# Spatial assessment of transit oriented development in Ahmedabad, India

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Urbanization is an integral part of economic development. In India especially, rapid economic growth and urbanization have led to formation of slums, deterioration in environment, congestion etc. A sustainable strategy is thus required to maintain the economic growth and alleviate the problems arising due to the growth. Transit oriented development which is an integrated approach to land use and transport planning is one such strategy.

Transit oriented development (TOD) is defined as a high density, mixed use type of development close to transit services. Indian cities traditionally have high density and mixed use type of development. In such a context, TOD might already be a reality in some form. Thus the current research investigates the concept of transit oriented development in an Indian context. Spatial multi criteria evaluation (SMCE) is a decision making model that uses inputs from multiple stakeholders and uses multi criteria to arrive at decisions. Since TOD requires co-operation between consumers, planners, administrators, designers etc. SMCE is the ideal tool for such an analysis. The other advantage of SMCE (or in general multi criteria methods) is that with a sensitivity analysis, stakeholder bias can be eliminated. As such, for the research SMCE is selected as the framework for analysis.
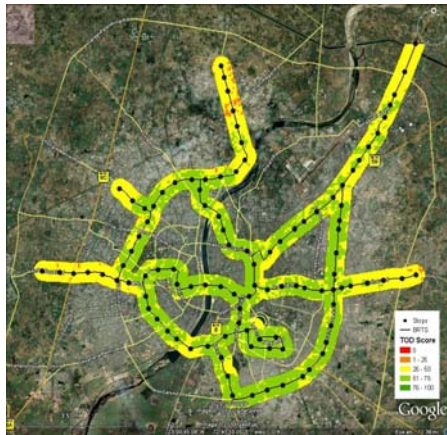
An SMCE framework has been used to develop a TOD score for the study area of Ahmedabad (the BRT corridor) using which it has been determined that greater portions of the city is already close to being TOD. Especially, the inner walled city with high density, mixed use type of development ranks very high on the TOD score (69%). The outer corridors on the other hand have a more or less suburban type of development and hence rank very low on the TOD score. These regions have great potential in terms of re-development.