

GIS Supports Planning and the Public Participation Process With Planning Support Systems

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Advances in GIS and supporting technologies have led to the development of decision support systems that facilitate the community planning process. There are several planning support systems (PSS) available on the market today to GIS users. PSS uses indicators and alternative development scenarios to measure the attributes and performance of communities and their plans. Planning support systems are instrumental to successful community planning and public participation processes because they focus on the needs and the know-how of users as opposed to focusing on or requiring a high degree of GIS expertise. Planning support systems can measure and compare performances of different planning scenarios according to planner- or citizen-defined indicators for land use, transportation, natural resources, and employment, to name a few. The ultimate goal is to bring together all potential players to work collaboratively on a common vision for their community. GIS-based planning support systems allow planners and citizens to quickly and efficiently create and test alternative development scenarios and determine their likely impacts on future land use patterns and associated population and employment trends, thus allowing public officials to make informed planning decisions.

Furthermore, software developers are increasingly using 3D visualization tools as an integral part of their Decision (Planning) Support Systems. Community planners, architects, urban designers and land use planners are increasingly using 3D visualization tools to give citizens and public officials the ability to visualize the impact, or probable result, of urban design projects, proposed land use and zoning changes, or to envision the results of smart growth initiatives. 3D GIS tools facilitate public participation by communicating both complex and simple geographic and man-made phenomena. 3D visualization tools combined with Planning Support Systems allow the public and decision makers to interactively change or simulate existing and proposed modeled environments or scenarios.