

## **Social Science at Sentencing: An Annotated Bibliography**

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Recent research in criminology and other related social and behavioral sciences provides empirical evidence relevant to the purposes of sentencing, and the court's obligation to consider "the nature and circumstances of the offense and the history and characteristics" of your client when imposing a sentence. This publication identifies resources that may be helpful in plea negotiations and sentencing advocacy. Providing the court with social science and statistical data strengthens your arguments and helps undercut incorrect assumptions about (a) the sentencing guidelines; (b) how to best satisfy the purposes of sentencing, and (c) the relevance and significance of individual characteristics.

This publication is designed to be updated on a regular basis as new relevant research becomes available. If you come across a relevant resource, please let us know so we can add it and share it with the Defender community.<sup>1</sup>

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<sup>1</sup> If you have a resource to add to this list, please send us an email with the cite, a brief explanation of the relevance of the research to sentencing advocacy, and, if possible, a link or copy of the resource. You can reach us at [denisebarrett@gmail.com](mailto:denisebarrett@gmail.com) or [Laura\\_Mate@fd.org](mailto:Laura_Mate@fd.org). We are grateful for your assistance with this project.

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## I. Deterrence

### A. General Deterrence

1. "The certainty of being caught is a vastly more powerful deterrent than the punishment." National Institute of Justice, *Five Things About Deterrence* (Sept. 2014), <http://www.nij.gov/five-things/pages/deterrence.aspx>. Flyer available here: <https://ncjrs.gov/pdffiles1/nij/247350.pdf>.
2. "Sending an offender to prison isn't a very effective way to deter crime. Prisons are good for punishing criminals and keeping them off the street, but prison sentences are unlikely to deter future crimes. Prisons actually may have the opposite effect." *Id.*
3. "[T]here is little evidence that increases in the length of already long prison sentence yield general deterrent effects that are sufficiently large to justify their social and economic costs." Daniel S. Nagin, *Deterrence in the Twenty-First Century*, 42 Crime & Just. 199, 201 (2013).

4. “[L]engthy prison sentences cannot be justified on a deterrence-based, crime prevention basis.” *Id.* at 202.
5. “[E]vidence in support of the deterrent effect of various measures of the certainty of punishment is far more convincing and consistent than for the severity of punishment. . . . The evidence in support of certainty’s deterrent effect pertains almost exclusively to apprehension probability. Consequently, the conclusion that certainty, not severity, is the more effective deterrent is more precisely stated as *certainty of apprehension* and not the severity of the legal consequence ensuing from apprehension is the more effective deterrent. . . . Thus, this revised conclusion about the deterrent effect of punishment certainly should not be construed as implying that policies mandating severe legal consequences have been demonstrated to achieve deterrent effects.” *Id.* at 201-202.
6. “[T]here is generally no significant association between perceptions of punishment levels and the actual levels of punishment that the criminal justice system achieves. This in turn implies that increases in punishment levels do not routinely reduce crime through general deterrence mechanisms, because the fundamental link between actual punishment levels and perceptions of punishment levels appears to be weak to nonexistent. . . . There may be some baseline level of deterrent effect generated by punishment-generating activities of the criminal justice system, but this level is apparently one that does not consistently increase with punishment levels or diminish with decreased punishment levels.” Gary Kleck & J.C. Barnes, *Deterrence and Macro-Level Perceptions of Punishment Risks: Is There a “Collective Wisdom”?*, 59 *Crime & Delinq.* 1006, 1031-33 (2013).
7. “Empirical studies have shown that longer sentences have minimal or no benefit on whether offenders or potential offenders commit crimes. The National Academy of Sciences (NAS) concluded that ‘insufficient evidence exists to justify predicating policy choices on the general assumption that harsher punishments yield measurable deterrent effects.’ NAS pointed out that all leading surveys of the deterrence research have reached the same conclusion: that ‘potential offenders may not accurately perceive, and may vastly underestimate, those risks and punishments’ associated with committing a crime. Some researchers suggest that incarceration has even less of a deterrent effect for violent crimes. Unlike property crimes, which offer a financial incentive and can replace or supplement legal income, violent crimes are often crimes of passion, not premeditated. Therefore, severe terms of incarceration may not affect an offender’s immediate decision to engage in criminal behavior.” Brennan Center for Justice, *What Caused the Crime Decline?* 26 (Feb. 2015), <https://www.brennancenter.org/publication/what-caused-crime-decline>.
8. Economists and social scientists “now agree[] that the effects of certainty and immediacy are much more important than the effects of severity. A substantial literature shows, however, that particularly police deployments can reduce the incidence of crime. . . . sentencing laws and practices should be substantially recast to reduce the severity of punishment and with that the sizes of the prison population and public spending on imprisonment.” Tonry, Michael, *An Honest Politician's Guide to Deterrence: Certainty*,

*Severity, Celerity, and Parsimony* (June 7, 2017). Deterrence, Choice, and Crime: Contemporary Perspectives (Daniel S. Nagin, Francis Cullen & Cheryl Lero Jonson, eds., New York: Routledge, 2018 Forthcoming). Available at SSRN: <https://ssrn.com/abstract=2981749>

## B. Specific Deterrence

1. "[T]here is little evidence of a specific deterrent effect arising from the experience of imprisonment compared with the experience of noncustodial sanctions such as probation. Instead, the evidence suggests that reoffending is either unaffected or increased." Daniel S. Nagin, *Deterrence in the Twenty-First Century*, 42 *Crime & Just.* 199, 201 (2013).
2. "Research suggests that incarceration does little to change a person's behavior. National studies (see, e.g., Durose, Cooper, & Snyder, 2014) indicate that 68% of state prisoners are rearrested within 3 years of their release, and 77% are rearrested within 5 years. Of those, nearly half — 45% — are reincarcerated. These high rates of rearrest and reincarceration translate to more victims, racial and ethnic disparities, an escalation of correctional and justice system costs, and a cycle of challenges for those who enter the justice system and struggle to stay out." National Institute of Corrections, *Myths and Facts: Why Incarceration is Not the Best Way to Keep Communities Safe 2* (2016), <https://s3.amazonaws.com/static.nicic.gov/Library/032698.pdf>.
3. "[T]he available evidence points toward a null or a slightly criminogenic effect of imprisonment but has rarely found support for a clear specific deterrent effect." Ellen Raaijmakers et al., *Exploring the Relationship Between Subjectively Experienced Severity of Imprisonment and Recidivism: A Neglected Element in Testing Deterrence Theory*, 54 *J. of Research in Crime and Delinquency* 1, 4 (2017).
4. Cognitive behavioral skill-building is more effective in reducing future criminal behavior than punishment even among persons at high-risk of reoffending. Patricia Clark, Office of Justice Programs, National Institute of Justice, *Preventing Future Crime with Cognitive Behavioral Therapy*, 265 *Nat'l Instit. of Just. J* 22 (2010).
5. "[P]robation and intensive probation are more effective than jail or prison, respectively, in reducing offending among first-time felons." Daniel Mears & Joshua Cochran, *Progressively Tougher Sanctioning and Recidivism: Assessing the Effects of Different Types of Sanctions*, *J. of Research in Crime & Delinquency* 24 (2017).
6. More severe sanctions for those who committed a second crime "appear to be more criminogenic. For example, among individuals whose first felony led to imprisonment, recidivism was lower when, in response to a second felony, they were sentenced to less severe sanctions . . . regular and intensive probation typically were associated with lower rates of recidivism." *Id.* at 33.

## C. Drug Problems

1. A comparison of publicly available data from law enforcement, correction and health agencies found "no statistically significant relationship between state drug offender

imprisonment rates and three measures of state drug problems: rates of illicit drug use, drug overdose deaths, and drug arrests.” PEW Charitable Trusts, Letter to the Honorable Chris Christie, *The Lack of a Relationship between Drug Imprisonment and Drug Problems* (June 19, 2017), <http://www.pewtrusts.org/~media/assets/2017/06/the-lack-of-a-relationship-between-drug-imprisonment-and-drug-problems.pdf>. See also PEW Charitable Trusts, *More Imprisonment Does not Reduce State Drug Problems* (Mar. 2018) (Data show no relationship between prison terms and drug misuse”), [http://www.pewtrusts.org/~media/assets/2018/03/pspp\\_more\\_imprisonment\\_does\\_not\\_reduce\\_state\\_drug\\_problems.pdf](http://www.pewtrusts.org/~media/assets/2018/03/pspp_more_imprisonment_does_not_reduce_state_drug_problems.pdf)

## II. Incapacitation

- A. “For several categories of offenders, an incapacitation strategy of crime prevention can misfire because most or all of those sent to prison are rapidly replaced in the criminal networks in which they participate. Street-level drug trafficking is the paradigm case. . . . Drug policy research has. . . shown consistently that arrested dealers are quickly replaced by new recruits. . . . Arrests and imprisonments of easily replaceable offenders create illicit ‘opportunities’ for others.” National Research Council, *The Growth of Incarceration in the United States: Exploring Causes and Consequences* 146 (Jeremy Travis et al. eds., 2014), [http://nap.edu/catalog.php?record\\_id=18613](http://nap.edu/catalog.php?record_id=18613). See also *Id.* at 88 (“Most drug policy analysts agree that ... imprisoning individual drug dealers seldom reduces the availability of drugs or the number of traffickers.”).
- B. “Unlike repeat violent offenders, whose incapacitation may protect the public from additional crimes by the offender, criminologists and law enforcement officials testifying before the Commission have noted that retail-level drug traffickers are readily replaced by new drug sellers so long as the demand for a drug remains high. Incapacitating a low-level drug seller prevents little, if any, drug selling; the crime is simply committed by someone else.” USSC, *Fifteen Years of Guidelines Sentencing: An Assessment of How Well the Federal Criminal Justice System is Achieving the Goals of Sentencing Reform* 131 (2004).

## III. Non-custodial Sentences

- A. “Community corrections has been shown to be effective in reducing future criminal activity by 10 to 30%.” National Institute of Corrections, *Myths and Facts: Why Incarceration is Not the Best Way to Keep Communities Safe* 6 (2016), <https://s3.amazonaws.com/static.nicic.gov/Library/032698.pdf>.
- B. A research study of convicted felons in Florida “found that across most comparisons, tougher sanctioning was consistently and positively associated with recidivism.” Joshua Cochran et al., *Assessing the Effectiveness of Correctional Sanctions*, 30 J. of Quant. Criminology 317, 342 (2013). The report concluded that “community sanctions, including jail, that provide access to the community and links to a variety of potential supports, may be more effective than prison in

reducing recidivism because they may better allow both for more punishment and for more rehabilitation. “ *Id.* at 343.

