

## Gun Violence Reduction Study Analysis – Plain English Version

Researchers at the University of Michigan School of Public Health and analysis by Keep Indianapolis Beautiful found a statistically significant 12 percent reduction in violent assaults with a gun after KIB works with community members to build a greenspace.

The analysis looked at 36 spaces, where vacant or abandoned lots were transformed into vibrant community greenspaces and compared that to 36 comparable nearby sites where no treatment was done. Additionally, factors such as median household income, age, access to transportation, non-white population, and other social vulnerability factors were considered.

Research looked at crime data from the Indianapolis Metropolitan Police Department to gather statistics for all crimes, and subsets of crimes by category, including violent assaults with a firearm. The number of total crimes in Indianapolis has declined from approximately 50,651 in 2010 to 38,369 in 2021. Violent crime has ebbed and flowed and increased slightly from 8,830 in 2010 to 9,225 in 2021. However, the subcategory of violent crime that includes assault with a firearm has risen dramatically, from 880 to 4,112. That is, 10% of all violent crime and 2% of all crimes were assaults with a firearm in 2010 but were 45% of all violent crime and 11% of all crimes in 2021. Gun crimes have climbed 5x over the past 12 years.

However, looking at a half-mile radius from locations where KIB worked with communities to create a greenspace, there was a statistically significant reduction of 12% (the confidence interval is from 6 to 20 percent). That means that at a minimum, KIB greenspaces reduce the incidence of an assault with a gun by 6 percent, and perhaps by as much as 20 percent. This accounts for differences in demographics, and accounts for the citywide rise in gun violence.

Interestingly, there was not a significant reduction when looking at all crimes. The All Crimes category is mostly property crimes. This finding is interesting – the calming effect that a greenspace has on violent crime does not translate to property crimes. It is consistent with findings from similar studies in Flint, Michigan and Youngstown, Ohio – that green infrastructure does make an impact on one type of crime, but not all crimes.

This has huge implications not just for Indianapolis, but also for cities across the country also grappling with violent crime problems. This could help determine where Indianapolis (or any big city) chooses to create more pocket parks in the future as a means to mitigate violent crime.

Future research will also uncover aspects of the greenspace program to determine if various elements matter more than others. For example, some greenspaces have a mural, and some don't. Does an art installation with people's faces on it matter? Some of the greenspaces are less than one-half acre, some are several acres in size. Does a certain size make a difference? There are a number of items to continue to explore to make these neighborhood investments as powerful as possible.