The Investigation and Evaluation of Economic Effects of BRT on Commercial Efficiencies of Street Margin, the Case Study of Tabriz Metropolitan (from University Square to Shariati Crossroads)

A Ghanbari, M. Safarpoor, Gh. Kord
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Extended abstract
1- Introduction
With increasing urbanization and subsequent population density in cities in the era of globalization and global economic integration, providing a public transportation system which is efficient, effective, safe and inexpensive leads to economic, social and environmental sustainability. So that other indicators such as travel time, traffic, fuel consumption and air pollution be improved, in addition to the current direction of traveling towards public transportation. BRT system is one of the forms of mass transit which had been designed and implemented in order to solve urban traffic problems and move toward sustainable urban development. In this way, planners and policy makers are still interested in investing in a transportation network and density of lands as an alternative to eliminate private cars, reduce traffic and its adverse effects. This paper investigates and evaluates the effects of BRT system on commercial land uses of street margin, in Tabriz from university square to Shariati cross-road.

2- Methodology
The sample size of the study includes all economic businessmen of the margin of street in the studied area in Tabriz in 2010-2011. The statistical sample of the survey was selected according to the random sampling method. There were 180 commercial land uses; with special separation of the main junction 75 questionnaires were returned and analyzed from the north side of the street and 75 ones were returned and analyzed from the south side of the street and the questionnaire return rate was 83 percent. In this study, interview method had also been used.
3- Discussion
BRT lines in Tabriz were designed to solve traffic problems and transportation. But regardless of its influential effects on the transport of Tabriz, adverse effects had been imposed on trade margin land uses in the studied area. In the area of study, due to the narrow width of passage, BRT line had allocated in one side of the street and other side of streets had been allocated to moving and handling personal vehicles that has led to slow movement and increase in volume of traffic. This resulted in the decrease of customers referring to shop across these lines, because people who want to buy goods and commodities from these places were no longer willing to go to these places and purchase goods from the North side of the street, due to various problems such as lack of parking places for private cars, preventing marginal park in the avenues, problems caused by going through the width of streets, waste of time and so on. Also, following to the investigations made, many shop owners and even some of the pedestrians have mentioned the BRT lines as a barrier wall. In the studied area, due to the narrow width passages, BRT line has allocated almost one side of the street and the rest of streets have been allocated to moving and handling personal vehicles that has resulted in slow movement and an increase in the volume of traffic. Besides BRT, other factors as well had affected sales and rents of shops. Some of them include: pavement design and its width, distance from trading centers or in other words, city's pedestrianism center, presence or absence of parking possibility for customers' cars, distance from government and official land use due to occupied passageways, the accumulation of shops in a bunch, price of shops, shops and distance from bus stops. In addition, based on the evaluation of the questionnaire results and interview with the local shopkeepers, this is clearly observable that the effect degree is not identical in North and South streets.

4- Conclusion
Apart from the market stagnancy and economic problems, BRT lines have negative effects on commercial land use, especially at the price of rents and the number of stores' clients. In general, the results point to a real recession and application changes of land uses in the north side of street (the margins of BRT Line) which is more than the south side of street and following these changes, the owners of the shops in north street and those who want to invest tend to use the shops of Southern part. Based on our investigation, most shop owners and even some of the pedestrians had mentioned the BRT lines as a barrier wall.

5- Suggestions
Based on the results of this research, it can be seen that following each step in the process of urban management many lateral and hidden feedbacks are visible which point to a multi-dimensional and chained link among the elements and parts of a city. In this regard, there is a need for a planning based on comprehensive approach and a system such as strategic planning to organize urban planning and management system in a way that it enables us to control and monitor feedback from the urban plans. Hence, according to current investigations, executive suggestions are as follows:
- Construction of parking within the scope of target services;
- Reducing the distance between stations;
- Tax relief for the losses;
- Other policies that attract citizens to the target locations such as the provision of green spaces, parks and other urban lively spaces in the target scope;
And finally, if possible, transferring BRT route to the middle line of the street.

**Keywords:** BRT, Economic Effects, Commercial Land Uses, Tabriz.

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