#### IV. Increased Rates of Incarceration and the Crime Decline

- A. “Incarceration has been declining in effectiveness as a crime control tactic since before 1980. Since 2000, the effect of increasing incarceration on the crime rate has been essentially zero. Increased incarceration accounted for approximately 6 percent of the reduction in property crime in the 1990s (this could vary statistically from 0 to 12 percent), and accounted for *less than 1 percent* of the decline in property crime this century. Increased incarceration has had no effect on the drop in violent crime in the past 24 years. In fact, large states such as California, Michigan, New Jersey, New York, and Texas have all reduced their prison populations while crime has continued to fall.” Brennan Center for Justice, *What Caused the Crime Decline?* 15 (Feb. 2015), <https://www.brennancenter.org/publication/what-caused-crime-decline>.
  1. “[I]ncreased incarceration had some effect on reducing crime since 1990 – however, far lower than previously thought and becoming almost zero in the 2000s. Other factors that played a role in the crime decline were increased numbers of police officers, deploying data-driven policing techniques such as CompStat, changes in income, decreased alcohol consumption, and an aging population. A review of past research indicated that consumer confidence and inflation also played a role.” *Id.* at 10.
- B. “[C]rime trends are complicated. Surely no one is complaining about the recent decline, but no one fully understands it either. One thing is becoming clear: Increased incarceration’s role was minimal.” Oliver Roeder, *The Prisoner’s Dilemma*, FiveThirtyEight (Feb. 12, 2015), <http://fivethirtyeight.com/features/the-imprisoners-dilemma>.
- C. “[I]t is no longer reasonable to even hypothesize that crime patterns can be explained in terms of punishment policies or imprisonment rates.” Michael Tonry, *Why Crime Rates Are Falling throughout the Western World* 53, 43 Crime & Justice, 2014, Minnesota Legal Studies Research Paper No. 14-41 (Oct. 2014), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2520500](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2520500).
- D. States that reduced their imprisonment rate between 2010 and 2015 saw a greater average decline in their crime rates (14 percent) than states that increased imprisonment during those years (8 percent average crime rate). Pew Charitable Trusts, *State Reforms Reverse Decades of Incarceration Growth* 9 (2017), [http://www.pewtrusts.org/~media/assets/2017/03/state\\_reforms\\_reverse\\_decades\\_of\\_incarceration\\_growth.pdf](http://www.pewtrusts.org/~media/assets/2017/03/state_reforms_reverse_decades_of_incarceration_growth.pdf).
- E. The federal system is out of step with most states; most states have worked to reduce reliance on incarceration. “[B]etween 2007 and 2013, many states made research-driven policy changes to control prison growth, reduce recidivism, and contain costs. While the federal imprisonment rate continued to rise during that period, the state rate declined.” Pew Charitable Trusts, *Growth in Federal Prison System Exceeds States’* 1 (Jan. 2015), <http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2015/01/growth-in-federal-prison-system-exceeds-states>.

- F. "The latest data, released Jan. 9 by the federal Bureau of Justice Statistics, show that trends in crime and imprisonment continue to be unrelated:
- Across the 45 states with crime declines from 2008-16, imprisonment rate changes ranged from a 35 percent decrease to a 14 percent increase.
  - 35 states cut crime and imprisonment rates simultaneously.
  - 21 states posted double-digit declines in both rates.
  - The average crime decline across the 10 states with the greatest declines in imprisonment was 19 percent, and across the 10 states with the largest imprisonment growth it was 11 percent." Pew Charitable Trusts, *National Prison Rate Continues to Decline Amid Sentencing, Re-Entry Reforms 1* (Jan. 2018), <http://www.pewtrusts.org/en/research-and-analysis/analysis/2018/01/16/national-prison-rate-continues-to-decline-amid-sentencing-re-entry-reforms>.
- G. [A] larger and much more powerful explanation" for the drop in crime rates is a "drop in interest rates and, in particular long-term interest rates." James Austin & Gregory Squires, *The "Startling" Link Between Low Interest Rates and Low Crime*, *The Crime Report* (Dec. 12, 2016), [http://www.jfa-associates.com/publications/CrimeReport/The%20Startling%20Link%20Between%20Low%20Interest%20Rates%20and%20Low%20Crime%20\\_%20The%20Crime%20Report.pdf](http://www.jfa-associates.com/publications/CrimeReport/The%20Startling%20Link%20Between%20Low%20Interest%20Rates%20and%20Low%20Crime%20_%20The%20Crime%20Report.pdf). "Job loss or the expectation of a long spell of unemployment can lead some people to abuse drugs and alcohol, commit theft, burglary, robbery or worse. Social scientists from various disciplines have long reported that when unemployment rates rise in a community a host of social problems are exacerbated." *Id.*

## V. Public Opinion on Sentences

- A. "The Guidelines and congressionally directed ranges are significantly harsher than community sentiment recommends." Judge James S. Gwin, *Juror Sentiment on Just Punishment: Do the Federal Sentencing Guidelines Reflect Community Values?*, 4 *Harv. L. & Pol'y Rev.* 173, 195 (2010).
- B. "A strong majority, even among victims, believes prison is not always the best response to non-violent crime." Public Opinion Strategies & The Mellman Group, *Public Opinion on Sentencing and Corrections Policy in America 2* (2012), [http://www.pewstates.org/uploadedFiles/PCS\\_Assets/2012/PEW\\_NationalSurveyResearchPaper\\_FINAL.pdf](http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/PEW_NationalSurveyResearchPaper_FINAL.pdf).
- C. "A survey of Iowa burglary victims found 81 percent wanted restitution, 76 percent wanted community service, and only 7 percent wanted a prisons sentence of a year or more." Marc Levin, *Remember and Empower Victims of Crime*, *The Hill* (Apr. 11, 2014), <http://thehill.com/blogs/congress-blog/judicial/203241-remember-and-empower-victims-of-crime>, likely referencing (though not citing), Gene M. Lutz et al., Iowa Crime Research Initiative, *The 1997 Iowa Adult Crime Victimization Survey* (Apr. 1998),

[http://www.csbs.uni.edu/dept/csbr/pdf/CRI\\_Crime\\_Victimization\\_Survey-1998.pdf](http://www.csbs.uni.edu/dept/csbr/pdf/CRI_Crime_Victimization_Survey-1998.pdf). Infographic available at <https://magic.piktochart.com/output/1635736-national-crime-victims-rights-we#/pikto-block-0>.

- D. "A national survey by the Pew Research Center finds that 67% of Americans say that the government should focus more on providing treatment for those who use illegal drugs such as heroin and cocaine. Just 26% think the government's focus should be on prosecuting users of such hard drugs." Pew Research Center, *America's New Drug Policy Landscape* 1 (Apr. 2014), <http://www.people-press.org/files/legacy-pdf/04-02-14%20Drug%20Policy%20Release.pdf>.
- E. Conservative and progressive organizations have joined together in support of criminal justice reform aimed at reducing the "overcriminalization" and "overincarceration" problems in the United States. The Coalition for Public Safety: *Advancing Criminal Justice Reform*, <http://www.coalitionforpublicsafety.org>.
- F. "Crime victims do not want new victims and support rehabilitation, perhaps even more so than the general public." National Institute of Corrections, *Myths and Facts: Why Incarceration is Not the Best Way to Keep Communities Safe* 8 (2016), <https://s3.amazonaws.com/static.nicic.gov/Library/032698.pdf>.
- G. "A majority of the American public favors alternatives to incarceration. Eighty-seven percent of respondents in one national survey indicated they would be more likely to support alternatives to incarceration for non-violent justice-involved individuals (40% when it comes to a violent crime) if research consistently showed there are ways other than incarceration to reduce the likelihood that they will commit new crimes (National Institute of Corrections [NIC], n.d.). A review of more than 50 public opinion research studies conducted since 2000 demonstrates growing and broad support for alternatives to incarceration, rehabilitation, and treatment (Opportunity Agenda, 2014). Eighty-four percent of respondents from one study support alternatives to prison (such as drug treatment, community service, or probation) for nonviolent offenses (Lake, Gotoff, & Pultorak, 2013)." National Institute of Corrections, *Myths and Facts: Why Incarceration is Not the Best Way to Keep Communities Safe* 8 (2016), <https://s3.amazonaws.com/static.nicic.gov/Library/032698.pdf>.
- H. "Voters Across the Political Spectrum Strongly Support Criminal Justice Reform." Sixty-nine percent of persons responding to bipartisan polling supported the view that "[t]here are more effective, less expensive alternatives to prison for nonviolent offenders, and expanding those alternatives is the best way to reduce the crime rate." Seventy-eight percent found it acceptable that "instead of mandatory minimums, judges have the flexibility to determine sentences based on the facts of each case." Pew Charitable Trusts, *State Reforms Reverse Decades of Incarceration Growth* 11 (2017). [http://www.pewtrusts.org/~media/assets/2017/03/state\\_reforms\\_reverse\\_decades\\_of\\_incarceration\\_growth.pdf](http://www.pewtrusts.org/~media/assets/2017/03/state_reforms_reverse_decades_of_incarceration_growth.pdf).
- I. "The most significant finding [of a Robina Institute study] is that in the eyes of the public, older prior convictions carry less weight than more recent priors: the public was less punitive when

the prior crime was older. In addition, there was substantial public support for look-back limits on counting prior convictions. Two-thirds of respondents were in favour of a policy that restricted judges from considering old offenses, and of those, three quarters believed the time limit should be set at ten years or less.” Julian Roberts, *Public Attitudes Regarding Look-Back-Limits: Findings from New Robina Institute Research*, <https://robinainstitute.umn.edu/news-views/public-attitudes-regarding-look-back-limits-findings-new-robinainstitute-research>.

