

What's the basis for this initiative?

Crime Prevention Through Environmental Design (CPTED) is a commonly used term for making improvements to the built environment that reduce crime and contribute to improvements in actual and perceived safety and wellbeing. The four elements of CPTED are natural surveillance and visibility, lighting, territorial reinforcement and space delineation, and natural access control.

According to the Manhattan Institute for Policy Research, “[t]oday’s cities can curb the incidence of crime by abating blighted vacant land. The benefits are clear, and a useful strategy is to give priority to programs that are simple to implement, are scalable to large populations, and are not expensive to sustain. While addressing blighted vacant land has been advocated as a crime-prevention policy for decades, there are now examples of successful programs that cities can inexpensively replicate to reduce crime and encourage residents to remain in their neighborhoods for decades to come.”¹ Niskanen Center states that, “[a]mong the many alternatives to police for which there is promising evidence are place-based crime control strategies such as increasing the availability of trees and green space, restoring vacant lots, public-private partnerships in the form of business improvement districts, street lighting, and reducing physical disorder.”²

In addition, according to the Centers for Disease Control, “[c]ommunities applying CPTED activities have reported decreases in gun violence, youth homicide, disorderly conduct, and violent crime.”³ By improving public safety, these place-based investments can also save money. According to an analysis published by the American Journal of Public Health in 2016, each dollar invested in remediating vacant lots and abandoned buildings saves an estimated \$26 and \$333 dollars, respectively, from reducing firearm violence.⁴

What does this initiative entail?

This item requests the Office of County Administration (OCA) and any other relevant departments to evaluate and recommend a funding strategy for an allocation of at least \$50 million toward targeted investments in place-based CPTED interventions in several zip codes with the highest concentrations of gun violence and relevant infrastructure needs. Given fiscal constraints, these would need to be one-time, non-personnel investments.

To identify evidence-based investments that will do the most to reduce violent crime in the selected zip codes, this item asks the OCA to work with relevant departments, law enforcement, affected communities, and subject-matter experts to identify, develop, and propose strategic, evidence-based CPTED interventions in several targeted violent crime hot spots.

Based on research from other jurisdictions and the specific needs of each target community, such investments could include but need not be limited to:

- **Cleaning and greening vacant lots:** A 2016 quasi-experimental study in Philadelphia, PA, found that abandoned building and lot remediation reduced firearm violence by 39% and 4.6%, respectively, in neighborhoods below the poverty line, saving an estimated \$5

¹ John M. McDonald and Charles C. Branas, “Reducing Crime by Changing Places: Assessing the Benefits of Abating Vacant and Abandoned Land in Urban Spaces,” in *Urban Policy Series 2019* (New York: Manhattan Institute for Policy Research, 2019), 8.

² Aaron Chalfin, et al. “When cities add cops, Black residents could have the most to gain – and the most to lose” (Washington: Niskanen Center, 2021).

³ “Using Environmental Design to Prevent School Violence,” Centers for Disease Control and Prevention (2021).

⁴ See Charles C. Branas, et al. “Urban Blight Remediation as a Cost-Beneficial Solution to Firearm Violence,” *American Journal of Public Health* 106, no. 12 (December 2016): 2158, doi:10.2105/ajph.2016.303434.

per dollar invested in remediating buildings and \$26 per dollar invested in remediating lots.⁵ The study found generally that “[b]lighted and vacant urban land affects people’s perceptions of safety, and their actual, physical safety. Restoration of this land can be an effective and scalable infrastructure intervention for gun violence, crime, and fear in urban neighborhoods.”⁶

- **Adding tree coverage and other plants:** A 2015 study examining the relationship between vegetation and crime in New Haven, CT, found greater tree canopy coverage was associated with lower rates of violent, property and total crime.⁷ These results support the general findings from studies conducted in larger cities, including Chicago, Portland, Baltimore and Philadelphia and points toward trees’ crime prevention potential.⁸
- **Improving street lighting in residential areas:** A 2017 randomized control trial in New York City found that adding one additional outdoor light per square block reduced nighttime outdoor assault, homicide, and weapon crimes over a 6-month period. Atlanta, Milwaukee, and Fort Worth have implemented similar programs. The study found that “crime can be successfully reduced by changing the situational environment that potential victims and offenders face.”⁹ In particular, the study evaluated temporary street lights randomly allocated to public housing developments from March through August 2016, finding evidence that communities that were assigned more lighting experienced sizable reductions in crime and that the provision of street lights led, at a minimum, to a 36% reduction in nighttime outdoor index crimes.¹⁰

The activities and interventions proposed could also provide funding for home inspections, structural repairs, and energy efficiency improvements to address health and safety hazards and substandard living conditions. Because violent crime increases when temperatures rise, this could include funding to:

- Improve access to efficient air conditioning units and appliances, healthy home energy repairs, and weatherization (e.g., Philadelphia’s Basic Systems Repair Program,¹¹ Austin Energy’s Weatherization Assistance¹²), or
- Install cool roof coatings and insulation to housing blocks in the hottest and most vulnerable neighborhoods.

⁵ Branas, et al. “Urban Blight Remediation as a Cost-Beneficial Solution to Firearm Violence,” 2158.

⁶ Charles C. Branas, et al. “Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear,” *Proceedings of the National Academy of Sciences of the United States of America* 115, no. 12 (March 2018): 2946, doi:10.1073/pnas.1718503115.

⁷ Kathryn Gilstad-Hayden, et al. “Greater tree canopy cover is associated with lower rates of both violent and property crime in New Haven, CT,” *Landscape and Urban Planning* 143 (November 2015): 248-253, doi:10.1016/j.landurbplan.2015.08.005.

⁸ Gilstad-Hayden, et al. “Greater tree canopy cover is associated with lower rates of both violent and property crime in New Haven, CT,” 248. See also Charles C. Branas, et al. “A Difference-in-Differences Analysis of Health, Safety, and Greening Vacant Urban Space,” *American Journal of Epidemiology* 174, no. 11 (December 2011): 1296–1306, doi:10.1093/aje/kwr273.

⁹ Aaron Chalfin, et al. “Reducing Crime Through Environmental Design: Evidence from a Randomized Experiment of Street Lighting in New York City,” *Journal of Quantitative Criminology* (April 2019), doi:10.1007/s10940-020-09490-6

¹⁰ Chalfin, et al. “Reducing Crime Through Environmental Design: Evidence from a Randomized Experiment of Street Lighting in New York City.”

¹¹ Eugenia C. South, John MacDonald, and Vincent Reina, “Association Between Structural Housing Repairs for Low-Income Homeowners and Neighborhood Crime,” *JAMA Network Open* 4, no. 7 (July 2021), doi:10.1001/jamanetworkopen.2021.17067.

¹² GDS Associates, Inc., “Weatherization Assistance Program: Evaluation of Austin Energy’s ARRA-Supported Weatherization Assistance Program (WAP),” Final Report prepared for Austin Energy (January 2015). See also Bruce Tonn, et al. “Health and Household-Related Benefits Attributable to the Weatherization Assistance Program,” Oak Ridge National Laboratory (September 2014).