

# The surveyor and the trajectory of land sobriety in France - Part 2 - Integrating Soil Management into Sustainable Land Use Planning

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**Key words:** Cadastre; Land distribution; Land management; Land readjustment; Spatial planning; Urban renewal

## SUMMARY

Urban renewal projects aim to address the challenges of aging infrastructure, socio-economic disparities, and environmental degradation in urban areas. This abstract presents a practical case study showcasing the role of a land surveyor-expert in a comprehensive urban recomposition initiative in a medium-sized European city. The project demonstrates how geomatics and land management can drive sustainable and inclusive urban redevelopment. □ □ The site in focus was a neglected residential and commercial district characterized by inefficient land use, deteriorating buildings, and limited green spaces. The land surveyor-expert was entrusted with the task of redefining the urban landscape while respecting regulatory, ecological, and socio-economic constraints. □ □ The project began with an extensive spatial analysis. Using state-of-the-art geospatial tools, including 3D laser scanning and Geographic Information Systems (GIS), the land surveyor-expert mapped existing conditions, including property boundaries, infrastructure, and environmental features. This data formed the foundation for a master plan designed to optimize land use and integrate sustainable development principles. □ □ The urban recomposition plan included the following key interventions: □ □ Redesign of Public Spaces: Streets and squares were redesigned to enhance accessibility, prioritize pedestrians and cyclists, and incorporate greenery to mitigate heat island effects. □ Land Consolidation: Fragmented plots were reorganized through a process of land readjustment, facilitating the construction of mixed-use buildings and improved infrastructure. □ Green Infrastructure: The project emphasized the creation of parks, green corridors, and urban gardens to enhance biodiversity and residents' quality of life. □ Infrastructure Modernization: Utilities, transportation networks, and stormwater systems were upgraded to meet current and future demands. □ Stakeholder involvement was a cornerstone of the project. The land surveyor-expert played a pivotal role in mediating between municipal authorities, private developers, and local communities. By ensuring transparent communication and balancing diverse interests, the project gained widespread support and minimized conflicts. □ □ The implementation of

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the urban recomposition plan transformed the district into a vibrant, functional, and sustainable area. Key outcomes included increased property values, enhanced public spaces, reduced environmental impacts, and improved social cohesion. The integration of green infrastructure and efficient land use also contributed to the city's resilience against climate change and urbanization pressures. □ □ This case study underscores the strategic importance of land surveyor-experts in urban renewal initiatives. Their technical expertise, combined with their ability to navigate legal frameworks and foster stakeholder collaboration, is essential for delivering projects that harmonize urban development with sustainability and community well-being.

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