

GIS Equipped Geovisualization for Investment in Real Estate:visualising the Reality with the Notion of Economy

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Key words: Affordable housing; Cartography; Geoinformation/GI; Real estate development; Valuation; Real Estate;Geo-visualization;webGIS;Routing

SUMMARY

GIS equipped Geovisualization for investment in Real Estate: Visualising the reality with the notion of economy Sonali Ghosh¹ and Arunava Dey² ¹National Atlas & Thematic Mapping Organisation, Kolkata- 700091, India ²Ramtech Software Solution. Noida, UP – 201301, India Email: ¹sonali.natmo@gmail.com ²arunavadey83@gmail.com With its powerful analytical capabilities and potent interactivity, geovisualization coupled with GIS, significantly aids human understanding of the surrounding reality leading to strategically better decision making. The advent of web enabled geospatial solution has popularized GIS as a powerful technical tool which provides solutions for almost every day to day life problems. Like people of all walks of life potential Property Buyers or Investors also come within the realm of Geographic Information System and can get benefited through it. Before an investment, a property investor always like to have some facts and figures regarding the location of site, facilities available and strategic importance to evaluate the economic viability. This paper aims at the development of a web based GIS application that will facilitate a property buyer to identify the best location, considering various influencing factors and their relative weightage. A Proof of Concept has been developed to demonstrate the same using open source tools. It supports highly complex spatial queries powered by the detailed spatial and related non-spatial data. The objective of this paper is to assess the applicability of GIS-based visualization in the real estate sector keeping in mind the scenario of Salt Lake City, Kolkata. This web based application will provide an option to the visitor (who intends to buy a property) to get an overview of the existing real estate scenario and associated socio-economic setup of the area. With the SEARCH option, the user can fix the criteria of his requirement, such as locality, budget etc. This will generate an intermediate result, populated with a number of site locations. The user then can select from a number of pertinent parameters, like nearness to road, railway, urban parks, hospitals, schools and etc. Each of these will be associated with user defined relative importance. In order to reproduce a better picture of the reality, multiple levels of drive time buffers will be generated, using road network data for all the sites. The previous result will then be filtered based on the user input to produce the final result, which will be a colour coded map of choice scores. Choice Score will signify the suitability of a site with respect to the user requirement .A detailed report will be generated in the form of maps and charts, describing the distribution of Points of interests surrounding the filtered sites, from various spatial layers. There will be geo-tagged

photographs, as well for these sites. The GIS equipped Geovisualization enriches the analytical power of the property buyer. It offers a more rational-realistic picture of the situation, so that one can take an economically viable decision. Key-words: Real estate, Geovisualization, webGIS, routing