

# **Help Wanted: Chicago needs a crime-fighting superhero**

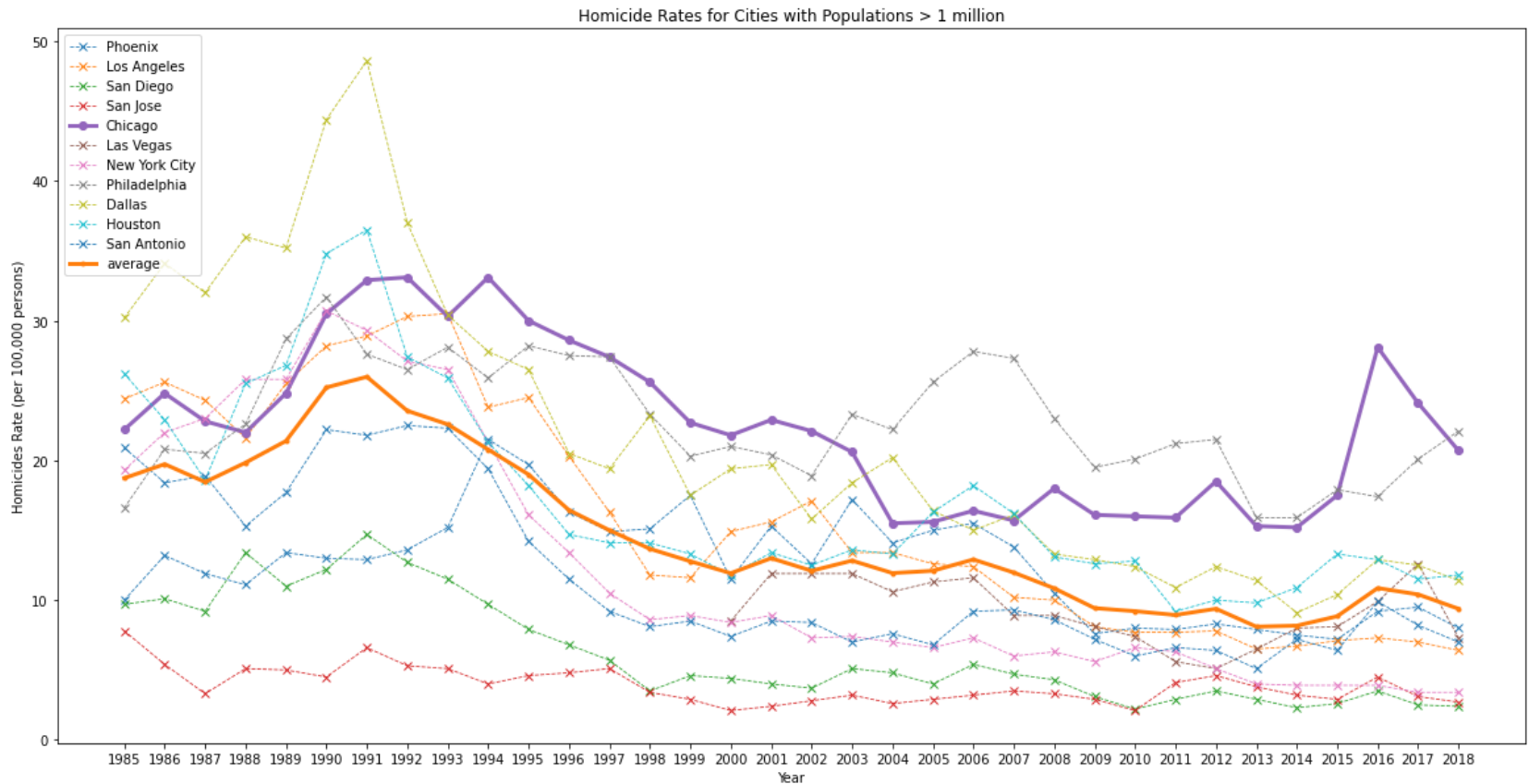
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# Chicago Homicides

Compare Chicago's homicide rate and trend to that of other large U.S. cities in one or two pretty figures. Given these graphs, would you say that Chicago is an outlier?

# Homicide Rates

**Chicago has the second-highest homicide rate compared to cities with populations above 1 million persons, and far surpasses the average for cities of similar size.**