- J. “Perhaps to the surprise of some, victims overwhelmingly prefer criminal justice approaches that prioritize rehabilitation over punishment and strongly prefer investments in crime prevention and treatment to more spending on prisons and jails.” Alliance for Safety and Justice, *Crime Survivors Speak: The First Ever National Survey of Victim’s Views on Safety and Justice 4* (2016), <https://www.allianceforsafetyandjustice.org/wp-content/uploads/documents/Crime%20Survivors%20Speak%20Report.pdf>.
  1. “By a 2 to 1 margin, victims prefer that the criminal justice system focus more on rehabilitating people who commit crimes rather than punishing them.” *Id.* at 5.
  2. “6 in 10 victims prefer shorter prison sentences and more spending on prevention and rehabilitation to prison sentences that keep people incarcerated for as long as possible.” *Id.*
  3. “By a margin of 4 to 1, victims prefer increased investments in drug treatment over more investments in prisons and jails.” *Id.*
  4. “By a margin of 2 to 1, victims prefer increased investments in community supervision, such as probation and parole, over more investments in prisons and jails.” *Id.*
  5. “By a margin of nearly 3 to 1, victims believe that prison makes people more likely to commit crimes than to rehabilitate them.” *Id.*
  6. “By a margin of 7 to 1, victims prefer increased investments in mental health treatment over more investments in prisons and jails.” *Id.*
  7. “By a margin of 10 to 1, victims prefer increased investments in job creation over more investments in prisons and jails.” *Id.*

## VI. Collateral Consequences

### A. Resources

1. The ABA collected information about the collateral consequences of a criminal conviction and created an interactive tool which can be searched and sorted by categories and keywords: The National Inventory of the Collateral Consequences of Conviction, <http://www.abacollateralconsequences.org>. “The Coalition will work across the political spectrum to pursue a comprehensive set of federal, state, and local criminal justice reforms to reduce our jail and prison populations and associated costs; end the systemic problems of overcriminalization and overincarceration — particularly of low-income communities and communities of color; ensure swift and fair outcomes for both the accused and the victim;

and make communities safe by reducing recidivism and breaking down barriers faced by those returning home after detention or incarceration.” *Id.*

#### B. Effects of Mass Incarceration

1. “It is well established that the detrimental effects of incarceration extend into many areas of social life (Wakefield and Uggen 2010). Incarceration limits future employment prospects and earnings (Western and Pettit 2005; Western 2006; Pettit 2012), blocks political participation (Manza and Uggen 2006), and can lead to physical and mental health issues for former offenders (Schnittker, Massoglia, and Uggen 2011). These far-reaching effects have led some to characterize incarceration as a criminal credential or absorbing status that results in continuing disadvantage for former prisoners (Pager 2003, 2007). The consequences of incarceration spread beyond the formerly incarcerated as well. Incarceration increases material hardship and familial stress, exacerbates marital instability by straining family ties, and is associated with a variety of adverse outcomes for children (Wildeman and Muller 2012).” Bryan Sykes & Michelle Maroto, *A Wealth of Inequalities: Mass Incarceration, Employment, and Racial Disparities in U.S. Household Wealth*, 1996 to 2011, 2 Russell Sage Foundation J. of Soc. Sciences 129 (2016), <http://www.rsfjournal.org/doi/full/10.7758/RSF.2016.2.6.07>.
2. Black households with an incarcerated member experience a sharper decline in wealth than white households. *Id.* at 8.

#### C. Impact of Incarceration on Families

Families are significantly impacted by incarceration. Among the findings of an extensive study are: 1) people with convictions are saddled with copious fees, fines, and debt at the same time that their economic opportunities are diminished, resulting in a lack of economic stability and mobility; 2) many families lose income when a family member is removed from household wage earning and struggle to meet basic needs while paying fees, supporting their loved one financially, and bearing the costs of keeping in touch; 3) women bear the brunt of the costs—both financial and emotional—of their loved one’s incarceration; 4) families incur large sums of debt due to their experience with incarceration; 5) despite their often-limited resources, families are the primary resource for housing, employment, and health needs of their formerly incarcerated loved ones, filling the gaps left by diminishing budgets for reentry services; 6) incarceration damages familial relationships and stability by separating people from their support systems, disrupting continuity of families, and causing lifelong health impacts that impede families from thriving; 7) the stigma, isolation, and trauma associated with incarceration have direct impacts across families and communities. Saneta deVuno-powell et al., *Who Pays, The True Cost of Incarceration on Families*. Oakland, CA: Ella Baker Center, Forward Together, Research Action Design (2015), <http://whopaysreport.org/wp-content/uploads/2015/09/Who-Pays-FINAL.pdf>.

## VII. Monetary Penalties

- A. “Excessive fees and fines needlessly enmesh poor people in the criminal justice system by spawning arrests, court proceedings, periods of incarceration, and other modes of supervision for those who lack the ability to pay. Criminal justice debt also contributes to mass incarceration by destabilizing people living at the economic margins and by impeding reentry of formerly incarcerated people who face impossible economic burdens, leading to cycles of poverty and imprisonment . . . . And because race intersects with class, with Black and Latino families disproportionately facing poverty, fees and fines that impose special hardships on impoverished individuals and communities will reinforce racially unequal outcomes.” Criminal Justice Policy Program, Harvard Law School, *Confronting Criminal Justice Debt: A Guide for Policy Reform* 1 (2016).
- B. “Criminal justice debt, and the elaborate enforcement machinery often used to collect it, can have spiraling consequences for the most economically marginalized individuals. In some instances, enforcement of these obligations has the paradoxical effect of constraining an individual’s ability to earn a living, thus undercutting the person’s ability to pay court costs while ensnaring her and her family in a cycle of poverty and indebtedness.” *Id.* at 5.

## VIII. Age

- A. “[T]here is a growing recognition that people may not gain full reasoning skills and abilities until they reach age 25 on average.” USSC, Youthful Offenders in the Federal System, Fiscal Years 2010 to 2015 (2017), [https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2017/20170525\\_youthful-offenders.pdf](https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2017/20170525_youthful-offenders.pdf).
- B. The “Age-Crime Curve”: “It is well established that antisocial and criminal activity increases during adolescence, peaks around age 17 (with the peak somewhat earlier for property than for violent crime), and declines as individuals enter adulthood.” Gary Sweeten et al., *Age and the Explanation of Crime Revisited*, 42 J. Youth & Adolescence 921 (2013).
- C. “Multiple studies show that the vast majority of adolescents who commit anti-social or criminal acts desist from such activity as they mature into adulthood and that only a small percentage—between five percent and ten percent, according to most studies—become chronic offenders.” USSC, *Report of the Tribal Issues Advisory Group* 30 (2016), [http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2016/20160606\\_TIAG-Report.pdf](http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2016/20160606_TIAG-Report.pdf).
- D. The “age-crime curve” applies across offense type. See Melissa Kearney et al., The Hamilton Project, *Ten Economic Facts about Crime and Incarceration in the United States* 6 (2014) (“55 percent of offenders committing crimes against persons (such as assault and sex offenses) were ages eleven to thirty. For crimes against property (such as larceny-theft and vandalism) and crimes against society (including drug offenses and weapon law violations), 63 percent and 66 percent of offenders, respectively, were individuals in the eleven-to-thirty age group.”0), [http://www.brookings.edu/~media/research/files/papers/2014/05/01%20crime%20facts/v8\\_t hp\\_10crimefacts.pdf](http://www.brookings.edu/~media/research/files/papers/2014/05/01%20crime%20facts/v8_t hp_10crimefacts.pdf).

- E. Sexual criminal behavior declines with age. "Among male sex offenders, decreased rates of sexual offending may be a result of reduced sexual drive related to age-related disease and decreases in testosterone (Barbaree & Blanchard, 2008; Hanson, 2002). As well, low self-control and impulsivity are related to risk of sexual and other types of criminal recidivism, and as individuals age, self-control increases and impulsivity decreases (Gottfredson & Hirschi, 1990; Hanson, 2002; Prentky, Knight, Lee, & Cerce, 1995)." Michael Lasher & Robert McGrath, *Desistance from Sexual and Other Violent Offending Among Child Sexual Abusers*, 20 *Crim. Justice & Behav.* 1 (2016).
- F. Recidivism rates decline with age. See USSC, *Measuring Recidivism: The Criminal History Computation of the Federal Sentencing Guidelines*, Ex. 9 (2004), [http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2004/200405\\_Recidivism\\_Criminal\\_History.pdf](http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2004/200405_Recidivism_Criminal_History.pdf).
- G. The Office of the Inspector General reviewed the criminal history of a random sample of aging inmates "who were released from BOP custody between FY 2006 and FY 2010" and found that only 15 percent "were re-arrested for new crimes within 3 years of their release," and that "the re-arrest of aging inmates within [the] sample generally declined with age. For example, 34 of 181 released inmates (19 percent) age 50 to 54 were re-arrested for a new crime compared to no re-arrests for released inmates age 70 and older." Office of Inspector General, U.S. Dept. of Justice, *The Impact of an Aging Inmate Population on the Federal Bureau of Prisons*, 39 (May 2015), <https://oig.justice.gov/reports/2015/e1505.pdf>.
- H. "Research shows that many interventions are effective, not all persons follow the trajectory of the aggregate age-crime curve, turning points divert individuals from paths of persistent offending, offenders can be responsive to changes in local life circumstances, and 'maturing out' is something that happens across the lifespan for different reasons at different ages. For public policy this is a promising story, as one need not simply wait for age to have its effect, but can pursue strategies to accelerate desistance from crime." Gary Sweeten et al., *Age and the Explanation of Crime Revisited*, 42 *J. Youth & Adolescence* 921 (2013).
- I. Factors that may help a person desist from crime include reduced exposure to antisocial peers, stability in home life, less victimization or witnessing violence, meaningful social relationships, community supervision, and improved impulse control. *Id.*
- J. A report by the Office of the Inspector General found that "aging inmates are more costly to incarcerate than their younger counterparts due to increased medical needs. [The OIG] further found that limited institution staff and inadequate staff training affect the BOP's ability to address the needs of aging inmates. The physical infrastructure of BOP institutions also limits the availability of appropriate housing for aging inmates. Further, the BOP does not provide programming opportunities designed specifically to meet the needs of aging inmates." Office of Inspector General, U.S. Dept. of Justice, *The Impact of an Aging Inmate Population on the Federal Bureau of Prisons* i (May 2015), <https://oig.justice.gov/reports/2015/e1505.pdf>.

