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AUTHORS

Chen, Yihsu Whalley, Alexander

GREEN INFRASTRUCTURE: THE EFFECTS OF URBAN RAIL TRANSIT ON AIR QUALITY

ABSTRACT

The transportation sector is a major source of air pollution worldwide, yet little is known about the effects of transportation infrastructure on air quality. This paper quantifies the effects of one major type of transportation infrastructure-urban rail transiton air quality using the sharp discontinuity in ridership on opening day of a new rail transit system in Taipei. We find that the opening of the Metro reduced air pollution from one key tailpipe pollutant, carbon monoxide, by 5 to 15 percent. Little evidence that the opening of the Metro affected ground level ozone pollution is found however. (JEL L92, Q53, R41, R53)

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