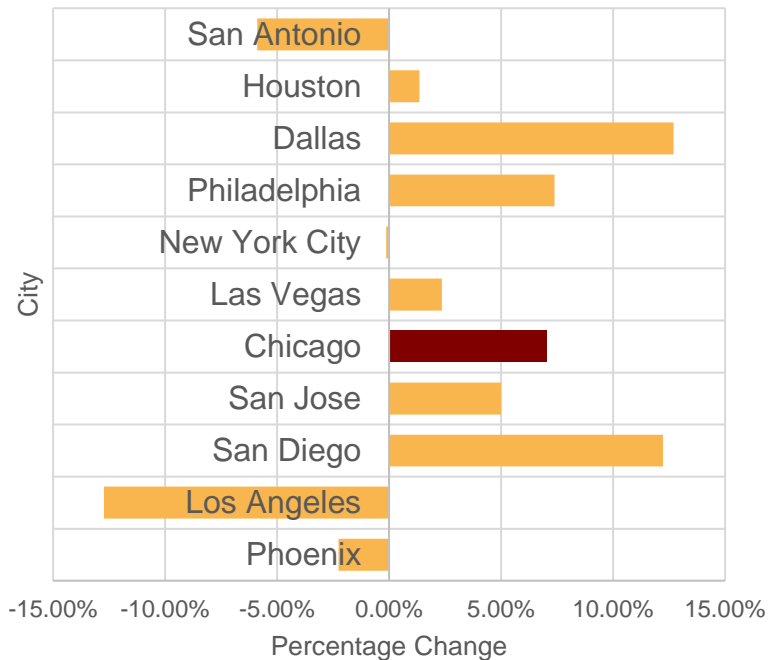


# Homicide Trends

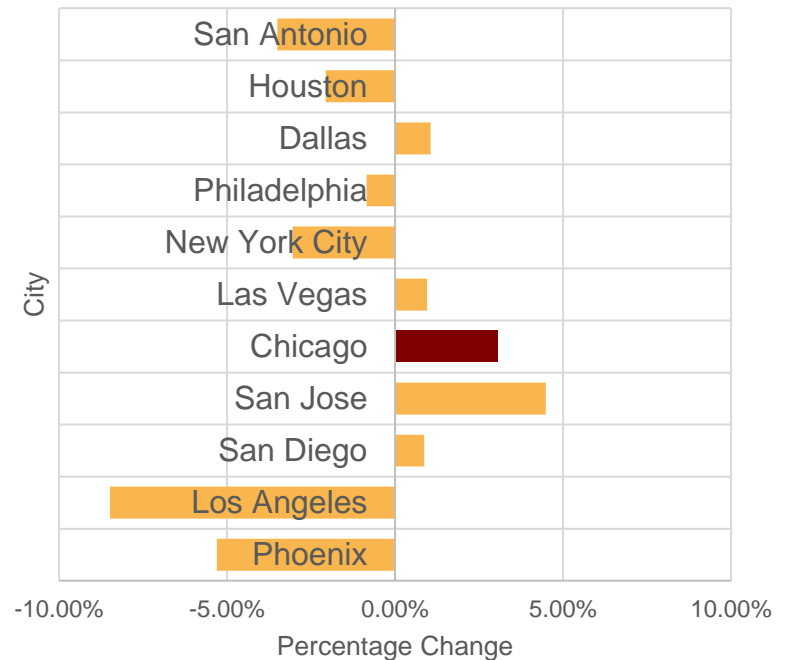
Homicides in large cities have increased overall recently. Chicago, while with high average year on year growth rates, does not seem to be an outlier.

In the last decade, though, most cities have had an overall decreasing trend in homicide rates. Chicago looks to be more of an outlier here.

**Average Y/Y Percentage Change in Homicide Rates 2016-2019**



**Average Y/Y Percentage Change in Homicide Rates 2009-2019**



# Impact Analysis Methods

The following methods were applied to project the expected impact of both CRED and the Centralize & Revitalize Proposal on homicides

# 2-Step Evaluation Process

1. **Budget Estimates:** How many individuals can be reached by the program:
  - Identifying the cost of helping 1 individual
  - Identifying how many individuals can be helped with \$25m
2. **Impact conversion:** Converting individuals helped to homicides prevented
  - How much will this increase the employment rate of the community area (CCA)?
  - Using the increase in employment rate to scale down the predicted homicide rate using the statistical methods (next slide)

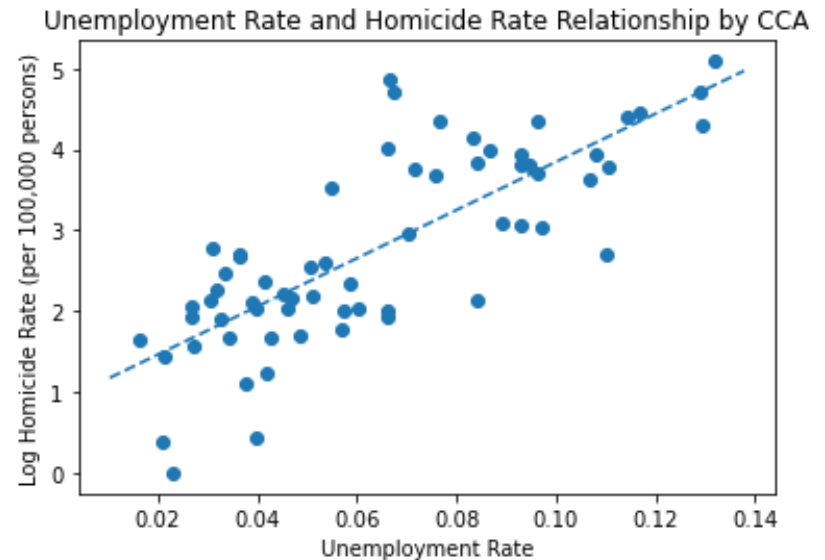
## ***Key facts and assumptions:***

- Most Chicago homicides (>50%) are committed by young men aged 12-24, as part of gang tussles
- Gangs are economic organizations that provide the economic opportunity that gang members otherwise do not have access to in the legal economy to support their families and selves

