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**“Monocentric Schools” in Beijing:
The Congestion and Pollution Consequences of Driving Children
to Schools**

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Abstract:

Despite of the fast population suburbanization in Chinese cities, schools (especially high-quality ones) are still centralized in the inner city where housing units are old and small. According to China’s “school zone” policy, those who own a housing unit in the school attendance zone (no matter whether live in it) or pay a high admission fee without owning a unit there are both entitled to enroll in a school. Therefore, many households choose not to live in the school attendance zone, but drive long way to send their children to their favorite schools. In this paper, we use “school holiday” as an exogenous timing event to estimate the congestion and pollution consequences of this non-commuting traffic flow of driving children to and from schools. We find that, all else equal, the transportation congestion index in the workdays during school-holidays is 20-30% lower than that in the workdays during non-school holidays, which decreases the concentration of particulate matter (PM₁₀) by about 15μg/m³ (equivalent to 16% of the mean of PM₁₀).