

Infrastructure investments: row summary

Infrastructure investments show little or no overall effect on reducing violence – and in some cases increase it - while there is some evidence of a moderate positive effect on diplomatic relations and peaceful dispute resolution.

Infrastructure investment interventions involve building or rebuilding physical infrastructure outside of community driven development and reconstruction processes.

The included studies cover two main types of intervention. First, small scale and large scale reconstruction and public works projects implemented in active conflict settings, most prominently through the Commander's Emergency Response Program in Afghanistan and Iraq. These projects included localized roads, electricity, water supply, and basic service infrastructure delivered rapidly, often by military actors. Second, large scale transport infrastructure connectivity investments focused on roads, railways, ports, and air transport facilities, particularly those associated with China's Belt and Road Initiative, aimed at improving cross border connectivity and trade.

Infrastructure investments are intended to reduce conflict and atrocities by creating short term employment, improving access to services, and supporting longer term economic development. In conflict affected settings, localized projects are expected to generate community support for governing authorities and reduce incentives for violence by addressing immediate needs. At a regional and international level, large scale connectivity investments are expected to support peaceful dispute resolution by increasing trade, economic interdependence, mobility, and shared interests between states. However, infrastructure investments may also increase violence if they draw insurgent attention, exacerbate inequalities, or are poorly aligned with local political and security conditions.

Evidence of effects.

- Nature and scale of violence and atrocities. Infrastructure investments show little or no overall effect on reducing violence ($g = 0.00$). This finding is based on three studies with nine effect sizes examining reconstruction spending under the US-supported Commander's Emergency Response Program. There is important variation within this overall null effect. Small scale projects implemented by localized units and using flexible cash disbursement mechanisms were associated with reductions in violence in some contexts, particularly in Iraq. In contrast, larger projects, especially in Afghanistan, showed no effect or were associated with increased violence. These adverse or null effects may reflect project visibility, targeting in highly insecure areas, or limited flexibility in implementation.
- Diplomatic relations and peaceful dispute resolution. Infrastructure investments focused on transport connectivity show a moderate positive effect on diplomatic relations and peaceful dispute resolution ($g = 0.15$). This evidence comes from a single global study of Belt and Road related connectivity investments. Effects were stronger in countries with higher governance capacity and

weaker in lower capacity settings. These findings are based on bundled connectivity interventions and cannot be disaggregated to isolate the effect of specific infrastructure components.

Confidence in the evidence is low. For violence outcomes, the evidence base is small and consists of non experimental studies conducted in highly specific conflict settings, with mixed findings across project types and contexts. For diplomatic relations and peaceful dispute resolution, confidence is limited by reliance on a single non experimental study. While some patterns are consistent with proposed mechanisms, the limited number of studies and strong contextual dependence reduce certainty in the overall findings.

Summary of effect sizes

Outcome	Effect size (g)	Effect interpretation	Number of studies	Number of effect sizes
Diplomatic relations and peaceful dispute resolution	0.15	Moderate effect	1	1
Nature and scale of violence and atrocities	0.00	Little or no effect	3	9