# Impact Conversion to Homicides

**Impact: CCA weight x CCA Homicide Rate Change x Predicted Chicago Homicides**

- Regressed Log homicide rates against neighbourhood employment:
  - Neighbourhood employment explains 61% of variance in homicide rates (R-squared value)
  - **1% decrease in unemployment rate reduces homicide rate by 29%** (coefficient = 29.8)
- **Predicted future homicides of Chicago** by pushing last 10 years' average growth rate forward
- **CCA Weight:** Predicted future homicides per CCA by taking % of future homicides based on last year's CCA homicide data
- **CCA Homicide Weight Change:** Scale expected homicides per CCA by expected decrease to yield homicides prevented\*



***\*Importantly, this relationship is correlation not causation, though a litany of psychology, social work and economic research has espoused on the link between adequate “employment” and taking men off the streets. Due to the lack of experimental information and data, this method will do.***

# Secondary Impact Conversion Methods

*used to corroborate the validity of the regression coefficient*

## Unemployment Elasticities in the Literature

To corroborate the regression analysis, research on the causal relationship between employment and homicides was sought in the literature:

- 1% increase in unemployment rate increases homicide rate by **0.31 / 100,000 persons**, based on national calculations (Kapucinski et al, 1991)<sup>1</sup>
- More recent study found that 1% increase in unemployment rate increases national homicide rates by **21.9%** (Ha, 2019)<sup>2</sup>

2<sup>nd</sup> number is closer to my own regressions, taking into account that Chicago's population may be more violent and elastic compared to national averages

## Unemployment Elasticity from Empirical Analysis

- **Natural Experiment** Looking at the pilot of Florida's mass job placement program in 1994
- Reduced unemployment rate by 1%, in the same time homicide rate decreased by 25%
- Nationally, both were unchanged

**DID shows: 1% unemp. <-> 25% hom. rate**

## Cost Savings from Prevention

- One homicide costs Chicago / the state **1.4m USD<sup>3</sup>**
  - Legal / law enforcement fees
  - Forgone earnings and other economic activity
- **18** homicides need to be prevented to make the \$25m worthwhile

1. [https://books.google.com/books?id=eT0GDAAQBAJ&pg=PA454&lpg=PA454&dq=unemployment+and+homicides+elasticity&source=bl&ots=0E\\_Bn8vdh-&sig=ACfU3U2dobOmORcRie-wf35c21WzmH9HKQ&hl=zh-TW&sa=X&ved=2ahUKEwjn6qfU09DpAhUYVc0KH148DD0Q6AEwAHoECAoQAQ#v=onepage&q=homicides&f=false](https://books.google.com/books?id=eT0GDAAQBAJ&pg=PA454&lpg=PA454&dq=unemployment+and+homicides+elasticity&source=bl&ots=0E_Bn8vdh-&sig=ACfU3U2dobOmORcRie-wf35c21WzmH9HKQ&hl=zh-TW&sa=X&ved=2ahUKEwjn6qfU09DpAhUYVc0KH148DD0Q6AEwAHoECAoQAQ#v=onepage&q=homicides&f=false)

2. <https://www.essex.ac.uk/-/media/documents/departments/economics/ha-eesj-a18.pdf>

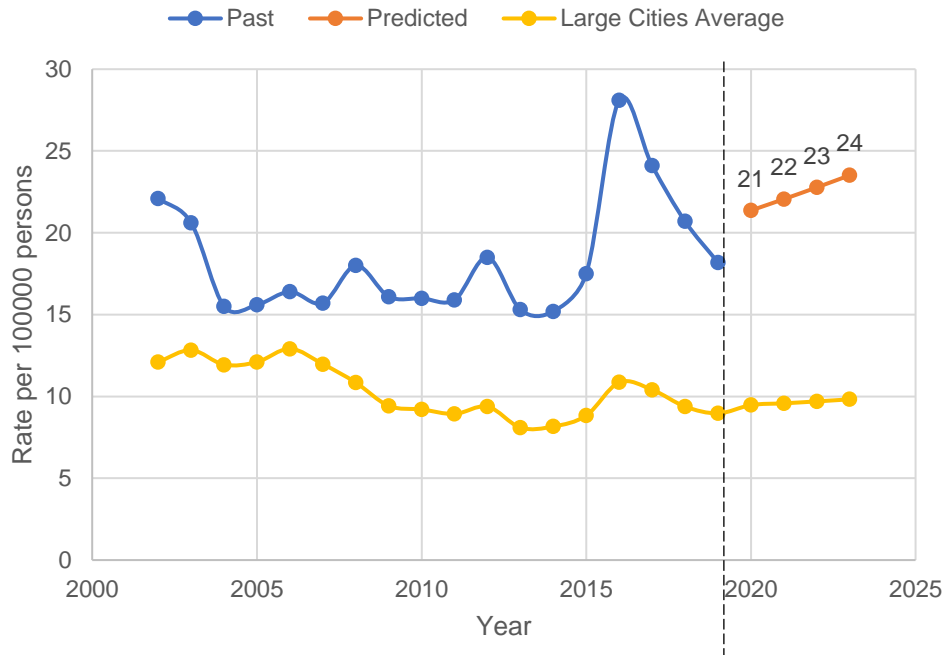
3. <https://www.wbur.org/onpoint/2016/11/11/chicago-violence-arne-duncan>



