

Transport sensitive areas in Europe: Identification and policy instruments

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The project Assessing Sensitiveness to Transport (EU FP 6) aims at developing an approach to the identification of transport sensitive areas (TSA) in Europe, and at analysing potential policy instruments in order to strike a balance between transportation and the natural and cultural values in such areas.

Using a selection of criteria, indicators and thresholds, TSA:s all over Europe have been identified, and a web-based GIS has been developed. Indicators included sensitive ecosystems, cultural heritage, touristic value, connectivity index, ground-water pollution, topography, etc. Sets of combinations of potential policy instruments (such as road pricing, subsidies, traffic regulations, infrastructure investments, mitigation measures and public opinion) have been tested in ten case-study areas differing greatly in size, population density, traffic characteristics, environmental pressure, political structure, data availability, etc.

The areas comprise three metropolitan areas, two mountainous regions, three other natural areas, one natural+urban area and a sea area (the Mediterranean). The study considers environmental pressure from noise, air pollution, traffic accidents and infrastructure pertaining to road, rail, air and maritime transport.

The approach of TSA identification and analysis of policy packages is demonstrated using the Swedish case study Omberg/Tåkern. This is a sparsely inhabited natural area with outstanding landscape values and historical continuity. Since many of the indicators for the identification of TSA:s were found little applicable to the Swedish case-study area, some alternative indicators have been proposed. A special effort has been made to find a monetary value of the encroachment on the landscape made by upgrading an existing road vs. investing in new road infrastructure in this TSA.

The high monetary value having been set for the encroachment in the Omberg/Tåkern case shows that encroachment can be an important factor in Cost-Benefit Analysis concerning decision making for infrastructure investments.