

ABSTRACT:

**The Effect of Cycling Infrastructure on Traffic and Accidents:
Evidence from Pop-up Bike Lanes in Berlin**

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I analyze the effect of bicycle lanes on traffic volume, congestion, and accidents. In order to do so, I focus on lanes, which substitute existing car lanes, thus reducing available space for motorized traffic. The construction of those pop-up bike lanes (PUBL) was quasi-random in timing and location. In order to analyze the effects caused by the newly installed lanes, I use an event-study design combined with a two-way fixed effects model and the synthetic control group method. I find a robust negative effect of bike lanes on average car speed by about 8 to 10 percentage points and no effect on car volume or commercial traffic. Accidents were not significantly affected by the installation of PUBLs. However, I cannot exclude the possibility of a per-cyclist decline of accidents.