# Predicting Future Homicides

*setting a baseline upon which the number of lives saved is calculated*

Chicago Homicide Rate, Past and Predicted



- The average of the last decades' year on year growth rates for homicide rates were used to predict Chicago's future homicides
- Comes out to 3.24% increase / year
- For the large cities, this was a 0.69% increase per year on average (basically a flat line)

**Scaling homicides by Chicago's current population yields:**

Chicago	Predicted Homicide Rate	Predicted Homicides
2020	21	576
2021	22	594
2022	23	614

# CRED Impact Estimate

The mayor has given Arne \$25 million to spend to implement his ideas (CRED) over the next few years. The Mayor wants your best estimate of the homicide reduction that will result from Arne's intervention. Explain and justify the assumptions underlying your estimate.

# CRED Budget & Impact (Estimate)

In an optimistic scenario, CRED would help 2,227 individuals over the next 3 years

## Q2 - Chicago CRED (amounts in USD, except year and employee counts)

Evaluation Timeframe (years)	3	Suppose the evaluation timeframe is the remainder of Lightfoot's term	
<b>Unit Model: One Participant For Projected Duration</b>			
<b>Item</b>	<b>Cost (USD)</b>	<b>Rationale</b>	<b>Sources</b>
Participant wages	31,320	Wage of \$15 an hour during 12-month training, 40h-week (i.e. 8 h/day), 261 workdays in a year	<b>Interviews with Arne Duncan &amp; Curtis Toler:</b> <a href="https://www.wbur.org/onpoint/2016/11/11/chicago-violence-arne-duncan">https://www.wbur.org/onpoint/2016/11/11/chicago-violence-arne-duncan</a> , <a href="https://www.chicagotribune.com/business/ct-arne-duncan-emerson-collective-1016-biz-20161014-story.html?int=lat_digitaladshouse_bx-modal_acquisition-subscriber_ngux_display-ad-Interstitial_bx-bonus-story_____">https://www.chicagotribune.com/business/ct-arne-duncan-emerson-collective-1016-biz-20161014-story.html?int=lat_digitaladshouse_bx-modal_acquisition-subscriber_ngux_display-ad-Interstitial_bx-bonus-story_____</a> , <a href="http://www.cc.com/video-playlists/1br55f/the-daily-show-with-trevor-noah-third-month-mania--bracket-of-bullshit/x2gknz">http://www.cc.com/video-playlists/1br55f/the-daily-show-with-trevor-noah-third-month-mania--bracket-of-bullshit/x2gknz</a> <b>Workdays in a year:</b> <a href="https://hr.uiowa.edu/pay/payroll-services/payroll-calendars/working-day-payroll-calendar-2019">https://hr.uiowa.edu/pay/payroll-services/payroll-calendars/working-day-payroll-calendar-2019</a>
Staff wages	1,064	Currently, 19 staff serve a cohort of 500 participants, started at 9 staff for 30 participants Typical non-profit salary per year is 50k Backed out variable cost as 10 * 50k for 470 additional participants = \$1,063 per participant, remainder is fixed cost	
Miscellaneous	2,000	Miscellaneous Costs Breakdown: - Transit, logistical needs (e.g. interview clothing, merchandise, outreach needs) - 1k - Event, educational (e.g. test scores, curricula supplies), office needs - 1k Likely an overestimate, leeway for some participant churn	
Annual cost	34,384		
Years	3		
<b>Total Unit Cost</b>	<b>103,151</b>		
<b>Likely scenario - if grant amount is fully counted towards helping participants (i.e. philanthropic funding source remains constant)</b>			
<b>Grant-Funded</b>			
Grant Amount	25,000,000	Full amount is counted towards helping participants	
<b>Participants (grant)</b>	<b>242</b>	Grant amount divided by per-participant variable cost, onboarded slowly over the course of the next few years	
<b>Participants (philanthropic)</b>	<b>500</b>	Suppose the philanthropically funded pool/year does not change for the evaluation period	
Years	3	Suppose the evaluation timeframe is the remainder of Lightfoot's mayoral term	
<b>Participants (Total)</b>	<b>2,227</b>		

# CRED Budget & Impact (Estimate)

**In a pessimistic scenario, CRED would help 666 individuals over 3 years**

- Suppose funding from the Emerson Collective dries up / considerably slows
- Fixed costs of operation would need to be pulled from the grant amount
- Assume that variable costs of serving each participant fixed, and over the same time horizon, CRED's impact will be much lower in terms of individuals helped
- ***Crucially, reflects that CRED's fixed cost of operations is very high***

