

We compare the short-term impacts of alternative transportation policies to reduce road traffic. First, we measure the welfare costs associated with using alternate-day travel schemes, regulations that have the advantage of being easy to implement and are widely used. Second, we compare them with the welfare costs of reducing traffic using standard price instruments: road tolls. To do so, we develop a structural model of transportation mode choice. The model considers car speeds and trip durations are endogenous equilibrium outcomes from transportation mode choices and road congestion technology. We estimate the model using rich survey data on individual transportation decisions combined with expected trip durations from Google Maps and TomTom and high-frequency traffic data from road sensors for the Paris metropolitan area. Our results suggest that all the policies are costly for individuals: the benefits of relaxing road congestion do not offset the costs of substituting away from cars. Moreover, the simple driving restrictions are dominated by tolls, primarily because they do not raise any tax revenue and secondly because they do not target the most polluting drivers.