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Demolition and Its Effects on Crime

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Executive Summary

Demolition is a common practice to take down abandoned or otherwise unused buildings. This working paper examines the effects of building demolition on crime. Multiple research articles have been written about the possibility of crime reduction through building demolition, but none of the works analyzed through this review were able to conclude definitively that demolitions of buildings have any positive effect on the rates of violent or drug crimes in the surrounding areas of the demolition site. Furthermore, the works analyzed in this review were unable to find any substantial differences between the areas around the demolition site before and after the demolition of the specified vacant or abandoned building.

However, despite these being the official conclusions of the authors' works, some of them have more to say about the relationship between demolitions and crime rates that were not included in their conclusions. For example, authors De Biasi et al. (2025) described that while demolitions did little, rehabilitating structures did reduce crime. This is due to changes in the nature of the ownership of the space. This is consistent with work done by Wo and Kim (2020), who identified that private company demolitions related to economic development were associated with reductions in criminal behavior, whereas government demolitions, often resulting in the creation of vacant lots, were not.

In conclusion, this review finds the relationship between structural demolitions and crime is inconclusive, and points perhaps to placemaking strategies as an alternative approach. However, using demolition in an applied Problem-Oriented Policing or Place Network Investigations intervention is yet to be tested, and may work as a more targeted approach.

Research and Data

In an article written by Smirniotis et al. (2022) analyzing the effects of building rehabilitation, as well as their demolition, in Cleveland, Ohio, evidence suggests that removing vacant or decaying buildings is associated with violent crime (such as firearm-related crimes). However, the results from this experiment only brought inconclusive results about the relationship between demolition and firearm-related crime rates, at least in Cleveland. The authors conclude that demolition (and building rehabilitation) has “limited impact on these structural drivers of violence (…) and, as such, may have limited potential as crime prevention strategies” (Smirniotis, et al., p.16).

De Biasi et al. (2025) discuss an experiment in which they study “whether prioritizing vacant properties for demolition or rehab based on their criminal histories is a worthwhile endeavor in terms of reducing crime" (p.1). The authors analyzed how the demolition of buildings affected crime rates, noting that they examined drug, lower-level violent, and property crime rates in Cleveland, Ohio, during the experiment. They discovered that demolitions showed no real reduction in crime rates. However, they did find evidence that building rehabilitation (i.e., repairing a building to the point where it can be used by new owners, while preserving the historical significance of the building) brought significant reductions in violent and drug-related crimes at the parcel level (i.e., a piece of land with defined boundaries); however, the authors note that this is only for select quarters. Arguably, this is due to increased participation in the area by owners of the rehabilitated property, something advocates of demolition often overlook.

Another article, published by Andrew Wheeler et al. (2018), details a study that examined the demolition of over 2,000 residences and the resulting crime reductions (if applicable). This study, conducted from 2010 to 2015, indicated how crime rates in an exact parcel were found to have had a steep drop, resulting in "additional crime decreases at buffers of up to 1,000ft away" (Wheeler, et al., 2018, p.390). Additionally, the authors state that demolitions reduced crime at the census tract level, but that this effect was "not statistically significant across different models" (Wheeler, et al., 2018, p.390). The authors conclude that demolitions as an effective crime reduction solution are only partially supported.

In 2023, authors Hye-Sung Han and Scott Helm conducted a study to examine the effects of demolition on the reduction of crime. The authors examined this by "quantifying the relationship between abandoned building demolition programs and nearby crime using a difference-in-difference approach on 559 abandoned buildings demolished in Kansas City, Missouri, between 2012 and 2016" (Han & Helm, 2023, p.334). The authors found that the demolition of abandoned properties did not have any significant impact on the reduction of nearby violent or property crime. The authors go on to state that their analysis has shown that changes in nearby crime are actually due to differences in socioeconomic and housing characteristics of the nearby areas, not the demolition of properties.

Finally, in an article written by James Wo and Young-An Kim in 2020, the authors conduct a research study to examine the possibility that the demolition of vacant and dilapidated buildings can actually backfire and contribute to higher crime rates. The authors examine the influence of building demolitions on crime within Philadelphia block groups ranging from 2008-2018, and they also differentiate between city and private demolitions to determine the possibility that different types of demolitions have different relationships to crime. Specifically,

among the key findings, the authors state that “whereas city demolitions showed weak evidence of a protective influence on neighborhood crime rates, private demolitions consistently exerted crime-reducing influences (consistent with routine activities and social disorganization theories)” (Wo & Kim, 2020, p.125). Wo and Kim (2020) conclude that city demolitions "coincide with stages of *neighborhood decline and 'death'*, whereas private demolitions are more likely to initiate or sustain *neighborhood revitalization*" (p.726).

Both city and private demolitions remove physical areas containing criminal opportunities; however, the authors state that private demolitions are more effective in crime reduction. While the authors do not provide an official conclusion on whether demolitions are effective in reducing crime or not, they do explain how private demolitions, as opposed to public ones, were found to provide more crime reduction according to their study. Private demolition in the block group, as reported by the authors, reduced crime rates “from about 1 to 3 percent the following year with all else being equal, while private demolition in the surrounding ½ mile reduced crime rates from about 1 to 8 percent” (Wo & Kim, 2020, p.726). Despite this, the authors also discuss possible limitations with this study, such as the fact that not all demolitions are equal in crime-reducing capabilities and that geographical size -- or the size of the building being demolished -- could affect the results.

References

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