The SCATTER project

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The urban research cluster LUTR

The **LUTR** cluster (www.lutr.net) links different projects in the area of sustainable urban mobility, including land use, transportation and the environment. These projects tackle issues of transportation demand and related land use planning, the design and provision of efficient and innovative transportation services including alternative means of transportation, and the minimisation of negative environmental and socio-economic impacts.

An overall objective underlying the LUTR cluster is to assist cities, national governments, international organisations, individuals and interest groups in obtaining maximum benefits from the research undertaken by the cluster projects and thus contribute to increase the effectiveness of sustainable measures by the dissemination and transferability of relevant practices.

European Commission Fifth Framework Programme
Energy, Environment and Sustainable Development Programme

Key Action 4: City of Tomorrow and Cultural Heritage

scatter

SPRAWLING CITIES AND TRANSPORT: FROM EVALUATION TO RECOMMENDATIONS

Urban sprawl is widespread in Europe. In a growing number of cities, population and employment in central areas is declining while increasing rapidly in suburban and peripheral areas

This induces a high level of car use and, usually, congestion on roads with access to city centres.

To limit the damage caused by urban sprawl in terms of congestion, air pollution and energy consumption, many European cities are implementing (or planning to implement) suburban public transport services, such as heavy or light rail.

But by improving accessibility, they create an incentive for a new wave of urban sprawl. Therefore, in parallel with these new public transport services, accompanying measures have to be elaborated and implemented, in order to prevent, mitigate and control the sprawl phenomenon.

The SCATTER project tackles the issue in which land use and transport are closely mixed.

The key aim of the project is to promote sustainable development. In addressing transport, land-use and environment in an urban context, SCATTER covers the most important threats to the well-being of the majority of European citizens.

SCATTER project objectives

- ***to analyse the contexts and mechanisms of the urban sprawl in six European case cities,*** using two complementary methods: *qualitative* systems analysis by experts and *quantitative* statistical analysis;
- ***to quantitatively evaluate measures aiming to prevent, mitigate and control urban sprawl,*** as accompanying measures in cities implementing suburban public transport services; the evaluation will be done by means of integrated land-use/transport models in a sub-set of three case cities and will take into account the impacts on urban structure (population and jobs location) as well as on transport and air pollution;
- ***to provide practical recommendations and guidelines to local authorities, on how to design accompanying measures*** to public transport investments and policies in order to efficiently tackle urban sprawl;
- ***to provide local authorities with an "urban sprawl monitoring tool"***, a tool to monitor the evolution of the structure of the urban region and the effects of sprawl with regard to transport and environment (air pollution);
- ***to provide each of the 6 case cities with a practical programme of measures.***

SCATTER project methodology

- first, ***improving the understanding of the mechanisms of urban sprawl and its impacts***, in particular its relation with transport (review of urban sprawl impacts and measurement techniques, system analysis and statistical analysis using a common analysis framework in the six case cities);
- secondly, ***reviewing measures aiming to wrestle with urban sprawl***, from case cities and from a larger review, which will also include experience in the USA where urban sprawl has existed for a much longer time that in Europe;
- then, ***selecting measures to be evaluated*** on the basis of their relevance with regard to the mechanisms of urban sprawl and of their expected efficiency;
- ***evaluating these measures as accompanying measures in cities implementing suburban public transport services***, through simulations with integrated land-use/transport models in three of the case cities;
- ***providing recommendations and guidelines to European cities implementing a new suburban public transport system***;
- ***providing cities with an "urban sprawl monitoring tool"***; applying the recommendations and guidelines to the six case cities.

The SCATTER case cities

The project comprises six case cities, located in six different European countries : Brussels, Stuttgart, Bristol, Helsinki, Rennes, Milan.

The evaluation of accompanying measures for the implementation of suburban public transport services, to mitigate or control urban sprawl, will be performed on Brussels, Stuttgart, and Helsinki, where such suburban public transport services were recently planned or implemented and where the required integrated land use and transport models are available.