

## A Theory of Change for Impact at Scale

Every year government in the US spends about \$10 trillion (that's trillion with a "t"). Yet we still have far too much income inequality, infant mortality, mediocre school outcomes, and rates of gun violence unheard of in any other rich country in the world. Each of these problems is regressive in their effects, harming disadvantaged people and communities of color the most.

How can *philanthropy* make a difference? Not by simply increasing spending. Philanthropy devotes \$350 billion a year to try to make the world a better place.<sup>1</sup> If government can't solve these problems with \$10 trillion in annual expenditures, why would philanthropic efforts to increase spending by the equivalent of ~3% of the government's budget make much difference?

The only way philanthropy can possibly make a *real* difference is through *leverage*: Helping the government spend its \$10 trillion a year much more effectively.

Why is government spending so ineffective? We believe one important reason is because society under-invests in R&D to increase government impact. A colleague of ours who served in the White House Office of Management and Budget lamented that only around 1% of government spending is based on any evidence at all. Imagine we did this in, say, medicine or airplane design or the civil engineering of bridges and roads and dams; it's unimaginable because it is madness. Why isn't it equally mad to spend \$10 trillion a year with no clue about what we're doing?

Society's under-investment in public policy R&D creates a "social arbitrage opportunity" for philanthropy: There are currently outsized returns to investing in R&D that helps the government spend its money more effectively, to become a better 'portfolio manager' of public tax dollars.

This is not a hypothetical 'social good arbitrage opportunity;' we've seen it first-hand in our own work at the University of Chicago Crime Lab and its sister organization, the Education Lab:

- In 2008, Chicago Mayor Richard M. Daley was eager for innovative ways to address gun violence. Together we raised \$1 million from philanthropy for a demonstration project of a behavioral-science-informed prevention program called Becoming a Man (BAM), by local non-profit Youth Guidance. That demonstration showed BAM reduces violent crimes for participants by 50% and generates from \$5 to \$30 in social benefits for each dollar spent. In response, Daley's successors, Mayors Emanuel and Lightfoot, invested \$60 million into this type of programming for youth (city spending plus donations). Our project led the government to re-optimize its spending portfolio towards an evidence-based policy with high benefit-cost ratios. *While there remains some uncertainty about how well BAM works at very large scale, a defensible estimate is that \$1 million*

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<sup>1</sup> This excludes what people give to religious organizations; see [https://philanthropy.iupui.edu/news-events/news-item/giving-usa:-total-u.s.-charitable-giving-remained-strong-in-2021,-reaching-\\$484.85-billion.html?id=392](https://philanthropy.iupui.edu/news-events/news-item/giving-usa:-total-u.s.-charitable-giving-remained-strong-in-2021,-reaching-$484.85-billion.html?id=392)

*demonstration created between \$300 million and \$1.8 billion in social good for Chicago.*<sup>2</sup>

- As the economy shifts from agriculture and manufacturing to knowledge-intensive jobs, education becomes ever more important for economic growth and upward mobility. Yet educational outcomes lag (especially on the heels of the pandemic) partly because of limited understanding of scalable solutions. Our University of Chicago-based team partnered with the Chicago Public Schools (CPS) and the non-profit Saga Education to test one intervention known to dramatically boost student learning since at least the 15<sup>th</sup> century at Oxford: high-dosage tutoring. Saga's innovation was to figure out how to do Oxford-style tutoring at CPS-style prices. Our research, which cost \$2 million total, showed this policy could double or triple what students learn per year. In response the city of Chicago has committed \$100 million into this type of tutoring since our studies. *With a benefit-cost ratio on the order of 5-to-1, our \$2 million study has helped redirect city dollars in a way that has produced on the order of \$500 million in social good.*<sup>3</sup>
- In 2017 then-New York City Mayor Bill DeBlasio announced the goal of closing the Rikers Island jail. One challenge is the sheer volume of defendants that judges keep sending to Rikers to await trial. Our team discovered a key explanation why: judges substantially mis-predict defendant risk. Judges are supposed to detain people only because they are high risk, but in practice they were detaining large numbers of very low-risk people (and simultaneously releasing lots of high-risk ones). So we helped build and implement a new data-driven [decision aid](#) for judges now being used in every NYC courtroom every day. *That tool cost \$3 million to build and, by diverting thousands of low-risk people from jail so the city can avoid these jail costs and people can keep their jobs (all without increasing crime rates), has led to at least \$100 million in social good.*<sup>4</sup>

The chance to get more social good from existing government spending is likely to become only more important over time as governments at every level face likely budget problems in the near future. For cities, federal pandemic relief funding is ending while the crisis of downtown commercial real estate may be only beginning. States are sitting on \$1.5 trillion in unfunded pension liabilities. And federal debt is now approaching \$35 trillion (\$100,000 per American).

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<sup>2</sup> See Sara B. Heller et al. (2017) "Thinking, fast and slow? Some field experiments to reduce crime and dropout in Chicago." *Quarterly Journal of Economics*. 132(1).

<sup>3</sup> CPS has provided \$27 million to Saga specifically and \$25 million per year the last few years (and again for next year, 2024-25) for its own in-house version of Saga tutoring, the CPS Tutor Corps. See Jonathan Guryan, Jens Ludwig, Monica Bhatt et al. (2023) "Not too late," *American Economic Review*. 113(3): 738-765.

<sup>4</sup> There are ~20,000 arraignments annually in NYC; while our evaluation of the release tool is ongoing for now we assume a 5 ppt (10%) change in detention. Harvard economist Will Dobbie and colleagues show detention reduces people's earnings by about \$1,000. Our calculation for jail savings per spell comes from multiplying the average Rikers spell of 115 days (<https://gothamist.com/news/detainees-spend-an-average-of-115-days-at-rikers-4-times-the-national-average>) by an average cost per jail spell of \$1500 (<https://comptroller.nyc.gov/newsroom/comptroller-stringer-cost-of-incarceration-per-person-in-new-york-city-skyrockets-to-all-time-high-2/>), and assuming in criminal justice that marginal costs are 20% of average costs (<https://www.vera.org/downloads/publications/marginal-costs-guide-fact-sheet.pdf>).

Luckily the opportunities for social good from R&D projects to improve the effectiveness of government spending are almost endless, given how little of the \$10 trillion the government spends each year is evidence based. Even just a modest percentage change in the social good we get for the government's \$10 trillion per year spending adds up to enormous social good.