

**Summary:**

## **The challenge of sustainable mobility in urban planning and development in Oslo Metropolitan Area**

This report presents the results of a study of the ways planners and decision-makers in Oslo Metropolitan Area have understood, interpreted, formulated policies and finally acted in relation to transport and land use in a sustainability context during the period since the 1990s. The Oslo case is part of a comparative study also including the metropolitan areas of Copenhagen in Denmark and Hangzhou in China.

Oslo has broken a long-lasting trend of spatial expansion and has since the mid 1980s followed a clear urban containment policy. Within the continuous urban area of Greater Oslo, the population density increased from 28.7 to 30.7 persons per hectare between 2000 and 2009. Within the municipality of Oslo, the density increase was substantial. Here, the urban population density increased from 37.9 persons per hectare in 2000 to 42.3 persons per hectare in 2009, i.e. by more than 11 %. The increase in population density has been going on since the late 1980s. The concentrated urban development in Oslo Metropolitan Area has contributed to reduce growth in car traffic and has clearly contributed to more sustainable mobility than what would have been the case with a more sprawling pattern of development.

Why has Oslo pursued such a strong densification policy, contrary to allegedly irresistible decentralizing forces? In order to throw light on possible explanatory factors we have investigated selected plans and policy documents, interviewed key planners, policy-makers and stakeholders, and carried out qualitative content analyses of articles in the professional journal *Plan*.

A strong focus on coordinated land use and transport planning in order to reduce energy use and emissions from transport is an important part of the explanation of Oslo's farewell to urban sprawl. In addition, social and cultural conditions necessary for implementing such a strategy have to a high extent been present.

During the whole period since the 1990s, there has been a high degree of professional and political consensus about urban densification as an overall strategy for urban development. Within the Norwegian profession of spatial planners, the compact city has obtained hegemonic status as a model for sustainable urban development. There has also been a considerable market demand for more intensive land use within existing urban areas, especially in the central parts of the region. Market agents have sometimes also pushed for greenfield development at locations poorly served by public transport in the outer parts of the region, but the amount of such development has been moderate. Although competition for inward investment makes up an incentive for outer-area municipalities to accept such location preferences, national and regional land use instruments have been able to limit the establishment of new car-dependent residential and workplace areas. In particular, the greenbelt policy for protecting the forest areas surrounding Oslo (the Marka border) and the National Policy Provisions for Coordinated Land Use and Transport Planning have been important. There is still a widespread

opinion among planners and policy-makers that the regional coordination of spatial development in the Oslo region should be improved.

Whereas land use development has to a high extent been in line with principles of sustainable urban development, the development of transport infrastructure has been more ambiguous, judged against sustainability goals. Along with important improvements in the public transport system (a new metro ring, new streetcar lines and bus lanes, and more frequent departures for streetcar and metro trains) there has also been considerable expansion of the road capacity. Seen from the perspective of sustainability, this combined, and quite costly, strategy has been similar to stepping on the accelerator and the brake at the same time. The general level of mobility has been enhanced, but the shares of car drivers and travelers by other modes have remained more or less the same.

Public transport improvement has been backed by broad political consensus. Road capacity increases have been contested among professionals but widely supported by politicians, apart from those on the left wing. In particular, there has been skepticism against urban highway development among land use planners and environmental organizations. Transport authorities and planners involved in transport infrastructure development in the Oslo region have generally considered road development as a measure to combat congestion; the transport planners have, however, at the same time often argued that better road must be combined with road pricing in order to avoid traffic increase leading to new congestion. During most of the investigated period, road pricing was not on the political agenda, but the latest transport policy deal (Oslo Package 3) opens for higher tolls on urban motoring.

The Oslo region has experienced strong economic growth (for a European city) as well as population growth since the 1990s. Within the fields affected by land use and transport planning, this growth has taken place with relatively moderate impacts on nature and the environment, compared to a sprawling and car-based development. Yet, the decoupling between growth and negative environmental impacts is relative, not absolute. The city is still moving away from important goals of sustainable mobility, albeit at a considerably lower pace than earlier.