Fixed Cost Model: Overheads of Running the Program (Yearly)			
Item	Cost (USD)	Rationale	Sources
Rent of office	280,000	Rent is roughly 7k per employee in Chicago (Loop) Est. current rent is 7k * 20 employees = 14k Expect to double participants, so doubling the rent.	<b>Rent:</b> <a href="https://www.marketwatch.com/story/heres-how-much-your-company-pays-to-rent-office-space-2015-05-27">https://www.marketwatch.com/story/heres-how-much-your-company-pays-to-rent-office-space-2015-05-27</a>
Staff overhead	418,085	Fixed costs as calculated from the personnel cost of the first year subtracting the variable cost element scaled by the individuals served in that year (30)	
Annual Cost	698,085		
Years	3		
<b>Total Fixed Cost</b>	<b>2,094,255</b>		
<b>Worse case scenario - if grant amount is the only funding that props up Chicago CRED for the next few years</b>			
Grant Amount	25,000,000		
Variable Budget	22,905,745	Subtracting fixed costs from grant amount, all money here invested into participants	
<b>Participants</b>	<b>666</b>	Dividing variable budget by per participant costs (=optimistic scenario)	

# CRED Scenario Analysis on Homicides

*Best case scenario:*

**357 homicides prevented / 3 years**

- 2,227 persons given jobs, evenly sourced from 3 neighbourhoods (i.e. 742 @)
- The 3 neighbourhoods are those responsible for highest proportion of homicides, in order – Austin (10%), North Lawndale (5%), Englewood (5%)
- Calculating reduction based on methods, reduction corresponds to **20% of predicted homicides in the 3-year period**
- Importantly, **only 33% of participants are funded by the grant.**

*Worst case scenario:*

**68 homicides prevented / 3 years**

- 666 persons are given jobs, who are all from one neighbourhood – Austin, where the highest proportion of homicides in Chicago are committed (10%)
- Using the same methods, arrived at 68 homicides reduced in 3 years, corresponding to **4% of the total predicted homicides** for that period

	Unemployment Rate		Homicide Rate Change	Homicides Prevented
	Old	New		
Austin	0.07	0.04	-100%	<b>-178</b>
N Lawndale	0.13	0.04	-100%	<b>-89</b>
Englewood	0.08	0.01	-100%	<b>-89</b>

	Unemployment Rate		Homicide Rate Change	Homicides Prevented
	Old	New		
Austin	0.07	0.04	-38%	<b>-68</b>

# CRED Effect Summary

**Best case scenario\***

**357**

**Homicides Prevented**

**\$500**

**Million Saved**

**Worst case scenario**

**68**

**Homicides Prevented**

**\$95.2**

**Million Saved**

\* only 33% of participants in program attributable to \$25m grant, i.e. ~ 119 persons' lives saved, \$167m savings

# Original Proposal: **Centralize and Revitalize**

The Mayor wants you to propose a strategy, hopefully something heroic that is original and will be wildly successful. Describe your strategy and estimate how many homicides will be prevented if the mayor gave you \$25 million to pursue it.

# Problem Characterisation

An “original proposal” is not about reinventing the wheel, but rather to fill in the gaps of existing solutions and efforts.

Since >50% of Chicago homicides are due to gang-related altercations<sup>1</sup>, a good proposal to reduce homicides needs to **collectively address** the key few factors leading to gang-related homicides – lack of economic opportunity, high inertia, lacking good neighbourhood role models, traumatic childhood experiences.

Bottom line: If the magic bullet to solve homicides existed, it would have been deployed. Nobody likes homicides, and many organizations exist to reduce them. A good proposal cannot discount these efforts, but also needs to avoid the following 3 pitfalls that plague them:

- **Non-profit work is siloed:** A lot of non-profit work is being done in those neighborhoods to either identify and provide programming for at-risk youth, or to rehabilitate ex-cons, but these groups often operate in silos even if their boundaries collide<sup>2</sup>. Youth do not have a centralized organization to turn to even when they do want help.
- **Supply-demand mismatch for legal economic opportunity:** Especially for the latter, the supply of ex-cons / disconnected young adults that want “out” of the shooting and street life. There are not enough jobs in the legal economy for them, however – CRED is running into this issue right now<sup>3</sup>.
- **Middle class flight:** jobs, if available, exist outside of at-risk youth’s home neighbourhoods, and the minority that receive help and are able to “make it” economically depart the neighborhood and Chicago. Inequality, and thus crimes related to it, worsen as a result<sup>4</sup>.

1. <http://home.chicagopolice.org/wp-content/uploads/2019/07/2018AnnualReport-05July19.pdf>  
2. <https://www.thetrace.org/2019/07/chicago-gun-violence-399-campaign/>  
3. <https://chicago.suntimes.com/crossroads/2019/10/4/20895771/chicago-losing-black-middle-class-ed-zotti-city-crossroads>  
4. <https://www.chicagomag.com/Chicago-Magazine/November-2016/Arne-Duncan/>



# How it Works

1

## Centralize

1. Set up a **community collective** that will pool together existing social work and non-profit resources
2. **Meet periodically** to bridge geographical and political silos

2

## Plan

1. Put out **Request for Proposals** for neighborhood projects
2. Target **Chicagoland or neighborhood** businesses

3

## Recruit

1. **Street outreach** for immediate employment
2. **Pretrial diversion** for rolling employment
3. **School and teen programming** to identify summer employment

