The Impact of Light Rail Construction on Regional On-Road CO2 Emissions Per Capita

Maynooth University Department of Geography invites you to attend an online seminar presented by:

Dr Kevin Credit Maynooth University

Date: 21st October

Time: 4 pm

Location: Online via Teams



As per capita on-road CO2 emissions continue to rise in the US, a better understanding of the emissions-reduction benefits of building a new transit system is needed. Employing a novel quasi-experimental event study methodology, the results of this paper indicate that after 8 years of operation, construction of a light rail system has led to a small but significant reduction in regional on-road CO2 per capita of 8.4% - 12.9%. These results are robust to selection of control group and are larger than the estimated impact of light rail construction on population density (1.0%), evaluated in a comparative "placebo" study.

Bio: Kevin Credit is an Assistant Professor/
Lecturer at the National Centre for
Geocomputation at Maynooth University. Broadly,
his research is focused on better understanding
how urban spatial structure and transportation
systems influence economic, environmental, and
social outcomes using quantitative approaches
and large open-source datasets. Kevin's
recent work looks at topics such as the
underlying racial and ethnic disparities in COVID19 outcomes, recent retail trends, and the
development of spatially-explicit random forest
models.