1. “[A]ging inmates experience delays receiving medical care.” For example, at one institution the OIG found that “the average wait time for inmates, including aging inmates, to be seen by an outside medical specialist for cardiology, neurosurgery, pulmonology, and urology to be 114 days.” *Id.* at 18.
  2. “All inmates are expected to perform activities of daily living, including dressing, cleaning their cells, and moving around within the institution. However, staff told [the OIG] that aging inmates often cannot perform these activities on their own because of their medical conditions and staff is not responsible for ensuring inmates can accomplish these activities.” *Id.* at 19.
  3. “[W]hile Social Workers are uniquely qualified to address the release preparation needs of aging inmates, such as aftercare planning and ensuring continuity of medical care, the BOP, which employs over 39,000 people, has only 36 Social Workers nationwide for all of its institutions.” *Id.* at ii.
  4. “Institution staff is not adequately trained to identify the signs of aging, which mistakenly can be viewed as reflecting disciplinary issues rather than a need for medical or mental healthcare.” *Id.* at 22.
  5. “Lower bunks are limited due to the overcrowding of BOP institutions.” *Id.* at 24. “[T]he lack of lower bunks may prevent or delay aging inmates from receiving lower bunks.” *Id.*
  6. “Overcrowding also limits the BOP’s ability to move aging inmates to the institutions that best address their medical needs.” *Id.* at 25.
  7. “There are no programs, and limited activities, specifically designed or appropriate for aging inmates.” *Id.* at 31.
  8. “The BOP does not address the specific release needs of aging inmates.” *Id.* at 35.
- K. “The people who become elderly during incarceration face real stresses . . . . They’ve typically lost the vast majority of their social network . . . . Their biological age is typically much higher than their chronological age; they typically look a decade older. They are at greater risk for chronic impairment, for depression and for a sense of hopelessness or a sense of suicidal thinking.” Elderly inmates also have a heightened risk of mental illness. The Crime Report, Katti Gray, *America’s Aging – and Mentally At-Risk—Prisoners* (Nov. 2016), <http://www.chromesplash.com/corrections/americas-aging-and-at-risk-prisoners>.
1. “Older people in jail can have depression, cognitive impairment, a history of trauma and abuse. And on top of that, they may fear of being victimized because they are older, frailer. For example, we’ve much concern that if [inmates] cannot hear [prison guards’] instructions they may be written up for violating a rule.” *Id.*
- L. “New research documents significant disparities in the life spans of Americans depending on where they live. And those gaps appear to be widening, according to the research. In counties with the longest life spans, people tended to live about 87 years, while people in places with the shortest life spans typically made it to only about 67, the researchers found. The U.S. counties

with the longest life expectancy are communities that are well-off and more highly educated. Counties with the shortest life expectancy tend to have communities that are poorer and less educated.” Rob Stein, *Life Expectancy Can Vary By 20 Years Depending On Where You Live*, <http://www.npr.org/sections/health-shots/2017/05/08/527103885/life-expectancy-can-vary-by-20-years-depending-on-where-you-live> (the site provides an interactive map).

## IX. Child Abuse & Neglect

- A. “Child abuse and neglect appear to influence the course of development by altering many elements of biological, cognitive, psychosocial, and behavioral development; in other words, child abuse and neglect “get under the skin” to have a profound and often lasting impact on development. Brain development is affected, as is the ability to make decisions as carefully as one’s peers, or executive functioning; the ability to regulate physiology, behavior, and emotion is impaired; and the trajectory toward more problematic outcomes is impacted.” Institute of Medicine & National Research Council, *New Directions in Child Abuse and Neglect Research* 154 (Anne Peterson et al. eds., 2013), <http://www.iom.edu/Reports/2013/New-Directions-in-Child-Abuse-and-Neglect-Research.aspx>.
- B. “Psychologically maltreated youth exhibited equivalent or greater baseline levels of behavioral problems, symptoms, and disorders compared with physically or sexually abused youth on most indicators.” Psychological maltreatment is a “a repeated pattern of caregiver behavior or a serious incident that transmits to the child that s/he is worthless, flawed, unloved, unwanted, endangered, or only of value in meeting another’s needs.” Joseph Spinazzola, et al., *Unseen Wounds: The Contribution of Psychological Maltreatment to Child and Adolescent Mental Health and Risk Outcomes*, 6 Psych. Trauma: Theory, Research, Practice, and Policy 1, 19(2014), <http://www.apa.org/pubs/journals/releases/tra-a0037766.pdf>.
- C. “Psychological maltreatment has emerged as a significant predictor of a broad range of negative youth outcomes. Youth with histories of psychological maltreatment exhibit elevated rates of inattention, aggression, noncompliance, hyperactivity, conduct problems and delinquency (Caples & Barrera, 2006; Hart, Brassard, & Karlson, 1996; Manly, Kim, Rogosch, & Cicchetti, 2001). This type of abuse has also been linked to internalizing symptoms, including anxiety, depression, post-traumatic stress disorder, suicidality and low self-esteem (McGee, et al., 1997; Stone, 1993; Wolfe & McGee, 1994).” Joseph Spinazzola et al., *Unseen Wounds*, American Psychological Ass’n, <http://www.apa.org/monitor/2015/07-08/ce-corner.aspx>.
- D. “The more children are spanked, the more likely they are to defy their parents and to experience increased anti-social behavior, aggression, mental health problems and cognitive difficulties, according to a new meta-analysis of 50 years of research on spanking by experts at the University of Texas at Austin and the University of Michigan.” Science Daily, *Risks of Harm from Spanking Confirmed by Analysis of 5 Decades of Research*, <https://www.sciencedaily.com/releases/2016/04/160425143106.htm>. See also Elizabeth Gershoff & Andrew Grogan-Kaylor, *Spanking and Child Outcomes: Old Controversies and New Meta-Analyses*, 30 J. of Family Psychology (online publication April 7, 2016),

[https://www.researchgate.net/publication/299992592\\_Spanking\\_and\\_Child\\_Outcomes\\_Old\\_Contentroversies\\_and\\_New\\_Meta-Analyses](https://www.researchgate.net/publication/299992592_Spanking_and_Child_Outcomes_Old_Contentroversies_and_New_Meta-Analyses).

- E. Physical, sexual, and emotional abuse; risky influences from partners and peers; and poor educational attainment have been linked to arrests, convictions, and incarceration for adults. “Educational attainment predicted a higher likelihood of desistence relative to chronic offending.” Todd Herronkohl et al., *Effects of Child Maltreatment, Cumulative Victimization Experiences, and Proximal Life Stress on Adult Crime and Antisocial Behavior* (2017) ( study funded by U.S. DOJ), <https://www.ncjrs.gov/pdffiles1/nij/grants/250506.pdf>.

#### **X. Childhood Bullying**

- A. “[B]eing bullied [by peers] has similar and in some cases worse long-term adverse effects on young adults’ mental health than being maltreated [by adults].” Suzet Lereya, et al., *Adult Mental Health Consequences of Peer Bullying and Maltreatment in Childhood: Two Cohorts in Two Countries*, *Lancet Psychiatry* (Apr. 28, 2015), <http://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366%2815%2900165-0/fulltext>.
- B. “Individuals who were bullied in childhood were more likely to have poorer physical and psychological health and cognitive functioning at age 50.” Kings College London, *Impact of Childhood Bullying Still Evident After 40 Years*, *ScienceDaily* (Apr. 17, 2014), <http://www.sciencedaily.com/releases/2014/04/140417212510.htm>.

#### **XI. Childhood Trauma and Early Life Stress**

- A. Childhood trauma could be mistaken for ADHD. Rebecca Ruiz, *How Childhood Trauma Could Be Mistaken for ADHD*, *Atlantic* (July 7, 2014), <http://www.theatlantic.com/health/archive/2014/07/how-childhood-trauma-could-be-mistaken-for-adhd/373328/>. “Inattentive, hyperactive, and impulsive behavior may in fact mirror the effects of adversity, and many pediatricians, psychiatrists, and psychologists don’t know how – and don’t have time – to tell the difference.” *Id.*
- B. “[I]t is clear that adverse childhood experiences have a profound, proportionate, and long-lasting effect on emotional state, whether measured by depression or suicide attempts, by protective unconscious devices like somatization and dissociation, or by self-help attempts that are misguidedly addressed solely as long-term health risks.” Vincent J. Felitti & Robert F. Anda, *The Relationship of Adverse Childhood Experiences to Adult Medical Disease, Psychiatric Disorders, and Sexual Behavior: Implications for Healthcare 7*, in *The Hidden Epidemic: The Impact of Early Life Trauma* (2009) (R. Lanius and E. Vermetten, eds.), [http://www.acestudy.org/yahoo\\_site\\_admin/assets/docs/LaniusVermetten\\_FINAL\\_8-26-09.12892303.pdf](http://www.acestudy.org/yahoo_site_admin/assets/docs/LaniusVermetten_FINAL_8-26-09.12892303.pdf).
- C. “[C]hronic, toxic stress like poverty, neglect and physical abuse — can have lasting negative impacts. A team of researchers recently showed these kinds of stressors, experienced in early life, might be changing the parts of developing children’s brains responsible for learning, memory and the processing of stress and emotion.” University of Wisconsin-Madison, *Early Life*

*Stress Can Leave Lasting Impacts on the Brain*, ScienceDaily (June 27, 2014), <http://www.sciencedaily.com/releases/2014/06/140627133107.htm>.