4

## Mentor

1. **Set up community programming** during lunch hours, weekends
2. **Set up buddy systems** between existing full-time workers and summer teen workers

# How it Works

1

## Centralize

Set up a **community collective**:

- Collect all programs targeting at-risk youth and offender reintegration into one room
- Gauge manpower and existing programming resources for:
  - Street outreach (both school age and adult)
  - Violence mediation
  - Youth programming
  - Health and provision of basic necessities
  - Job retraining and other economic aid
  - Pre-trial aid and post-trial reintegration

Community collective will have **the following goals**:

- Identify an abandoned area or space for redevelopment
- Design a timetable of programming for the workers that are participating in the revitalization program, in particular during -
  - Lunch and after-hours, weekends
  - Summers for youth laborers
- Convene regularly to discuss problematic cases or evaluate methods

2

## Plan

**Put out an RFP to neighborhood, Chicago-area businesses or coalitions of organizations for the identified open area:**

- Budget limit to 300k absent variable manpower
- Construction, renovation, urban planning welcome
- Expect most of these to be refurbishment of abandoned buildings or creation of recreational spaces (e.g. pop-up stores and fairs).
- Lacking demand for a proposed structure can be filled in by moving in community organizations
  - *Similar to MEMFix, MEMShop, MEMobile* programs that were implemented in Memphis with a fraction of their 3.7m grant from Bloomberg Philanthropies<sup>1</sup>.
  - *Similar to DESEPAZ youth houses* movement in Cali, Colombia, which used to have homicide clear rates < Chicago, and similarly 67% of homicides being gang-related, committed largely by poor male youth<sup>2</sup>.

Aldermen & community collective will vet proposals.

1. 50% in homicides for target neighborhoods in Memphis: <https://money.cnn.com/2014/12/08/news/economy/wharton-memphis-innovation/index.html>

2. Approach reduced 60 homicides / 100,000 persons in 3 years: <https://www.scientificamerican.com/article/big-data-are-reducing-homicides-in-cities-across-the-americas/>

# How it Works

## 3

### Recruitment

Once the RFPs have been vetted, seasoned community organizations proceed **recruiting immediate or rolling employment on grant payroll** at minimum wage levels (\$14) through 2 ways:

- **Street outreach:** gang members or at-risk youth out of school (ex-cons possible) from the neighbourhood who would like “out” of gang life
- **Pretrial diversion:** members of the neighbourhood who are newly arrested / awaiting trial who can plead guilty and work this job to pay back money owed or to reduce the sentence<sup>1</sup>

**Crucially, workers must 1) reside in the CCA and 2) commit to attending programming outside of work hours (i.e. quit the gang)**

During the summers, **incorporate school-age youth through a summer job + programming package**, especially for 15-17 year olds that are unwitting breadwinners of their family, recruited through:

- In-school programs or
- Other community organizations

## 4

### Mentorship

Community organizations to host regular programming (using existing expertise) that fosters:

- **Community based in individuals, not gangs:** workers socialize outside of their own predetermined gangs’ geographical locations
- **Productive social relationships:** through socializing through sports and classes, occupy these people during the hours that would otherwise be time to stake out other gangs / engage in gang-related tussles and violence (i.e. weekends, weekday late night hours)
- **Transferable skill development:** to equip these men to stay employed in other positions after the projects are over

During summers, **workers to mentor working youth in a 5:1 ratio** alongside youth programming by community organizations, which will:

- **Create role model figures outside of accessible gang leadership:** solve for lacking sense of belonging in youth spurring gang involvement
- **Occupy youth during high-crime hours**

• Existing pretrial programs in Cook County already exist or have been proposed to some effect: [http://chicagoappleseed.org/wp-content/uploads/2012/08/diversion\\_court\\_proposal\\_and\\_implementation\\_plan.pdf](http://chicagoappleseed.org/wp-content/uploads/2012/08/diversion_court_proposal_and_implementation_plan.pdf), <https://www.aclu.org/blog/smart-justice/diversion-programs-are-cheaper-and-more-effective-incarceration-prosecutors>

# How does it solve the 3 existing problems?

## **Non-profit work is siloed**

- Centralized collective oversees the project, helps to field incoming youth / young adults to helpful organizations
- Collective's regular meetings help different organizations minimize overlap and cross-evaluate operational methods, ensuring fewer people fall through the gaps

## **Supply Demand Mismatch**

- Job training and placement occur within the neighbourhood, adults are met where they are at
- RFP method (instead of government decree) ensures that there will be demand for the proposed space or building, helping to bring in more investment

## **Middle-Class Black Flight**

- Project fosters healthy social communities within the neighbourhood, increasing sense of belonging
- Economic relief is provided within the neighbourhood, and revitalization will bring in jobs as like case studies in other cities, reducing incentive to flee

# Proposal Budget & Impact

Through 2 neighbourhood projects, each spanning 2 (2021 – 2022) years, the proposal would aid 1,503 laborers and 301 youth in total.

