

## The Reach of Shopping Center Layout Form on Subway Based on Kernel Density Estimate

**Authors :** Wen Liu

**Abstract :** With the rapid progress of modern cities, the railway construction must be developing quickly in China. As a typical high-density country, shopping center on the subway should be one important factor during the process of urban development. The paper discusses the influence of the layout of shopping center on the subway, and put it in the time and space's axis of Shanghai urban development. We use the digital technology to establish the database of relevant information. And then get the change role about shopping center on subway in Shanghai by the Kernel density estimate. The result shows the development of shopping center on subway has a relationship with local economic strength, population size, policy support, and city construction. And the suburbanization trend of shopping center would be increasingly significant. By this case research, we could see the Kernel density estimate is an efficient analysis method on the spatial layout. It could reveal the characters of layout form of shopping center on subway in essence. And it can also be applied to the other research of space form.

**Keywords :** Shanghai, shopping center on the subway, layout form, Kernel density estimate

**Conference Title :** ICAEDM 2014 : International Conference on Architectural Engineering and Design Management

**Conference Location :** London, United Kingdom

**Conference Dates :** September 26-27, 2014