Spatial Data Infrastructures (SDIs): Institutional Infrastructures for Policy

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Spatial Data Infrastructures (SDIs), as institutional infrastructures, profoundly impact policy. The variations and general consensus of such policies influence the economic and social as well as environmental sustainability at national, regional, and global levels.

SDIs are based on the fundamental concept of framework datasets. Framework datasets are comprised of basic spatial data such as administrative boundaries, geodetic networks, hydrography, and transportation etc. As such, SDIs are emerging as the inventories of the natural/cultural assets at national, regional, and global levels. As SDIs develop, they become information infrastructures, which are critical for the economic, social, and environmental decision-making at each SDI level. SDIs undergo a transformation from spatial data infrastructures to information infrastructures to institutional infrastructures for the development, institutionalization, and deployment of policy. This presentation reviews the emergence of SDIs and its basic components and the interplay of these components for formulating and institutionalizing de jure and consensus based policy.