## Q3 - Proposal (amounts in USD, except year and employee counts)

<b>Evaluation Timeframe (years)</b>	<b>2</b>	Suppose RFPs and community organizations take a year to set up, and evaluate for remainder of Lightfoot's term	
<b>Unit Model: One Participant</b>			
<b>Item</b>	<b>Cost (USD)</b>	<b>Rationale</b>	<b>Sources</b>
Participant wages	29,232	Minimum wage of \$14 an hour each year, 40h-week (i.e. 8 h/day), 261 work days a year	National Law Review: <a href="https://www.natlawreview.com/article/chicago-workers-to-earn-15-minimum-wage-2021">https://www.natlawreview.com/article/chicago-workers-to-earn-15-minimum-wage-2021</a> Workdays in a year: <a href="https://hr.uiowa.edu/pay/payroll-services/payroll-calendars/working-day-payroll-calendar-2019">https://hr.uiowa.edu/pay/payroll-services/payroll-calendars/working-day-payroll-calendar-2019</a> Chicago Appleseed: <a href="http://chicagoappleseed.org/wp-content/uploads/2012/08/diversion_court_proposal_and_implementation_plan.pdf">http://chicagoappleseed.org/wp-content/uploads/2012/08/diversion_court_proposal_and_implementation_plan.pdf</a>
Treatment Costs	1,751	According to a proposal for a Cook County Diversion Court, which would provide a year's worth of treatment (job training, therapy, reintegration etc) for eligible felony suspects in lieu of jail time. Importantly, all workers will be eligible for this sort of treatment, which can be preferred by community partners during lunch hours, after work, over the weekends.	
<b>Annual Costs</b>	<b>30,983</b>		
<b>Years</b>	<b>2</b>		
<b>Total Per Participant Cost</b>	<b>61,965</b>		
<b>Unit Model: One Project</b>			
<b>Item</b>	<b>Cost (USD)</b>	<b>Rationale</b>	<b>Sources</b>
Overhead	333,333	Median grant amount for small business initiative construction projects is \$1m - initiative was begun to encourage small businesses to propose neighborhood revitalization projects. Wages typically accounts for 67% of construction costs, so the \$1m was divided by 3, as workers will be on the grant's payroll	Grants for small business construction initiatives: <a href="https://www.chicago.gov/content/dam/city/depts/dol/rulesandregs/SBIPProgram.052018.pdf">https://www.chicago.gov/content/dam/city/depts/dol/rulesandregs/SBIPProgram.052018.pdf</a> Construction projects costs breakdown - some websites, and public company filings for construction companies: <a href="https://www.botkeeper.com/blog/construction-labor-cost-percent">https://www.botkeeper.com/blog/construction-labor-cost-percent</a> ; <a href="https://investor.graniteconstruction.com/sites/granite-construction-v2/files/2020-04/2018-annual-report-2019-proxy-statement.pdf">https://investor.graniteconstruction.com/sites/granite-construction-v2/files/2020-04/2018-annual-report-2019-proxy-statement.pdf</a>
<i>Manpower</i>			
Full-Time Employees	500	According to NAICS codes for small businesses, construction companies may only hire 250 - 750 people. This includes both full-time workers as well as diversion program participants. Scale by Unit Participant Model costs above	NAICS Code Requirements: <a href="https://www.sba.gov/sites/default/files/2019-08/SBA%20Table%20of%20Size%20Standards_Effective%20Aug%2019%2C%202019.pdf">https://www.sba.gov/sites/default/files/2019-08/SBA%20Table%20of%20Size%20Standards_Effective%20Aug%2019%2C%202019.pdf</a>
<b>Full-Time Costs</b>	<b>15,491,260</b>		
Part-Time Employees	100	Assume labor force expands by 0.2 during summers to provide for out-of-school youth. 0.2 is based on: - 5 adults supervising 1 youth seems plausible - Community services to only take on 0.2 more of their current load for 3 months seems manageable Scale by 1/4 of Unit Participant Model costs above as students are only working for 3 months	
<b>Part-Time Costs</b>	<b>774,563</b>		
<b>Manpower Costs</b>	<b>16,265,823</b>		
<b>Annual Cost</b>	<b>16,599,156</b>		
<b>Years</b>	<b>2</b>		
<b>Total Per Project Cost</b>	<b>33,198,313</b>		
<b>Fixed Costs: Yearly</b>			
<b>Item</b>	<b>Cost (USD)</b>	<b>Rationale</b>	<b>Sources</b>
Staff overhead	22,167	Administration overhead to field the RFPs, coordinate the different community organizations, staff incoming participants Divided a similar team in Minneapolis' budget by 3 as that team is 12 persons responsible for projects across the entire city, we are only going to be doing a few neighborhoods - 4 FTEs should be more than enough with help from community partners.	Overhead costs of the "Neighborhood Revitalization Team" in Minneapolis, whose responsibilities are similar: <a href="http://www.minneapolismn.gov/www/groups/public/@finance/documents/webcontent/convert_276975.pdf">http://www.minneapolismn.gov/www/groups/public/@finance/documents/webcontent/convert_276975.pdf</a>
<b>Annual Cost</b>	<b>22,167</b>		
<b>Years</b>	<b>2</b>		
<b>Total Fixed Cost</b>	<b>44,333</b>		
<b>Impact Analysis</b>			
Grant Amount	25,000,000		
Variable Budget	24,955,667	Subtracting fixed costs from grant amount, all money here invested into participants	
<b>Projects</b>	<b>2</b>	Dividing variable budget by per participant costs	
<b>Participants</b>			
<b>Full-Time</b>	<b>1503</b>		
<b>Part-Time</b>	<b>301</b>		