- D. Childhood instability (e.g., stress, poor relationships with parents and nurturing adults, unstable routines and home environments, poor access to food, housing, education, health care, and other resources, lack of family and community support) negatively impacts childhood development and undermines outcomes. Gina Adams, et al., Urban Institute, *Stabilizing Children's Lives: Insights for Research and Action* (Dec. 5, 2016), [http://www.urban.org/sites/default/files/publication/86216/stabilizing\\_childrens\\_lives.pdf](http://www.urban.org/sites/default/files/publication/86216/stabilizing_childrens_lives.pdf).
- E. Young people involved in the juvenile justice system who have experienced severe trauma and who receive treatment while in foster care generally have lower recidivism rates than other out-of-home placements. John Robst et al., *The Association Between Type of Out-of-Home Mental Health Treatment and Juvenile Justice Recidivism for Youth With Trauma Exposure*, *Crim. Beh. & Mental Health* (March 9, 2017), <http://onlinelibrary.wiley.com/doi/10.1002/cbm.2024/full> (online version before inclusion in an issue).
- F. "Criminal thinking styles were examined as mediational links between different forms of child maltreatment (i.e., sexual abuse, physical abuse, and physical neglect) and adult criminal behaviors in 338 recently adjudicated men. Analyses revealed positive associations between child sexual abuse and sexual offenses as an adult, and between child physical abuse/neglect and endorsing proactive and reactive criminal thinking styles. Mediation analyses showed that associations between overall maltreatment history and adult criminal behaviors were accounted for by general criminal thinking styles and both proactive and reactive criminal thinking. These findings suggest a potential psychological pathway to criminal behavior associated with child maltreatment. Limitations of the study as well as research and clinical implications of the results are discussed." LE Cuadra et al., *Child Maltreatment and Adult Criminal Behavior: Does Criminal Thinking Explain the Association*, 38 *Child Abuse Negl.* 1399 (2014).
- G. "Childhood residential mobility is associated with multiple long-term adverse outcomes (violent offending, attempted suicide, substance misuse, and unnatural death). Although frequent residential mobility could be a marker for familial psychosocial difficulties, the elevated risks were observed across the socioeconomic spectrum, and mobility may be intrinsically harmful." Roger Webb et al., *Adverse Outcomes to Early Middle Age Linked with Childhood Residential Mobility*, 51 *Am. J. Prev. Med.* 291, 298 (2016), [http://www.ajpmonline.org/article/S0749-3797\(16\)30118-0/pdf](http://www.ajpmonline.org/article/S0749-3797(16)30118-0/pdf).
- H. "Evidence has accumulated that young people in America are witnesses to considerable violence at home and in the community. This study is the first to examine the association between witnessing community violence and criminal behavior in a representative sample of young adults....The results indicate that recent exposure to violence in the community along with a history of receiving traumatic news, direct victimizations in the community, recent life events, and associations with criminal peers increase the risk for young adult criminal offending." David Eitle & R. Jay Turner, *The Effects of Witnessing Violence, Traumatic Victimization, and Other Stressful Life Events*, 39 *J. of Research in Crime & Delinquency* 214 (2002).

- I. "Promoting healthy adolescent brain development for young people in foster care requires special understanding of how the experience of foster care affects a child's development and how factors such as racism and discrimination compound trauma and chronic stress while limiting access to the opportunities and rewarding experiences adolescents need to thrive." The Annie Casey Foundation, *The Road to Adulthood" Aligning Child Welfare Practice with Adolescent Brain Development* 12-13 (2017)<http://www.aecf.org/m/resourcedoc/aecf-theroadtoadulthood-2017.pdf>
  1. "At the same time young people in foster care are poised to take on new challenges, many of them are dealing with the continuing effects of adverse childhood experiences, trauma and 'ambiguous loss' . . . . The experience of childhood adversity and trauma must be managed throughout life. While young people may have received intervention and support to cope with an issue at one point, the same issue may resurface in a different form as they hit a new stage of development." *Id.* at 13.

## **XII. Childhood Psychiatric Issues**

- A. Duke University researchers found that children with mental health problems such as depression, anxiety and/or behavioral problems were six times more likely than those with no psychiatric problems to have difficulties in adulthood. Those later struggles included addiction, early pregnancy, criminal charges, difficulty getting and keeping jobs, education failures and housing instability, the study authors said. Even children with mild or passing episodes of psychiatric problems were at increased risk. William Copeland et al., *Adult Functional Outcomes of Common Childhood Psychiatric Problems: A Prospective, Longitudinal Study*, 72 JAMA Psychiatry 72 (2015).

## **XIII. Environmental Issues**

Environmental chemicals have a significant impact on a child's brain development. Some chemicals - lead, mercury, and organophosphate pesticides, for example have long been recognized as toxic substances that can have lasting effects on children's neurological health." ESNIA, *What Are We Doing to Our Children's Brains: Environmental Chemicals are Wreaking Havoc to Last a Lifetime* (2015), <https://ensia.com/features/what-are-we-doing-to-our-childrens-brains>.

### **A. Lead Paint Exposure**

1. A house or apartment built before 1978 is highly likely to have lead paint. As the Centers for Disease Control acknowledged in 2012, there is "no safe level of lead for a child." Lead paint exposure, even in low levels, increases a child's risk of dropping out of school and becoming involved in the juvenile justice system. Lead paint poisoning can cause "lifelong learning and behavior problems." Coalition to End Childhood Lead Poisoning (CECLP), <http://www.greenandhealthyhomes.org/home-health-hazards/lead>. See Advisory Committee on Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention, *Guidelines for Measuring Lead in Blood Using Point of Care Instruments* (2013), [http://www.cdc.gov/nceh/lead/ACCLPP/20131024\\_POCguidelines\\_final.pdf](http://www.cdc.gov/nceh/lead/ACCLPP/20131024_POCguidelines_final.pdf).

2. “The correlational association of lead with conduct problems, IQ, and ADHD is well established. Goodlad and colleagues concluded from their comprehensive meta-analysis that the association of lead with symptoms of inattention was  $r = .03$  to  $.25$  with a point estimate of  $r = .16$ . This effect holds even at low, previously safe levels. While this is a small statistical effect, small effects have large public health consequences when exposures are widespread. The effect on ADHD and IQ results in part from lead’s disruption of executive functions. While many studies in the literature and the meta-analysis by Goodlad and colleagues assayed lead levels that were higher than are now common among the US population, several studies using varying methodology from 2005 to 2015 confirmed that blood lead level was associated with ADHD even at levels in the  $0.5$  to  $3.0$   $\mu\text{g}/\text{dL}$  range, after control for many covariates. If there exists a “safe” level of lead for children, it is below the detection limit of the best mass spectroscopy instruments.” Joel Nigg, *Understanding the Link Between Lead Toxicity and ADHD*, Psychiatric Times (Sept. 2016), <http://www.psychiatrictimes.com/special-reports/understanding-link-between-lead-toxicity-and-adhd?GUID=4C1C75D5-E0E5-43E4-B7AC-B89220F1A883&rememberme=1&ts=06102016>.
3. “Lead water pipes exposed entire city populations to much higher doses of lead than have previously been studied in relation to crime. Our estimates suggest that cities’ use of lead service pipes considerably increased city-level homicide rates.” James J. Feigenbaum & Christopher Muller, *Lead Exposure and Violent Crime in the Early Twentieth Century*, 62 *Explorations in Economic History* 51 (2016). See also Brookings Institution, *New Evidence That Lead Exposure Increases Crime* (June 1, 2017) (citing report about extreme lead exposure in Los Angeles County, California).

#### B. Pesticide Exposure (Urban & Rural)

1. “From infancy on, the children of the mothers with the highest levels of organophosphates were at the greatest risk for neurodevelopmental problems. That association was present at every stage the researchers checked in on the kids. At 6 months, they were more likely to have poorer reflexes. At 2, they were at higher risk for pervasive developmental disorder, an autism-related condition, like Asperger’s, in which children have trouble connecting to others. At 5, they were more likely to be hyperactive and have trouble paying attention. At 7, they scored lower on IQ tests, by an average of seven points—the equivalent of being a half-year behind their peers.” Susan Freinkel, *Warning Signs: How Pesticides Harm the Young Brain*, The Nation (Mar. 11, 2014), <http://www.thenation.com/article/178804/warning-signs-how-pesticides-harm-young-brain>.
2. Findings from studies on the effects of organophosphate pesticides on brain development are “‘very similar to what we learned about lead twenty-five to thirty years ago.’ The lead studies found similarly subtle but important brain impacts among kids who weren’t visibly sick from exposure. In addition to lower IQs, they were at higher risk for attention and behavioral problems as well as dyslexia. They had a harder time in school and were more

- likely to drop out. ‘Further follow-up showed that at 17 or 18, they were more likely to be in trouble with the law.’” *Id.*
3. “Results of this study showed that higher prenatal CPF exposure, as measured in umbilical cord blood plasma, was associated with decreases in cognitive functioning on two different WISC-IV indices, in a sample of urban minority children at 7 years of age.” Virginia Rauh et al., *Seven-Year Neurodevelopmental Scores and Prenatal Exposure to Chlorpyrifos, a Common Agricultural Pesticide*, 119 *Envtl. Health Persp.* 1196, 1200 (2011).
  4. *See generally* Environmental Health Perspective, a monthly journal of peer-reviewed research and news published with support from the National Institute of Environmental Health Sciences, National Institutes of Health, <http://ehp.niehs.nih.gov/>; Center for Environmental Research & Children’s Health, <http://cerch.org/publications-2/directory-of-publications/> (listing Center’s publications by exposure and health effect); Columbia Center for Children’s Environmental Health, <http://ccceh.org/our-research> (listing Center’s research by exposure and health effect).

#### XIV. Poverty

- A. “Parental socioeconomic disadvantage was, independently from pregnancy and delivery complications, associated with abnormal child neural development during the first 7 years of life.” Chin-Lun Hung, et al., *Socioeconomic Disadvantage and Neural Development from Infancy Through Early Childhood*, 44 *Int. J. Epidemiology* 1889 (2015). *See also* National Institute of Health, *Poverty May Slightly Increase Childhood Risk of Neurological Impairment: NIH Study Suggests* (2015), <https://www.nichd.nih.gov/news/releases/Pages/121615-childhood-neurological-poverty.aspx>.
  - B. “Children in the school districts with the highest concentrations of poverty score an average of more than four grade levels below children in the richest districts. (Reliable estimates were not available for Asian-Americans.) Even more sobering, the analysis shows that the largest gaps between white children and their minority classmates emerge in some of the wealthiest communities, such as Berkeley, Calif.; Chapel Hill, N.C.; and Evanston, Ill.” Motoko Rich et al., *NY Times, Money, Race and Success: How Your School District Compares* (2016), [https://www.nytimes.com/interactive/2016/04/29/upshot/money-race-and-success-how-your-school-district-compares.html?\\_r=2](https://www.nytimes.com/interactive/2016/04/29/upshot/money-race-and-success-how-your-school-district-compares.html?_r=2) (references a Stanford study with an interactive map showing educational attainment by school district and race).
  - C. “Young adults living in poverty face high exposure to ‘go throughs’: lived experiences of structural disadvantage and trauma with lasting implications for educational, economic, and other life outcomes.” Nia West-Ney & Stephanie Flores, CLASP, *Everybody Got Their Go Throughs: Young Adults on the Frontlines of Mental Health* (June 2017), <https://www.clasp.org/sites/default/files/publications/2017/08/Everybody-Got-Their-Go-Throughs-Young-Adults-on-the-Frontlines-of-Mental-Health.pdf>.
1. “Young adults who experience psychological distress are more likely to be poor.” *Id.* at 6.

