Preface:

Literature Review

Research relating to public-health oriented crime prevention measures was compiled using the Northeastern University Library's Scholar OneSearch tool and the Google Scholar search tool. We identified 20 peer-reviewed research studies from the last two decades which demonstrated a positive correlation between community public health interventions and reduced crime rates. These studies largely informed our exclusion and inclusion criteria, in addition to the other books or reports cited below.

Inclusion Criteria:

Any department in consideration for inclusion in our CRI analysis must have a direct association with one of two things: either the overall population's health and well-being or with criminal justice outcomes. The inclusion parameters discussed below were developed with this in mind.

Carceral

Law enforcement functions as the primary -- but not the only -- gateway into an expansive system of punishment and control that includes prosecutors, courts, prisons, community supervision, and other elements. Hence, the following major departments and agencies comprise this spending category:

- Police Departments
 - Investigation and Accountability Boards
 - Parking Citations & Tickets
 - Forensics
- Sheriff's Offices
- Prosecutors & Public Defense
- Courts
- Corrections
- Community Supervision

We do note that, of these functions, the police department may be the only one that is a municipal function. Some of the cities included in the CRI provide funding to those county functions, such as Atlanta. We see this in cases where municipalities are unified jurisdictions where the city and county are effectively a single unit, such as: San Francisco, New Orleans, and Washington, DC. However, some cities included in the CRI -- such as Los Angeles and Albuquerque -- only include police expenditures within carceral spending.

Health

Health and Human Services; Public Health Departments; Veteran Affairs; Disability Services; Elderly Services; Behavioral Health

We included these departments because a person's health and access to health care are associated with a reduced likelihood of criminal justice involvement. State Medicaid expansion <u>led</u> to overall improved access to care among older adults and to increased self-reporting of good health status. This is particularly relevant given that justice-involved individuals face high uninsurance rates; Medicaid-expansion under the Affordable Care Act in 2014 led to a 9.7 percent <u>increase</u> in this demographic. Additionally, some of the strongest evidence for investing in public health as a means of crime prevention is through funding substance use treatment, specifically with regards to <u>methadone and buprenorphine</u>.

Public Spaces; Parks & Recreation

We included open spaces and parks because they are essential to community gathering. One <u>study</u> found that individuals living near recently-reclaimed vacant lots reported reduced safety concerns and perceptions of criminal activity. Importantly, they also reported significant increases in the use of outdoor spaces for socialization and relaxation. For more reading, Palaces for the People by Eric Klinenberg provides an extended argument in favor of the ways in which access to public space and investments in social infrastructure promote community health and resilience.

Support Services

Housing; Neighborhood Development; Utility Assistance

We included housing because of its direct relation to criminal justice outcomes, especially in cities with high populations of unhoused individuals who regularly interface with local police. Assisting persons experiencing homelessness through public health program intervention may result in reduced crime rates. In support of this view, several studies illustrate an association between experiencing homelessness and the likelihood of committing a crime. One such <u>study</u> from New York

University which conducted longitudinal interviews with persons experiencing both homelessness and mental illness found that psychological symptom severity and homelessness was predictive of an increase in a community's non-violent crime. Similarly, a 2012 <u>study</u> found a positive correlation between the duration of homelessness and the number of times a person had been arrested.

Employment; Workers' Compensation

We included departments and agencies that fund employment opportunities since stable jobs and secure financial well-being are associated with less crime. A study conducted in 2013 found a 33 percent drop in violent crime among previously-incarcerated youth just one year after their participation in a Chicago summer job program. Overseas, Swedish researchers noted a positive association between unemployment and subsequent property crimes.

Civic & Community Engagement; Immigrant Affairs; Human and Civil Rights; Board of Ethics; 311

We included departments related to community engagement because the literature emphasizes their effectiveness in preventing crime through community involvement. In fact, as far back as 1976, the US Department of Justice <u>reviewed</u> 37 projects and reached this same conclusion. A more recent <u>paper</u> went so far as to estimate that, for every 10 non-profits which address crime and enhance community engagement in cities of over 100,000 residents, that crime rates could be reduced: murder by 9%, violent crime by 6%, and property crime rate by 4%.