# Proposal Effect on Homicides

## *Employment effect:*

**99 homicides prevented / 2 years**

- 1,503 persons helped in 2 neighborhoods, placed with jobs (i.e. 752 per neighbourhood)
- The 2 neighbourhoods are ones responsible for highest proportion of homicides in Chicago, in order – Austin (10%), North Lawndale (5%)
- Scaling the homicide rate reduction by the weight on predicted Chicago homicides using the equation show in methods

**Equivalent to a 8% reduction in projected homicides over the 2 year period**

	Unemployment Rate		Homicide Rate Change	Homicides Prevented
	Old	New		
Austin	0.07	0.04	-42%	<b>-51</b>
N Lawndale	0.13	0.04	-79%	<b>-48</b>

## *Youth Programming Effect:*

**1.3 homicides prevented / 2 years**

Effectiveness of youth programs:

- RCT in Boston<sup>1</sup>: program reduces # arraignments of violent crime by 2.4%, plus increased desire to attend college
- RCT in Chicago<sup>2</sup>: violent crime arrests dropped by 45%, suggesting that Chicago's population is more elastic than national averages

**Lives saved:** Proportion of youth aided \* Reduction in homicide probability \* proportion of homicides caused by youth \* total projected homicides in 2 years

- ~ 10% of Chicago's homicides are caused by youth below the age of 17<sup>3</sup>
- 12.8k males 15-17yo live in poverty<sup>4</sup> in Chicago, program helps 301 of them to supposedly reduce chance of committing homicide by 50%
- $0.3/12.8 * 45\% * 10\% * 1208 = 1.3$  **persons over 2 years**

1. [https://www.brookings.edu/wp-content/uploads/2017/12/metro\\_2018jan\\_how-can-summer-jobs-reduce-crime-among-youth-final.pdf](https://www.brookings.edu/wp-content/uploads/2017/12/metro_2018jan_how-can-summer-jobs-reduce-crime-among-youth-final.pdf)  
2. <https://www.ncjrs.gov/pdffiles1/oijdp/grants/251101.pdf>  
3. <https://home.chicagopolice.org/wp-content/uploads/2014/12/2011-Murder-Report.pdf>  
4. <https://datausa.io/profile/geo/chicago-il#demographics>

# Proposal Effect Summary

100

Homicides Prevented

- 99 lives from full-time workers
- 1 life from summer employment

\$140

Million Saved

- \$1.4m cost per homicide
- >\$25m, proposal is effective

## Possible Positive Spill-over Effects

- Pretrial diversion programs also save costs of locking up inmates at **50k per year / inmate**
- Reducing jail terms as a result also reduces gang violence from leadership instability
- Centralized social services increases the effectiveness, accessibility of existing interventions, reducing incentive to join gangs
- Peer pressure is critical – once a critical mass of youth exit a gang or informal economy, the organization will disintegrate
- Investment may bring in higher income settlers and more businesses / economic opportunities, further reducing homicides

## Possible Negative Spill-over Effects

- Some gangs may relocate their operations to a neighbouring district – effect estimates would be overly optimistic
- Some “Relapse” / Churn from noncompliant participants may be inevitable as the inertia of the gang around the block may be hard to overcome

# Caveats



# Proposals considered

**There is no “one” way to solve homicides. The following few ideas were considered but rejected due to lower impact, with brief reasons cited.**

- **Increasing policing technology**
  - Chicago's police currently already have more sophisticated police technology compared to LA, NYC in terms of body worn cameras, data, cameras and identification etc<sup>1</sup>
  - Increasing community-based policing programs have yet to be evaluated for efficacy
- **Tightening regulations on weapons and violence triggers such as banning the sale of alcohol past 2am and banning even concealed carry of firearms on high-risk days (e.g. memorial day, July 4<sup>th</sup>)**
  - As discussed in class, increasing stop and frisk / aggressive policing tends to destabilize gangs and cause more violence
- **Changing grade school curricula to incorporate greater vocational elements and behavioural therapy elements to reduce social acceptance of violence to solve problems**
  - Does not solve truancy, meaning the targets (i.e. at-risk youth) are unlikely to benefit from the new policies as they are not in the classroom
  - Does not solve the problem of low employment opportunities, meaning at-risk youth may become more employable even as the supply-demand mismatch remains unsolved in the labor market
- **Targeting other motives for crime, such as domestic violence, driving under the influence (e.g. put in mandatory alcohol ignition locks):**
  - Newly implemented hotlines and organizations to reduce domestic violence during Covid have yet to be evaluated for efficacy
  - Compared to gang violence, these motives make up for very small % of Chicago homicides<sup>2</sup>

1. <https://news.wttw.com/2020/01/13/charlie-beck-chicago-police-will-become-model-effectiveness>

2. <http://home.chicagopolice.org/wp-content/uploads/2019/07/2018AnnualReport-05July19.pdf>