

# Cure Violence

Tools for Telling the Story of Gun Violence May 2016



#### What is Cure Violence?

Treating violence as a contagious health issue

Cure Violence stops the spread of violence in communities by using the methods and strategies associated with disease control – detecting and interrupting conflicts, identifying and treating the highest risk individuals, and changing social norms – resulting reductions in violence of 40% to 70%.







Analytics Client Relationship



Strategic
Partnership for
Analytics and
Data Science



Value from
Data- Subject
Matter Support





#### 1. Cost-benefit analysis

- a. How many Incidents were avoided, multiplied by the cost saving scalar
- b. Extracted data from reports
- c. Extracted model from the Mother Jones analysis

#### 2. Visualization of Crime Reports

- a. Filter based on type of violence
- b. Allows for decisions on where to go next
- c. TODO: Incorporate Cost Benefit Analysis
- d. TODO: Ability to "drop in" mediators to view their effects in real time





#### OpenData Socrata data

- Socrata Clients:

  - New York San Francisco
  - ChicagoNew Orleans
- Input data format: CrimeDatetime | Category | Description | Lat | Long

#### **Public Reports**

- Johns Hopkins University: Baltimore, 2012
- Ul Chicago: Chicago, 2009
- Northwestern University: Chicago, 2014
- Mother Jones: What Does Gun Violence Really Cost?





### Site Summary: Baltimore

- Data from the Baltimore Police Department for homicides and nonfatal shootings from January 1, 2003 to December 31, 2010
- Surveys of program participants from 2007 2010
- Average of 30 40 participants taking and tracking surveys
- Over 300 incidents mediated over 4 years

"Three of the four program sites experienced large, statistically significant, program related reductions in homicides or nonfatal shootings without having a counter-balancing significant increase in one of these outcome measures."



### Site Summary: Chicago

- Raw crime counts show a 31% reduction in homicide, a 7% reduction in total violent crime, and a 19% reduction in shootings in the targeted districts.
- These effects are significantly greater than the effects expected given the declining trends in crime in the city as a whole.
- Reduced levels of total violent crime, shootings, and homicides remained constant
- The effects of the intervention were immediate
- It is not likely that effects were due to increased police activity



## Cost Benefit Model

**Gun Casualty Category** 

Guil Casualty Categor	Y			Victim		Victims		Category			
	Police and Legal	\$4,500	٦.								
Homicide	Mental-health Treatment	\$11,600		\$441,300	×	10,500	=	\$4,633,650,000		1	
	Medical care and Transport	\$11,200									
	Prison	\$414,000							- }-	<ul> <li>Homicide and Assault</li> </ul>	\$8,114,650,00
	Police and Legal	\$2,000	7								
Assault	Mental-health Treatment	NA	L	\$59,000	×	59,000	=	\$3,481,000,000	_		
	Medical care and Transport	\$52,000									
	Prison	\$5,000									
	Police and Legal	\$2,000	٦ _								
Suicide	Mental-health Treatment	\$11,500		\$15,000	×	20,500	=	\$307,500,000	٦		
	Medical care and Transport	\$1,500	St								
	Prison	NA	_						ı	Suiside and Attenuated Suiside	¢570,000,000
										Suicide and Attempted Suicide	\$570,000,000
	Police and Legal	\$2,000	7.								
Attempted Suicide	Mental-health Treatment	NA	H	\$75,000	×	3,500	=	\$262,500,000	٦		
	Medical care and Transport	\$73,000									
	Prison	NA	_								

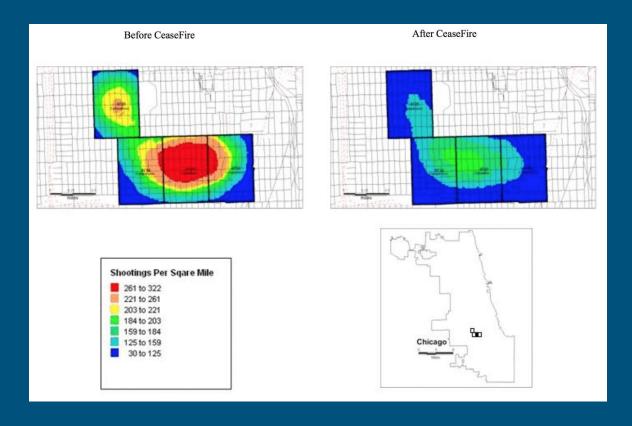
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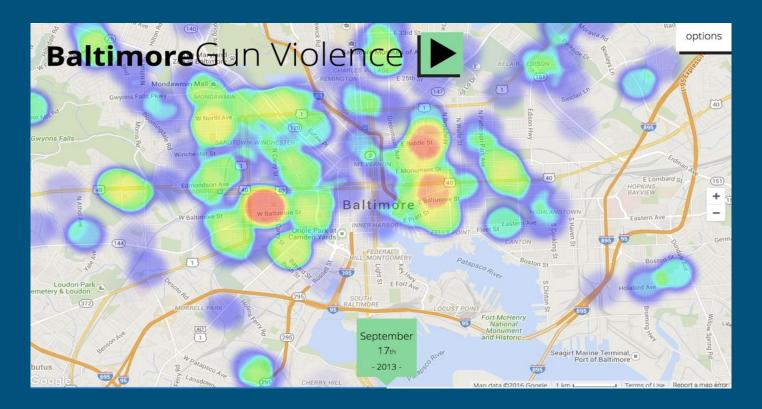






## <u>Interactive Heatmap of Gun Violence</u>: Baltimore Demo





# Suggested Steps for Advancing Value from Data for CV



Goal: Further advance the value from data to impact core functions

- 1. Tie in even more data sets: demographics, quality of life, internet usage, etc to build a growth model that can be applied across cities
- 2. Leverage Web MVP
  - Add additional data (layering / pockets)
  - 2. Create functionality for prioritization of local areas
  - 3. Expand geographies filter
- 3. Embed a easy to use customer view within Website. Consider optimizing website with something interactive that customers can play with, and make it extensible to other cities
- 4. Incorporate data from internal data sets be synced with a web presence: show areas of mediator presence and events to highlight impact

# Thank You

Questions?