

Mountaintop Removal Mining in Appalachia
& its Economic and Well-being Impacts on Surrounding
Populations

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Abstract

This research seeks to build on the existing literature to determine the impact of mountaintop removal mining (MTM) on the economic and well-being outcomes of surrounding communities. We utilize satellite imagery data from SkyTruth.org of active MTM sites in Central Appalachia in tandem with data from the American Community Survey from 2012-2021 in order to build a two-way fixed effects linear model with inverse probability weighted group balancing. We observe fixed effects by year as well as at three regional levels: state, public use microdata area (PUMA), and mining versus non-mining areas of a state. Our model seeks to uncover the causal impact of MTM intensity in a given region on that population's employment, poverty, total income, and instance of disability. We determine significant yet somewhat ambiguous results, indicating a relatively positive impact of increased MTM activity on a PUMA, when compared to itself over the years, but a negative impact of MTM when compared to other MTM PUMAs and non-MTM PUMAs.