2. "Substance is common among [poor] young adults." *Id.* at 8.
  3. "[T]here is a growing recognition that racism and other forms of toxic stress perpetuated systemically are forms of ongoing trauma that affect the lives of young people of color." *Id.* at 9.
  4. "Financial strain was particularly salient for young people with a history of contact with the criminal justice system." *Id.*
  5. "Focus group participants reported a range of traumatic experiences, both recent and throughout their childhoods. Perhaps most prominent in both the urban and rural context was gun violence; however, participants also reported experiences with racism and unresolved community and family trauma at alarming levels." *Id.* at 10. Other "traumatic influences" were "gang violence, cultural and socioeconomic sensitivity, bullying, homelessness, parental incarceration, untimely loss of parents and other family members, witnessing a parent's drug addiction or domestic violence, sexual abuse, and being 'kicked out' by parents. Also common in the rural focus groups were descriptions of other forms of violence including physical fights, stabbings, and assaults at school and in the community." *Id.* at 10-12."
  6. "Focus group participants in both urban and rural settings saw community-based programs as the most effective mental health support they had experience." *Id.* at 12.
- D. "Emerging science indicates the inherent stress of living in poverty has the capacity to negatively impact the decision-making processes involved in problem-solving, goal-setting, and goal attainment. The prefrontal cortex of the brain – the area of the brain that is associated with many of the analytic processes necessary to solve problems, set goals, and optimally execute chosen strategies – works in tandem with the limbic system, which processes and triggers emotional reactions to environmental stimuli." Elisabeth Babcock, *Using Brain Science to Design New Pathways Out of Poverty* 5 (2014), <http://www.cccmaine.org/wp-content/uploads/2017/02/Using-Brain-Science-to-Create-Pathways-Out-of-Poverty-FINAL-online.pdf>.

## **XV. Family Ties**

- A. Fathers who maintain relationships with children are less likely to recidivate. Solangel Maldonado, *Recidivism and Parental Engagement*, 40 Family L. Q. 191 (2006) ("The literature ... suggests that exconvicts who share close relationships with their children are less likely to recidivate than those who do not.").
- B. "The single best predictor of successful release from prison is whether the former inmate has a family relationship to which he can return. Studies have shown that prisoners who maintain family ties during imprisonment are less likely to violate parole or commit future crimes after their release than prisoners without such ties." *Id.* at 196-97.
- C. Parents with "less time to serve reported more frequent contact with their children" than those serving longer prison sentences. "About half (47%) of parents who expected to be released

within six months reported at least weekly contact with their children, compared to 39% who expected to be released in 12 to 59 months, and 32% in 60 or more months.” Lauren E. Glaze & Laura M. Maruschak, Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, *Parents in Prison and Their Minor Children* (2010), <http://www.bjs.gov/content/pub/pdf/pptmc.pdf>.

- D. The results of one recent study “strongly suggest that the experience of incarceration leads to a substantially higher divorce risk among offenders who are married when they enter prison.” Robert Apel et al., *The Impact of Imprisonment on Marriage and Divorce: A Risk Set Matching Approach*, 26 J. Quant. Crim. 269 (2009). “In our data, by the fifth year post-release, imprisoned men have a divorce probability that is 56.8% higher than comparable, convicted but non-imprisoned men. In light of our methodological approach, we are inclined to attribute this finding to the causal effect of first-time imprisonment on divorce.” *Id.* at 291. “Considering the (by now) well-established protective role that marriage plays in the criminal career (in the male criminal career, at least), as well as cross-national expansion in the use of incarceration as the predominant form of crime control, an important social concern is the degree to which widespread use of prison may actually backfire by worsening the life chances of offenders returning to the community after they have paid their debt to society.” *Id.* at 289.

#### **XVI. Mentally Ill Inmates**

- A. “In addition to their often untreated illness, mentally ill prisoners are more likely than other prisoners to incur disciplinary infractions and suffer punishment as a result, and they are also more likely to be victimized, including sexual victimization, in the course of their confinement.” National Research Council, *The Growth of Incarceration in the United States: Exploring Causes and Consequences* 223 (Jeremy Travis et al. eds., 2014), [http://nap.edu/catalog.php?record\\_id=18613](http://nap.edu/catalog.php?record_id=18613), citing numerous studies. *See also* Bureau of Justice Statistics, Department of Justice, *Prison Rape Elimination Act of 2003-PREA Data Collection Activities, 2013 2* (June 2013) (“Inmates with a history of mental health problems reported higher rates of sexual victimization than other inmates in 2011–12.”).
- B. “Among state and federal prison inmates, an estimated 6.3% of those identified with serious psychological distress reported that they were sexually victimized by another inmate. In comparison, among prisoners with no indication of mental illness, 0.7% reported being victimized by another inmate.” Bureau of Justice Statistics, *Sexual Victimization in Prisons and Jails Reported by Inmates, 2011–12* (May 2013), <http://www.bjs.gov/content/pub/pdf/svpjri1112.pdf>.
- C. “[P]ersons with mental disabilities who are behind bars are at heightened risk of physical mistreatment by staff.” Human Rights Watch, *Callous and Cruel: Use of Force against Inmates with Mental Disabilities in US Jails and Prisons 2* (May 2015). “There are no national statistics on the prevalence of staff use of force against inmates in general, or inmates with mental disabilities in particular, in the more than 5,100 jails and prisons in the United States. Experts we consulted for this report said that force is used disproportionately against prisoners with mental illness.” *Id.* at 44.

- D. "Detained juvenile offenders are hospitalized for very different reasons than the general adolescent population. Mental illness, often with comorbid substance abuse, requiring long inpatient stays, represents the major cause for hospitalization. These findings underscore the urgent need for effective, well-coordinated mental health services for youth before, during, and after detention." "In addition, hospitalized detained youth were disproportionately black and from larger metropolitan counties." Arash Anoshiravani, et al., *Mental Illness Drives Hospitalizations for Detained California Youth*, 57 J. of Adolescent Health 455, 457 (2015), [http://www.jahonline.org/article/S1054-139X\(15\)00222-0/pdf](http://www.jahonline.org/article/S1054-139X(15)00222-0/pdf).

#### **XVII. Medical Needs of Inmates**

- A. The Office of Inspector General found that "recruitment of medical professionals is one of the BOP's greatest challenges and staffing shortages limit inmate access to medical care, result in an increased need to send inmates outside the institution for medical care, and contribute to increases in medical costs." U.S. Dep't of Justice, Office of the Inspector General, *Review of the Federal Bureau of Prisons' Medical Staffing Challenges* i (2016), <https://oig.justice.gov/reports/2016/e1602.pdf>.

#### **XVIII. Traumatic Brain Injury**

- A. People who suffer from TBI may be more likely to recidivate sooner than those without TBI. "[R]ecent biological theories have shown disruptions in key areas of the brain posthead injury are responsible for impulse control, the regulation of emotions, and planning and judgment. TBI can lead to disruptions in executive functioning such as impulse control affecting levels of self-control, which is a consistent predictor of antisocial behavior and crime, or attachments that restrain individuals from engaging in criminal behavior), neither of which were measured in the present study. It is also possible that those with TBI become involved in the criminal justice system, not directly because of their TBI but because their social background and TBI serve as barriers to prosocial activities with family and friends. This may lead to difficulties finding sufficient employment or may lead them to self-medicate with alcohol and drugs. On reentering the community, many inmates are ill-prepared for life outside an institution and too often return to disorganized, high-crime neighborhoods lacking supports for housing, employment, social activities, and mental health and substance abuse treatment where they resume antisocial behavior patterns." Bradley Ray & Nicholas Richardson, *Traumatic Brain Injury and Recidivism Among Returning Inmates*, 44 Crim. J. & Behav. 472, 482 (2017) (citations omitted). This study highlights the need for screening for TBI and placing the person in a treatment program that can address individual needs. *Id.* at 483.
- B. "[R]esearch indicates that criminal defendants are at very high risk for traumatic brain injuries that pre-date the instant offense and more likely than the general population to sustain traumatic brain injuries." Stacey Wood & Bhushan Agharkar, *Traumatic Brain Injury in Criminal Litigation*, 84 UMKC Law R. 411, 413 (2015). "Individuals with a history of TBI are more likely to demonstrate impairment on measures of attention, processing speed, working memory, episodic memory, and tasks of executive functioning. These individuals are also more likely to show disinhibition, apathy, poor judgment, and limited insight into their disorder." *Id.* at 415.

**XIX. Executive Functioning**

- A. Deficits in executive functioning and emotion regulation increase vulnerability toward engaging in aggressive behavior. These abilities “may be valuable targets for interventions aiming to reduce aggressive behaviors.” Sarah Holley, et al., *The Relationship Between Emotion Regulation, Executive Functioning, and Aggressive Behaviors*, 32 J. of Interpersonal Violence 1692 (2017).

**XX. Psychological Implications of Unemployment**

- A. A study of the influence of unemployment on personality changes found that “unemployed men and women experienced significant patterns of change in their mean-levels of agreeableness, conscientiousness, and openness, whereas re-employed individuals experienced limited change. The results indicate that unemployment has wider psychological implications than previously thought.” Christopher Boyce et al., *Personality Change Following Unemployment*, 100 J. of Applied Psychology 991 (2015), <https://www.apa.org/pubs/journals/releases/apl-a0038647.pdf>.

**XXI. Neighborhoods**

- A. “[P]oor children who grow up in some cities and towns have sharply better odds of escaping poverty than similar poor children elsewhere.” David Leonhardt, et al., *The Importance of Place: An Atlas of Upward Mobility Shows Paths Out of Poverty*, N.Y. Times The Upshot (May 3, 2015), <http://www.nytimes.com/2015/05/04/upshot/an-atlas-of-upward-mobility-shows-paths-out-of-poverty.html?rref=upshot>. An interactive feature allows you to focus on specific counties. *The Best and Worst Places to Grow Up: How Your Area Compares*, N.Y. Times, The Upshot (May 4, 2015), <http://www.nytimes.com/interactive/2015/05/03/upshot/the-best-and-worst-places-to-grow-up-how-your-area-compares.html>.
- B. “[N]eighborhoods matter for children’s long-term outcomes.” Raj Chetty & Nathaniel Hendren, *The Impacts of Neighborhoods on Intergenerational Mobility: Childhood Exposure Effects and County-Level Estimates* 4 (May 2015), [http://www.equality-of-opportunity.org/images/nbhds\\_paper.pdf](http://www.equality-of-opportunity.org/images/nbhds_paper.pdf). “Where children grow up affects their outcomes in adulthood in proportion to the time they spend in the place.... Our results highlight that it is exposure during childhood that appears to matter most, up to the early twenties – and that at least 50% of the variation in intergenerational mobility across the U.S. reflects the causal effects of childhood exposure.” *Id.* at 80. More information is available here: <http://www.equality-of-opportunity.org>.
- C. Data on neighborhoods is available at a number of different websites. Your local community may have specific data that is helpful to show the community in which your client lives or grew up in. *See, e.g.*, [bniadjfi.org](http://bniadjfi.org) (information on Baltimore neighborhoods); [neighborhoodindicators.org](http://neighborhoodindicators.org) (lists 32 partners in major cities with information on specific neighborhoods); <http://www.datacenterresearch.org/> (information on Southeast Louisiana neighborhoods), [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml) (includes census data by city, town, or zip code, including information about education, income, poverty, racial demographics, housing, and employment); <https://catalog.data.gov/organization>.

