بازدهمين

کنفرانس بین المللی مهندسی حمل و نقل و ترافیک



## Technische Universität München Master of Science in Transportation Systems

**Transport Demand Management** Growing mobility needs restrictions in traffic

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## Abstract

Mobility needs is growing. However there are limited resources that has be managed and optimized for efficient usage. It brings us to growing mobility needs restriction in traffic. This paper will present different policies implemented for car traffic restriction. The outcomes will prove to us that these restrictions are necessary in order to achieve social, economic and environmental sustainability.

## 1. Introduction

All demand for goods can be responded by supply. Transportation demand follows the same routine. However, there are differences between this type of demand and supply. The relation between road supply and travel demand is positive relation. It means that increase in one result an increase in another. This process is called induced investment and demand. This relation could work in case that unlimited resources was available and everyday mobility was not growing in today's society. Therefore, due to limited resources demand has to be shaped and managed. Also there should be different tools to manage transport supply. Cars always were favorable due to flexibility in time, rout and comfort. It seems hard to convince people to use public transport even if there are in best conditions. Therefore, does growing mobility need restrictions in traffic? This restriction is about private car usage. In other hand green modes of transportation should replace the private car usage. It should be encouraging to use non-motorized transport and public transport.

The development of cities is interlinked to improvement in transportation and mobility. This improvement causes several difficulties for future of cities. Traffic congestion, air and noise pollution, traffic accidents, excessive gasoline consumption, improper land use, time loss, road rages, and health impacts are some of outcomes. Also this effects the economic growth of cities. Obviously, Transport supply is not similar to another goods supply. It is impossible to build enough roads to satisfy future demand. Therefore, restraining transport demand is necessary than simple demand and supply attitude. Transport Demand Management (TDM) is the term that is used for this concept. It is policy concept that goals in minimizing distance trips and also shift to green modes of transport. That is environment, social and economic sustainable mode of transport. "PUSH MEASURES to reduce private car use and PULL MEASURES to improve the attractiveness of lower-carbon modes" (Tsinghua University, 2011) are essential.