## Finding relation between the parking facilities and the built environment and the...

Transportation, Public Transport



The car parking policy can play a key role as a travel demand tool. It is significant in the influencing the modal choice. The parking prices have been regarded as the tool to reduce the car ownership or usage. The policies that implement paring pricing have many effects. For instance can influence mode choice, destination choice, trip timing and car occupancy. For long, the car parking studies usually have dealt with how parking at the destination can influence the travel behaviour. Regarding the work trips, it would be the parking arrangement at the work place and how this arrangement is going to impact the modal choice.

One of the main challenge for carrying out the empirical studies of parking and car usage is the limited amount of valid and reliable data. Most of the research has relied on the limited number of case areas, manual observations, stated preference surveys, and parking revenue information. Difference between the parking standardsThere are two types of parking standards; one is called the parking minimum and the other, parking maximum. The minimum considers parking as a basic need in most of the residential areas of Norway and provides sufficient parking spaces in the building byelaws. On the other side, the parking maximum considers for limiting the car usage. This is mainly applied in the commercial areas of the Norway.

Finding relation between parking and car usage have used the Norwegian National Transport Survey of the year 2013-14 and combined this with additional geographic context data. The Norwegian National Transport Survey of the year 2013-14, comprises of a total of 60, 000 individuals from

the age range of 13 years and above. The survey consists of different sets of aspects and the author found the following as the most relevant for the study.

- Access to the transport resources
- Residential and workplace address
- Socio economic data
- Modal share data with travel time, distance and purpose shows the characteristics of the variables used for the analysis.

The first section analyses whether the parking availability at the work place affects the car usage. The second section analysed the parking effect in the residential area. Mainly, it was noted that it is important to know that how the distance of parking at home impacts the car usage. Finally, the third section, how parking availability both at the start and end affects the car usage. Also, the study included the effects of the socio-economic variations, urban structure and transport options. This methodology helped in broad analysis of how parking impact the cars usage. The data was analysed with the logic regression in SPSS. The model was constructed for analyzing how parking can influence the modal choice.

## The findings of the study

One of the very important implication of the study for the policymakers and planners alike was that parking restriction at the workplace could be a very effective tool in reducing car usage for the work trips. The literature review done by the authors also validates this finding. It was found that the parking restriction at the workplace is considerably more effective than regulation

through parking pricing. The best way of reducing the car usage to work trips is the combination of parking restriction and parking pricing.