## XXII. Parental Incarceration

- A. "It is not the case that [incarcerated parents] were already disengaged from their children's lives. For example, in 2007, approximately half of parents in state prisons were the primary provider of financial support for their children – and nearly had lived with their children prior to incarceration." Melissa Kearney et al., The Hamilton Project, *Ten Economic Facts about Crime and Incarceration in the United States* 14 (2014).  
[http://www.brookings.edu/~media/research/files/papers/2014/05/01%20crime%20facts/v8\\_t hp\\_10crimefacts.pdf](http://www.brookings.edu/~media/research/files/papers/2014/05/01%20crime%20facts/v8_t hp_10crimefacts.pdf) .
- B. "The best evidence produced thus far links paternal incarceration to childhood mental health and behavioral problems, problems that are strongly linked to difficulty in school, trouble finding work, and becoming involved in crime. Paternal incarceration increases behavioral problems by one third to one half a standard deviation and is global in nature, influencing both externalizing behaviors and internalizing behaviors in roughly equal measure. Using conservative estimates and a variety of stringent modeling strategies, we show that the influence of mass incarceration has increased racial disparities in externalizing problems by up to 26% and in internalizing problems by up to 45%." Sara Wakefield & Christopher Wildeman, *Mass Imprisonment and Racial Disparities in Childhood Behavioral Problems*, 10 *Criminology & Pub. Pol'y* 793, 806 (2011).
- C. Sara Wakefield & Christopher Wildeman, *Children of the Prison Boom: Mass Incarceration and the Future of American Inequality* (2013), as summarized in a blog posting, by Holly Yettick, *Parental Incarceration Has Worsened Disparities Between Black, White Children*, Education Week (Apr. 18, 2014), [http://blogs.edweek.org/edweek/inside-school-research/2014/04/a\\_quarter\\_of\\_black\\_babies.html](http://blogs.edweek.org/edweek/inside-school-research/2014/04/a_quarter_of_black_babies.html).
1. "Wakefield and Wildeman write that the five-fold increase in children with incarcerated parents that has occurred since 1980 has largely been fueled by locking up nonviolent offenders who tend to have family ties and histories of employment."
  2. "'In most instances,'" Wakefield and Wildeman state, "'the removal of a parent makes a bad situation worse.'"
  3. "[C]hildren whose fathers have been incarcerated fare worse than similar children whose fathers have not been locked up. For instance, they have higher rates of problems with mental health and behavior."
  4. "[C]hildren with incarcerated parents are also more likely than similar children to end up homeless. Wakefield and Wildeman conclude that the black-white gap in childhood homelessness would have been 26 percent to 65 percent smaller had mass imprisonment never occurred."
  5. "[C]hildren of incarcerated fathers are more likely to die before the age of 1. 'According to our estimates,' the authors write, 'the effects of parental incarceration on children's risk of infant mortality are comparable to the effects of maternal smoking on this risk.'"

6. “‘The prison is not the place to solve problems that have very little to do with crime,’ Wakefield and Wildeman conclude. ‘[W]e do not therefore suggest that putting parenting programs in prison is the way to improve the lives of children with incarcerated parents. . . . Prisons are as ill-equipped to facilitate quality family functioning as they are at tackling serious mental illness or drug addiction.’”
- D. “Children of incarcerated parents are more likely to experience financial hardship, residential instability, changes in caregiver arrangements, and trauma associated with the loss of a loved one, all of which may translate into short- and long-term mental and physical health issues, poor academic performance and achievement, substance abuse, and delinquency.” Akiva M. Liberman & Jocelyn Fontaine, Urban Institute, *Reducing Harms to Boys and Young Men of Color from Criminal Justice System Involvement* 10 (Feb. 2015), <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000095-Reducing-Harms-to-Boys-and-Young-Men-of-Color-from-Criminal-Justice-System-Involvement.pdf>.
  - E. “[P]arental incarceration leads to an array of cognitive and noncognitive outcomes known to affect children’s performance in school, and ... the criminal justice system makes an important contribution to the racial achievement gap.” Leila Morsy & Richard Rothstein, Economic Policy Institute, *Mass Incarceration and Children’s Outcomes: Criminal Justice Policy is Education Policy* (2016).
  - F. “[P]arental incarceration is consistently associated with adolescent delinquency” and is “strongly associated with aggressive behavior in both childhood and adolescence.” Raymond Swisher & Unique R. Shaw-Smith, *Paternal Incarceration and Adolescent Well-Being: Life Course Contingencies and Other Moderators*, 104 J. Crim. L. & Criminology 929, 956 (2014).
  - G. “Incarceration breaks up families, the building blocks of our communities and nation. It creates an unstable environment for kids that can have lasting effects on their development and well-being. These challenges can reverberate and multiply in their often low-income neighborhoods, especially if they live in a community where a significant number of residents, particularly men, are in or returning from jail or prison. And different obstacles emerge once parents are released and try to assume their roles as caregivers, employees and neighbors.” The Annie E. Casey Foundation, *A Shared Sentence: The Devastating Toll of Parental Incarceration on Kids, Families, and Communities* 1(2016), <http://www.aecf.org/m/resourcedoc/aecf-asharedsentence-2016.pdf>.
  - H. Parental Incarceration, Child Homelessness, and the Invisible Consequences of Mass Imprisonment
  - I. “This article presents research on the consequences of mass imprisonment for childhood inequality. I investigate average and race-specific effects of paternal and maternal incarceration on the risk of child homelessness, using data from the Fragile Families and Child Wellbeing Study. The results suggest that (1) recent paternal but not maternal incarceration substantially increases the risk of child homelessness, (2) effects are concentrated among African American children, and (3) increases in familial economic hardship and decreases in access to institutional

support explain some of the relationship. Taken together, the findings indicate the prison boom was likely a key driver of the growing racial disparities in child homelessness, increasing black-white inequality in this risk by 65 percent since the 1970s. When coupled with the other effects of mass imprisonment on childhood inequality, these results suggest that the prison boom will likely lead to far greater black-white inequality in civic and political participation, as the children of the prison boom come of age.” Christopher Wildeman, *Parental Incarceration, Child Homelessness, and the Invisible Consequences of Mass Imprisonment* (2017), <https://pdfs.semanticscholar.org/8fb3/325c477f4b8666ff55f9eb5e85e5125dbe75.pdf>

### **XXIII. Parental Psychiatric Disease**

- A. The risk of violent offending is higher for persons whose parents suffered from a mental disorder, especially cannabis misuse, a personality disorder, or attempted suicide. Pearl Hok, et al., *Parental Psychiatric Disease and Risks of Attempted Suicide and Violent Criminal Offending in Offspring: A Population-Based Cohort Study*, 10 JAMA Psychiatry 1015-1022 (2016).

### **XXIV. Post-Traumatic Stress Disorder**

- A. “Persons involved in the criminal justice system and those with mental disorders are at significantly higher risk of trauma exposure and development of Posttraumatic Stress Disorder (PTSD) compared with the general population. The high rates of trauma exposure among individuals involved in the criminal justice system suggest that PTSD may be an important risk factor for justice-system involvement and criminal recidivism.” This is true for women, veterans, and others who either experience or witnessed violent acts. The results of this study, in combination with other research, “provide compelling evidence that PTSD deserves attention in developing interventions to reduce justice system involvement of persons with mental disorders.” Naomi Sadeh & Dale McNeil, *Posttraumatic Stress Disorder Increases Risk of Criminal Recidivism Among Justice-Involved Persons with Mental Disorders*, 42 Crim. Just. & Behav. 573, 574, 583 (2015).
- B. The National Center for Post-Traumatic Stress Disorder has a publication on how community violence causes PTSD symptoms in children and adolescents. David Foy & Carole Goguen, *Community Violence-Related PTSD in Children and Adolescents*, 9 PTSD Research Quarterly (1998).
- C. “Childhood adversity is among the most potent risk factors for developing mood and anxiety disorders later in life.” Anne Albrecht et al., *Neurobiological Consequences of Juvenile Stress: A GABAergic Perspective on Risk and Resilience*, 74 Neuroscience and Biobehavioral Reviews 21 (2017).

### **XXV. Racial Disparity**

- A. “[N]ot only does segregation concentrate social and environmental toxins as well as poverty and other social problems, but the two types of factors can potentially amplify each other. It is not just the independent effects of lead or the independent effects of concentrated poverty that affect individual and community stress; it is their combination that makes both of them more

toxic. It is the synergy between these exposures to social and environmental toxins that amplifies or widens racial health inequities.” Darla Thompson, et al., *Framing the Dialogue on Race and Ethnicity to Advance Health Equity: Proceedings of a Workshop* (2016 ), <http://www.nap.edu/23576>.