Arts and Culture: Museums

We included Arts and Culture departments because <u>qualitative studies</u> from abroad have shown that engagement in the arts can promote active citizenship, increase self-esteem, and strengthen community ties. Some research has also shown that arts education can assist in developing certain social, emotional, and cognitive skills that reduce the likelihood of an individual committing a crime. As documented in their 2016 report, the <u>Urban Institute</u> believes there is value in understanding the impact of the arts at the population level. In 2019, a large-scale <u>randomized controlled trial</u> found that the implementation of an arts education curriculum reduced school disciplinary infractions by 3.6%, a pertinent finding considering the relevance of the <u>school to prison pipeline</u> and its deleterious health and financial outcomes on BIPOC communities. That being said, appropriations to education departments will not be included in our CRI analysis as a whole for reasons clarified later on in this document.

Regarding the inclusion of public defense: given that the demand for public defenders and court-appointed attorneys is a direct outcome of carceral investments into courts and law enforcement, we have included their expenditures in the carceral category.

Exclusion Criteria:

Any department in consideration for exclusion from our analysis fulfills one of two criteria: either the department is irrelevant because its functions do not significantly mediate any of the systems included in our analysis, or because the department fulfills responsibilities within both carceral or health-and-support systems as characterized in our inclusion criteria.

Fire Department

Research has yet to show any correlation between fire departments and criminal justice outcomes. We reckon that the work of fire departments is usually conducted in isolated cases without having a continuous influence on population well-being or carceral outcomes. This meets the first of the exclusion criteria.

Child Protective Services

We chose to exclude Child Protective Services divisions and related programs supporting juvenile detention initiatives. Often, these were found within HHS departments. In theory, these services should assist in preventing police contact. However, child and family services are <u>widely criticized for their service modalities</u>, which often have carceral and racist foundations. This includes outdated "War on Drugs" policies which are used to separate families and route children into <u>foster care</u>, predisposing them to future involvement in crime.

Medical Examiner's & Coroner's Offices

These offices provide carceral functions through cause and manner of death determinations and forensic examinations. They may also benefit the community by conducting public health surveillance and informing epidemiological studies. Disaggregating spending for these agencies was reserved for possible future research.

Convention Centers & Stadiums

These expenditures are typically multi-year infrastructure investments which may serve purposes apart from community initiatives and sport events; it is difficult to determine how to split up this

amount given that we are analyzing budgets by fiscal year. Additionally, research has not determined whether the tourist-geared or high-level sports events held in these facilities have a positive effect on resident well-being or criminal justice outcomes. Hence, these irrelevancies merit exclusion.

Building Code Enforcement

In order to keep housing safe and up to code, violations are enforced by a code officer and assessed within a city held court. Therefore, Building Code Enforcement falls between support (housing) and carceral (officer, courts) and meets exclusion criteria.

City Court Clerk

Primarily functions to complete paperwork pertaining to issues and efforts that do not fall into either the carceral bucket or the health and support buckets. Therefore, it does not meet the inclusion criteria.

Zoning Departments

These departments typically concentrate on zoning for public buildings, urban infrastructure, road building, and large construction projects. Research does demonstrate that zoning laws may be correlated with <u>reductions in crime rates</u>, <u>income segregation</u>, <u>racial inequality</u>, and limitations in accessing methadone for people with opioid use disorder. However, it is unclear as to what degree the amount of spending within the zoning department is relevant to the observed correlation. This ambiguity is consistent with the first exclusion criterion.

Historic Preservation

Offices relating to historic preservation may be rooted fully or partially in gentrification, which may <u>increase levels of policing</u>. On the other hand, these offices contribute to the structural resilience of culturally-relevant architecture, so we could also conceptualize these expenditures as being relevant to Arts & Culture. This contradiction between policing and culture fulfils the second exclusion criterion.

