets. Slow automobile speeds in traffic calmed areas encourage more cycling and make it safer. The city requires bike parking in all new buildings with two or more apartments, as well as schools, universities and businesses. Between 1987 and 2009, the number of bike parking spaces increased significantly—including a major bike parking garage at the main train station with space for 1,000 bikes.

Restricting Automobile Use

Many of the policies that promote public transport, bicycling, and walking involve restrictions on car use—such as car-free zones and traffic-calmed neighborhoods. Additionally, Freiburg's parking policy is designed to make car use less convenient and more expensive. Parking garages are relegated to the periphery of the city center. In residential neighborhoods, parking is reserved for residents only and requires a special permit. On-street parking in commercial areas of the city becomes more expensive with proximity to the center.

Citizen Involvement

Citizen participation has been a key aspect of transport and land-use planning in Freiburg. For example, Freiburg's latest land-use plan has been developed with sustained input of 900 citizens 19 neighboring municipalities, and 12 special purpose governments in the region. Citizen involvement and public discourse kept the environment and sustainability of the transport system in the news in Freiburg for decades. Over time, public opinion in Freiburg has become more and more supportive of sustainable policies.

Lessons for the USA

The innovative transport and land-use policies introduced in Freiburg offer useful lessons on how to increase transport sustainability: First, controversial policies were implemented in stages—often starting in neighborhoods where people were most supportive. Second, transport policies were multi-modal and included both incentives for alternatives to the car and disincentives to automobile use. Third, transport and land-use planning were fully integrated—culminating in the simultaneously drafted transport and land-use plans of 2008. Fourth, citizen involvement was an integral part of policy development and implementation—with citizens often driving the sustainability agenda. Fifth, support and collaboration from higher levels of government was crucial to making local policies work. Sixth, sustainable transport policies were long term, with policies sustained over time, for lasting impact.

For more details: Buehler, R., Pucher, J. forthcoming. "Sustainable Transport in Freiburg: Lessons from Germany's Environmental Capital," *International Journal of Sustainable Transportation*.