

Abstract

Use of Geospatial Data and Analytics for Urban Planning

Given Singapore's land constraints, there will always be competing demands for land to support housing, business, commerce, recreational, utility, and transportation developments. As the national land-use planning authority, URA's work requires timely and accurate data, information and knowledge on land and developments to make informed decisions on land use and the trade-offs involved.

Geospatial data and analytics have been URA's key business enablers to cater to the planners' needs and tackle the challenges of land use planning. URA is one of the pioneer Singapore government agencies in the adoption of Geographical Information System for planning work. The enterprise GIS system IPLAN, the digital 3D Urban Model System and various strategic systems leverages on data and analytics to enable URA's planners and architects to carry out their urban planning and design work, including policy formulation effectively and efficiently.

With the advancement in GIS, better quality and granularity of geospatial data as well as smarter algorithms and big data analytics, URA sees great opportunities in taking advantage of these trends to enable deeper insights and better decision making in land use planning for Singapore.