Zoos and Aquariums

As for their potential influence on health and well-being, we could propose that Zoos and Aquariums fall within the community and civic engagement category. However, we did not include them because we have yet to discover research that correlates these facilities with criminal justice outcomes. Therefore, they do not meet the first exclusion criterion.

City Council

This was not included in our analysis as a City Council may influence carceral, health, and supportive initiatives. Therefore, it meets exclusion criteria.

Victim Services

Victim Services provide an array of services to innocent victims of crime, their families, and witnesses. We recognize that many of these services could be considered human services. However, since these departments are also related to courts and prosecutions, and they may facilitate advocacy for longer sentences, denial of probation and parole, and post-release surveillance, we have decided they meet exclusion criteria.

Emergency Management Department

For the local offices that coordinate responses to disasters, research does not demonstrate a significant association between spending on local emergency management departments per se and criminal justice or population health outcomes. While it is true that disasters can have enormous impacts on crime, criminal justice, public health, and support systems, the funding that flows in response tends to come from non-municipal sources. Additionally, events mediated by this department are exceptional and rare among the majority of our sample.

Temporarily Excluded Spending:

Several departments were excluded from our crude analysis due to limited research resources or to a relatively thin existing evidence base. We categorize them separately here to note that they may be significant sources of spending that should shift CRI values meaningfully. In future phases of this initiative, we will analyze the budgets of the following types of departmental funding to disaggregate carceral and health/support spending, and we will update CRI values accordingly.

Education & Library

Broadly, educational attainment can be <u>inversely associated</u> with the likelihood of a person's criminal justice involvement. However, the positive association between educational status and criminal justice involvement unfolds over many years and under the influence of several confounding variables. Furthermore, the relationship between education and carceral systems is blurred by the use of substantial portions of education dollars in many jurisdictions to support carceral expenditures such

as <u>school resource officers</u>. With regard to libraries, though some may facilitate community engagement through special programing, during the initial phase of this research, it was not possible to isolate these costs.

Public Works & Sanitation

Public Works and Sanitation walk a fine line between being classified as a public health division and that of city infrastructure. Moreover, federal standards protect certain aspects of public works which would most associate with health, such as water, meaning that cities may have limited spending discretion. There is no evidence base as yet indicating whether changes in spending on either Public Works or Sanitation directly affect criminal justice involvement.

Environmental Funds

Environmental protection was temporarily excluded due to challenges in identifying what was being funded. Environmental and climate protection spending clearly improves public health and may reduce the <u>fear of crime</u>. Additionally, interventions which seek to reduce <u>air pollution</u>, the presence of <u>heat islands</u>, and <u>lead pollution</u> could reduce crime and violence. However, outside of unusual jurisdictions like the District of Columbia, relatively little environmental spending comes from the municipal level. In addition, it is challenging to disaggregate which agency is responsible for related initiatives, and it is <u>difficult to distinguish</u> the direct impact of environmental design from the beneficial effects of the organizational development surrounding such environmental efforts.

Fluctuating Designations:

The following departments, though shared in name among various cities, often carry out different functions. This section documents our reasoning as to why we may choose to exclude or include these departments.

City Clerk

In some cases, the City Clerk may perform election-related duties. In this case, we would categorize this specific expenditure under the category of civic engagement. All other expenses are irrelevant.

Communications Department

If the budget provided sub-department expenditures, our researchers would identify the target audience of each sub-department when deciding what to include or exclude. Functions relating to external communications (e.g. video services, web services, constituent services, marketing and creative services) can serve the purposes of community and/or civic engagement and are thus categorized as such. If we were not able to parse out these appropriations due to the limitations of the budget document, then the entire department was categorized as irrelevant.

Office of the Inspector General

The office may facilitate programs relating to both criminal investigations (carceral) and evaluation of HHS programs (health). If the allocation of funds towards each program was specified, we categorized them appropriately. If the departmental appropriations were not broken down in the budget document, then the entire department was excluded.

City Attorney; Law Department

Though many departments share the same name of City Attorney, their functions vary. Allocations towards criminal prosecution were included, whereas allocations devoted to agencies that provide legal counsel to the city government were excluded.

