

Transit-oriented developments: A panacea to city problems



Most of our major cities are faced with multiple problems in terms of congestion, traffic jams, unprecedented load on infrastructure and deteriorating environmental condition. Transit-oriented development (TOD) is one such concept or tool that can help address all these issues in a much sustainable manner, explains

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Transit oriented development

Last few decades have witnessed tremendous increase in urbanization aggravated by the concentration of economic opportunities in few urban centres. Such large concentrations put huge pressure on facilities as well such as, infrastructure, transportation, housing and other components required by the population. Besides, rapidly growing population has considerable bearing on housing as cities struggle to accommodate their burgeoning population.

There is need to formulate a sustainable strategy which can address these issues in a holistic manner without adversely impacting the growth. Though a relatively new

concept in the Indian context, TOD in western economies is a fast-growing trend in creating vibrant, livable and sustainable communities. It is the creation of compact, walkable, mixed-use communities centered around high-quality transit (rail) systems. This makes it possible to live a lower-stress life without complete dependence on vehicular traffic for mobility.

It has become more relevant now as all major cities globally, from Beijing to Delhi are seeing considerable deterioration in their environmental condition. A transit-oriented development is one of the approaches which integrates land use and transit systems to maximize access to public transport and solving the environmental, social as well as

economic problems. In fact, such a development is also a major solution to the serious and growing problems of climate change and global energy security by creating dense, walkable communities that greatly reduce the need for driving and energy consumption. This type of living arrangement can reduce driving by up to 85 percent.

Delhi

In a kneejerk reaction, the Delhi government had recently announced curbs on plying of private vehicles. In a bid to curb rising pollution, the government decided that odd and even number vehicles will ply on alternate days in the capital. However, such a move cannot be sustained even in the short run.

Rather, the Delhi government should come up with well-designed action plan to implement its recently-approved TOD Policy for the capital. This will address the growing problems of pollution, congestion and shortage of homes by promoting TOD developments on both side of metro corridor. Development/redevelopment in TOD zone will be incentivized by providing significantly higher FAR (floor area ratio) of 400, which will enable vertical construction that is required to address shortage of land availability. TOD will also enable the city to be more corridor-oriented, making

allow to provide infrastructure. It will encourage mix land-use and create a range of housing opportunities and offices.

Mumbai



Seawoods Grand Central, Navi Mumbai

In city like Mumbai, where land is always in short supply due to its geography, TOD could be effectively used as one of the planning tools to address its multiple problems. More so as the city already has a well developed network of suburban rail network. Besides, in order to ease the increasing traffic congestion by reducing private ownership in the region and to supplement various Mass Transit initiatives, Mumbai Metropolitan Region Development Authority (MMRDA) is currently in the process of implementing metro and monorail systems along the congested corridors of Mumbai region. Many of these stations throw huge potential for TOD developments which will enable the city to use market forces to increase densities near stations, where most services are located, creating more efficient sub centres and minimising sprawls.

Currently, L&T is undertaking India's largest TOD project around the modern Seawoods-Darave railway station on Harbour Line. The sprawling 40-acre project is being modelled on the lines of transit-oriented development across the world, including the acclaimed Canary Wharf in London, International Finance Centre in Hong Kong and Shinjuku in Tokyo. This

TOD project, Seawoods Grand Central (SGC), will encompass state-of-the-art workspaces and shopping malls, snazzy restaurants and hotels and fun-filled recreation zones, converging around this transit station.

city structure. Station areas start facing the problem of encroachment, squatter development and densification. Nature of both the problems may be different but it becomes necessary to find a combine solution to them.

Whereas there are many definitions of TOD, the essence is the same i.e. integration of transit and land use planning. In the western countries, TOD is an easily comprehensible solution for regional growth and to meet the need of transit agencies for alternative revenue sources. There TOD is used for densifying certain areas but in India the cities already have higher densities. Hence, TOD in Indian cities should be looked at as a tool for improving quality of life and financial means to provide infrastructure facilities.

An Example



San Diego city

The problems of financing large-scale infrastructure projects can be overcome by using TOD as a financial model. The financial model as worked out, can be used in making an informed decision about the feasibility of TOD schemes around MRTS stations.

Economic-Socio Benefits

Experts are of the view that TOD enhances the overall economic efficiency of a city. Denser cities with less car use and more transit use spend a lower proportion of their GDP or wealth on passenger transportation. In other words, there are many ways in which TOD promotes sustainable development.

Financing of these projects has been one of the major issues for the authority to deal with. The large scale projects when implemented, affect the existing

The City of San Diego, one of the fastest growing urban areas in California, has adopted design guidelines for TOD as a key component in their Land Guidance and Urban Form programs. The process of preparation and adoption of the guidelines was inclusive and very effective.

TODs are being used to help the city reduce urban sprawls, plan the urbanized area efficiently, encourage infill and redevelopment and support the trolley and bus transit system. A particular focus of the guidelines is to encourage infill and redevelopment patterns and transit integration. The work includes an implementation of strategy that outlines the steps necessary to fully adopt the principles and specific recommendations of the design guidelines into city-wide zoning, street standards and other policies.

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