

## **Abstract**

In an effort to reduce air pollution and congestion, Latin American cities have experimented with different policies to persuade drivers to give up their cars in favor of public transport. Two notable examples are the driving restriction program introduced in Mexico-City in November of 1989 Hoy-No-Circula (HNC) and the public transport reform carried out in Santiago in February of 2007 Transantiago (TS). We develop a simple model of car use and ownership, and show that policies that may appear effective in the short run can be highly detrimental in the long run, i.e., after households have adjusted their stock of vehicles. Based on hourly concentration records of carbon monoxide, which comes primarily from vehicles exhaust, we find that household's responses to both HNC and TS have been remarkably similar and consistent with the above: an expected short-run response followed by a rapid (before 11 months) increase in the stock of vehicles.