Planning and Development

When possible, programs regarding housing and community development were categorized as support-related appropriations. However, programs relating to land-use regulations, zoning, and transportation were excluded. If the budget document did not provide a sub-department level breakdown of appropriations, the entire department was excluded.

Neighborhood Services

Appropriations pertaining to 311 programs and housing services are to be included under the support bucket. Programs such as neighborhood crime watch and code enforcement fall between both carceral and support buckets, and so we did not include these appropriations.

Works Cited:

- Anderson, J., MacDonald, J., Bluthenthal, R., & Ashwood, J. (2013). Reducing crime by shaping the built environment with zoning: An empirical study of Los Angeles. University of Pennsylvania Law Review, 161(3), 699-756. http://www.jstor.org/stable/23527820
- Beck, B. (2020). Policing Gentrification: Stops and Low-Level Arrests during Demographic Change and Real Estate Reinvestment. City & Community, 19, 245-272. https://doi.org/10.1111/cico.12473
- Branas, C. C., South, E., Kondo, M. C., Hohl, B. C., Bourgois, P., Wiebe, D. J., & MacDonald, J. M. (2018). Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear. Proceedings of the National Academy of Sciences, 115(12), 2946-2951. https://doi.org/10.1073/pnas.1718503115
- Courtemanche, C., Marton, J., Ukert, B., Yelowitz, A., & Zapata, D. (2017). (rep.).

 Early Effects of the Affordable Care Act on Health Care Access, Risky Health
 Behaviors, and Self-Assessed Health (Ser. Discussion Paper Series, pp. 1-74).
 Bonn, Germany: IZA.
- Crawford-Roberts, A., Shadravan, S., Tsai, J., Barcelo, N. E., Gips, A., Mensah, M., Roxas, N., Kung, A., Darby, A., Misa, N., Morton, I., & Shen, A. (2020, June 6). George Floyd's Autopsy and the Structural Gaslighting of America. Scientific American Blog Network. https://blogs.scientificamerican.com/voices/george-floyds-autopsy-and-the-structural-gaslighting-of-america.
- Davis, J. M. V., & Heller, S. (2017). Rethinking the Benefits of Youth Employment Programs: The Heterogeneous Effects of Summer Jobs. https://doi.org/10.3386/w23443
- Edmark, K. (2005). Unemployment and Crime: Is There a Connection?

 Scandinavian Journal of Economics, 107(2), 353-373. https://doi.org/10.1111/j.1467-9442.2005.00412.x
- Fischer, S. N., Shinn, M., Shrout, P., & Tsemberis, S. (2008). Homelessness, Mental Illness, and Criminal Activity: Examining Patterns Over Time. American Journal of Community Psychology, 42(3-4), 251–265. https://doi.org/10.1007/s10464-008-9210-z
- Gilmore, A. (2014). (rep.). Raising our quality of life: The importance of investment in arts and culture. Retrieved from https://www.research.manchester.ac.uk/portal/files/33173386/FULL_TEXT.PDF

