

Readme file for Stata codes and data files

The Marginal Cost of Traffic Congestion and Road Pricing:
Evidence from a Natural Experiment in Beijing

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Jun Yan, Avralt-Od Purevjav, and Shanjun Li

The Stata do file for the main results (Table 2, 6, 7, 8, and Figure 3, 4, 5, 7) is
main_replication.do.

There are three data files: (1) traffic_data.dta, (2) weather_data.dta and (3) mecc_data.dta.

traffic_data.dta contains hourly real-time traffic volume and vehicle speed data from 385 remote traffic microwave sensors in Beijing for 2014. Due to the data restriction from the providers, we randomly selected 50 road segments from the original 1528 traffic monitoring sensors. The data on driving restriction policy and public holiday was collected from publicly available sources from Beijing Transportation Research Center.

weather_data.dta contains hourly records of important weather controls for the average vehicle speed: wind speed, visibility, air temperature, relative humidity, wind direction, and sky coverage indicators from the ISD-Lite data set published by the National Oceanic and Atmospheric Administration (NOAA).

mecc_data.dta contains authors' calculations of average marginal external cost of congestion (MECC) for each road segment based on the OLS and IV estimates.