- Hanzlick, R., & Parrish, R. G. (1996). The Role of Medical Examiners and Coroners in Public Health Surveillance and Epidemiologic Research. Annual Review of Public Health, 17(1), 383-409. https://doi.org/10.1146/annurev.pu.17.050196.002123
- Heilmann, Kilian & Kahn, Matthew E. & Tang, Cheng Keat, 2021. The urban crime and heat gradient in high and low poverty areas, Journal of Public Economics, Elsevier, vol. 197(C).
- Heitzeg, N. A. (2009). Education or Incarceration: Zero Tolerance Policies and the School to Prison Pipeline. Forum on Public Policy Online, 2019(2), 1–21. https://files.eric.ed.gov/fulltext/EJ870076.pdf.
- Homer, E. M., & Fisher, B. W. (2019). Police in schools and student arrest rates across the United States: Examining differences by race, ethnicity, and gender. Journal of School Violence, 19(2), 192–204. https://doi.org/10.1080/15388220.2019.1604 377
- Justice Programs, & Washnis, G. S., CITIZEN INVOLVEMENT IN CRIME PREVENTION (1976).
- Jesse Burkhardt, Jude Bayham, Ander Wilson, Ellison Carter, Jesse D. Berman, Katelyn O'Dell, Bonne Ford, Emily V. Fischer, Jeffrey R. Pierce. The effect of pollution on crime: Evidence from data on particulate matter and ozone. Journal of Environmental Economics and Management, 2019; 102267 DOI: 10.1016/j.jeem.2019.102267
- Kisida, B., & Bowen, D. H. (2019). (rep.). New evidence of the benefits of arts education. Brookings. Retrieved from https://www.brookings.edu/blog/brown-center-chalkboard/2019/02/12/new-evidence-of-the-benefits-of-arts-education/
- Klinenberg, E. (2018). Palaces for the People. Random House US.
- Lorenc, T., Petticrew, M., Whitehead, M., Neary, D., Clayton, S., Wright, K., Thomson, H., Cummins, S., Sowden, A., & Renton, A. (2013). Environmental interventions to reduce fear of crime: systematic review of effectiveness. Systematic reviews, 2, 30. https://doi.org/10.1186/2046-4053-2-30
- MacCratic, R. M. (2012). Criminal Interventions With Homelessness: Risk Factors For Incarceration Among The Service Seeking Homeless In San Diego (thesis). San Diego University, San Diego.
- Roberts, D. (2020, June 16). Abolishing Policing Also Means Abolishing Family Regulation. The Imprint. https://imprintnews.org/child-welfare-2/abolishing-policing-also-means-abolishing-family-regulation/44480.

- Rolnick, A., & Grunewald, R. (2011, June 9). Early Childhood Development: Economic Development with a High Public Return. https://www.help.senate.gov/imo/media/doc/Rolnick.pdf
- Ross, C. (2016). (rep.). Exploring the Ways Arts and Culture Intersect with Public Safety. Urban Institute. Retrieved from http://www.urban.org/sites/default/files/publication/79271/2000725-Examining-the-Ways-Arts-and-Culture-Intersect-with-Public-Safety.pdf
- Rothwell, J. T., & Massey, D. S. (2010). Density zoning and class segregation in U.S. metropolitan areas. Social science quarterly, 91(5), 1123-1143. https://doi.org/10.1111/j.1540-6237.2010.00724.x
- Santo, T., Clark, B., Hickman, M., Grebely, J., Campbell, G., Sordo, L., Chen, A., Tran, L. T., Bharat, C., Padmanathan, P., Cousins, G., Dupouy, J., Kelty, E., Muga, R., Nosyk, B., Min, J., Pavarin, R., Farrell, M., & Degenhardt, L. (2021). Association of Opioid Agonist Treatment With All-Cause Mortality and Specific Causes of Death Among People With Opioid Dependence. JAMA Psychiatry. https://doi.org/10.1001/jamapsychiatry.2021.0976
- Sharkey, P., Torrats-Espinosa, G., & Takyar, D. (2017). Community and the Crime Decline: The Causal Effect of Local Nonprofits on Violent Crime. American Sociological Review, 82(6), 1214-1240. https://doi.org/10.1177/0003122417736289
- Taylor, R. B. & Harrell, A. V. (1996). Physical Environment and Crime. National Institute of Justice. https://www.ojp.gov/pdffiles/physenv.pdf
- Winkelman, T. N., Kieffer, E. C., Goold, S. D., Morenoff, J. D., Cross, K., & Ayanian, J. Z. (2016). Health Insurance Trends and Access to Behavioral Healthcare Among Justice-Involved Individuals—United States, 2008–2014. Journal of General Internal Medicine, 31(12), 1523–1529. https://doi.org/10.1007/s11606-016-3845-5
- Yang, J., McCuish, E., & Corrado, R. (2020). Is the Foster Care-Crime Relationship a Consequence of Exposure? Examining Potential Moderating Factors. Youth Violence and Juvenile Justice, 19(1), 94-112. https://doi.org/10.1177/1541204020939643