- B. “Black men tend to be stereotyped as threatening and, as a result, may be disproportionately targeted by police even when unarmed. Here, we found evidence that biased perceptions of young Black men’s physical size may play a role in this process. The results of 7 studies showed that people have a bias to perceive young Black men as bigger (taller, heavier, more muscular) and more physically threatening (stronger, more capable of harm) than young White men. Both bottom-up cues of racial prototypicality and top-down information about race supported these misperceptions. Furthermore, this racial bias persisted even among a target sample from whom upper-body strength was controlled (suggesting that racial differences in formidability judgments are a product of bias rather than accuracy). Biased formidability judgments in turn promoted participants’ justifications of hypothetical use of force against Black suspects of crime. Thus, perceivers appear to integrate multiple pieces of information to ultimately conclude that young Black men are more physically threatening than young White men, believing that they must therefore be controlled using more aggressive measures.” J Wilson et al., *Racial Bias in Judgments of Physical Size and Formidability: From Size to Threat*, J. of Personality and Social Psychology (2017), <http://dx.doi.org/10.1037/pspi0000092>.
- C. “Contrary to popular stereotypes of African Americans, prevalence of drug-use disorders such as cocaine and hallucinogen or PCP was lowest among African Americans, followed by Hispanics, then non-Hispanic Whites. For example, nonHispanic Whites had more than 30 times the odds of having cocaine-use disorder than African Americans. These racial/ethnic differences persisted even after we controlled for the additional time that African Americans spend in correctional facilities, where access to substances is restricted. Our findings add to the growing debate about how the “War on Drugs” has disproportionately affected African American youths and young adults.” Leah Welty et al., *Health Disparities in Drug-and Alcohol-Use Disorders: A 12-Year Longitudinal Study of Youths After Detention*, 106 American J. of Public Health (2016), <http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2015.303032>.

## **XXVI. School-to-Prison Pipeline**

- A. “Sixty years after the *Brown* decision, de facto segregation persists because of a complex web of factors rooted in our nation’s long history of discrimination. But segregation is only one of the issues faced by students of color. Increasingly, minority children are drawn into the so-called school-to-prison pipeline – the phenomenon in which draconian disciplinary policies force students out of the educational system and into the criminal justice system.” Dennis Parker, *Segregation 2.0: America’s School-to-Prison Pipeline*, MSNBC (May 17, 2014), <http://www.msnbc.com/msnbc/brown-v-board-students-criminalized>. See also New York Civil Liberties Union, *A, B, C, D, STPP: How School Discipline Feeds the School-to-Prison Pipeline* (2013), <http://www.nyclu.org/publications/report-b-c-d-stpp-how-school-discipline-feeds-school-prison-pipeline-2013>.

- B. "Black students are suspended and expelled at a rate three times greater than white students. On average, 5% of white students are suspended, compared to 16% of black students. American Indian and Native-Alaskan students are also disproportionately suspended and expelled, representing less than 1% of the student population but 2% of out-of-school suspensions and 3% of expulsions." U.S. Dep't of Educ. Office for Civil Rights, *Civil Rights Data Collection, Data Snapshot: School Discipline 1* (Mar. 2014), <http://ocrdata.ed.gov/Downloads/CRDC-School-Discipline-Snapshot.pdf>.
  1. Disproportionately high suspension rates for students of color begin as early as preschool. "Black children represent 18% of preschool enrollment, but 48% of preschool children receiving more than one out-of-school suspension; in comparison, white students represent 43% of preschool enrollment but 26% of preschool children receiving more than one out of school suspension." *Id.*
  2. "Black students represent 16% of student enrollment, 27% of students referred to law enforcement, and 31% of students subjected to a school-related arrest. In comparison, white students represent 51% of students enrolled, 41% of referrals to law enforcement, and 39% of those subjected to school-related arrests." *Id.* at 6.
- C. "[R]esearch suggests that the substantial racial disparities of the kind reflected in the CRDC data are not explained by more frequent or more serious misbehavior by students of color." U.S. Dep't of Just. & U.S. Dep't of Educ., *Dear Colleague Letter: Nondiscriminatory Administration of School Discipline 4* (2014) (citing multiple sources), <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201401-title-vi.html>.
  1. "The increasing use of disciplinary sanctions such as in-school and out-of-school suspensions, expulsions, or referrals to law enforcement authorities creates the potential for significant, negative educational and long-term outcomes, and can contribute to what has been termed the 'school to prison pipeline.' Studies have suggested a correlation between exclusionary discipline policies and practices and an array of serious educational, economic, and social problems, including school avoidance and diminished educational engagement; decreased academic achievement; increased behavior problems; increased likelihood of dropping out; substance abuse; and involvement with juvenile justice systems." *Id.*
- D. "When controlling for campus and individual student characteristics, the data revealed that a student who was suspended or expelled for a discretionary violation was nearly three times as likely to be in contact with the juvenile justice system the following year." Tony Fabelo et al., Council for State Governments Justice Center & Public Policy Research Institute, *Breaking Schools' Rules: A Statewide Study of How School Discipline Relates to Students' Success and Juvenile Justice Involvement* xii (2011), [http://csgjusticecenter.org/wp-content/uploads/2012/08/Breaking\\_Schools\\_Rules\\_Report\\_Final.pdf](http://csgjusticecenter.org/wp-content/uploads/2012/08/Breaking_Schools_Rules_Report_Final.pdf).
- E. "Black, Latino, American Indian and Native-Alaskan students attend schools with higher concentrations of first-year teachers at a higher rate (3 to 4%) than white students (1%)." U.S.

Dep't of Educ. Office for Civil Rights, *Civil Rights Data Collection, Data Snapshot: Teacher Equity* 1 (Mar. 2014), <http://ocrdata.ed.gov/Downloads/CRDC-Teacher-Equity-Snapshot.pdf>.

- F. Annie E. Casey Foundation, Kids Count Data Center (data on education indicators, searchable by city and state), <http://datacenter.kidscount.org/data#USA/2/8/10,11,12,13,14,15>.
- G. “[T]here is evidence that the presence of school resource officers increases arrests and court referrals for low-level issues that would otherwise have been handled informally by schools.” Akiva M. Liberman & Jocelyn Fontaine, Urban Institute, *Reducing Harms to Boys and Young Men of Color from Criminal Justice System Involvement* 10 (Feb. 2015), <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000095-Reducing-Harms-to-Boys-and-Young-Men-of-Color-from-Criminal-Justice-System-Involvement.pdf>. (citing C. Na and D.C. Gottfredson, *Police Officers in Schools: Effects on School Crime and the Processing of Offending Behaviors*, J. Qtly. 30 (2013)). See also Libby Nelson & Dara Lind, *The School-to-Prison Pipeline, Explained*, Vox (Feb. 24, 2015), <http://www.vox.com/2015/2/24/8101289/school-discipline-race>.
- H. Although the rate of youth committed to juvenile facilities fell by 47 percent between 2001 and 2013, racial and ethnic disparities grew nationally, but not in all states. The Sentencing Project, *Racial Disparities in Youth Commitments and Arrests* (2016), <http://www.sentencingproject.org/wp-content/uploads/2016/04/Racial-Disparities-in-Youth-Commitments-and-Arrests.pdf>.
- I. “Black students, boys, and students with disabilities were disproportionately disciplined (e.g., suspensions and expulsions) in K-12 public schools, according to GAO’s analysis of Department of Education (Education) national civil rights data for school year 2013-14, the most recent available. These disparities were widespread and persisted regardless of the type of disciplinary action, level of school poverty, or type of public school attended. For example, Black students accounted for 15.5 percent of all public school students, but represented about 39 percent of students suspended from school—an overrepresentation of about 23 percentage points.” U.S. Gov’t Accountability Office, *K-12 Education: Discipline Disparities for Black Students, Boys, and Students with Disabilities* 12 (March 2018), <https://www.gao.gov/assets/700/690828.pdf>.
  - 1. “Research has shown that students who are suspended from school lose important instructional time, are less likely to graduate on time, and are more likely to repeat a grade, drop out of school, and become involved in the juvenile justice system. The effects of certain discipline events, such as dropping out, can linger throughout an individual’s lifetime and lead to individual and societal costs.” *Id.* at 1.
  - 2. “The issue of who gets disciplined and why is complex. Studies we reviewed suggest that implicit bias—stereotypes or unconscious associations about people—on the part of teachers and staff may cause them to judge students’ behaviors differently based on the students’ race and sex.” *Id.* at 4.
  - 3. “Students with disabilities represented approximately 12 percent of all public school students, and accounted for nearly 25 percent or more of students referred to law

enforcement, arrested for a school-related incident, or suspended from school (an overrepresentation of roughly 15.5 percentage points for referrals to law enforcement and school-related arrests, and 13 percentage points for out-of-school suspensions). Further, our analysis of discipline for students with disabilities by both race and sex showed that Black students with disabilities and boys with disabilities were disproportionately disciplined across all six actions.” *Id.* at 16.

4. The regression model GAO used “showed that increases in the percentage of low-income students in a school were generally associated with significantly higher rates for each of the six disciplinary actions GAO reviewed (in-school and out-of-school suspensions, referrals to law enforcement, expulsions, corporal punishment, and school related arrests). *Id.* at 18.

## **XXVII. Mental and Substance Use Disorders**

- A. The Surgeon General released an extensive report on substance abuse that covers a wide variety of topics, including the “prevalence of substance use, misuse problems, and disorders,” demographics of substance use, “vulnerability to substance abuse misuse problems and disorders,” “neurobiology of substance use, misuse, and addiction, diagnosing a disorder, and treatment and interventions. The report also encourages a “cultural shift in how we think about addiction. For far too long, too many in our country have viewed addiction as a moral failing. This unfortunate stigma has created an added burden of shame that has made people with substance use disorders less likely to come forward and seek help. It has also made it more challenging to marshal the necessary investments in prevention and treatment. We must help everyone see that addiction is not a character flaw – it is a chronic illness that we must approach with the same skill and compassion with which we approach heart disease, diabetes, and cancer.” U.S. Dep’t of Health and Human Services, *Facing Addiction in America: The Surgeon General’s Report on Alcohol Drugs, and Health* (2016), <https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf>.
- B. The National Institute of Drug Abuse has supported research on drug abuse treatment for persons involved in the criminal justice system. “[I]t is a matter of public health and safety to make drug abuse treatment a key component of the criminal justice system. Indeed, addressing the treatment needs of substance abusing offenders is critical to reducing overall crime and other drug-related societal burdens, such as lost job productivity and family disintegration.” Nat’l Institute on Drug Abuse, *Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide* 9 (2014) [https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/txcriminaljustice\\_0.pdf](https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/txcriminaljustice_0.pdf).
- C. “Mental and substance use disorders are prevalent among the most highly stigmatized health conditions in the United States.” National Academies of Sciences, Engineering, and Medicine, *Ending Discrimination Against People with Mental and Substance Use Disorders: The Evidence for Stigma Change* 17 (2016), <https://www.nap.edu/download/23442>.
  1. “Mental illness and a history of substance misuse remain barriers to full participation in society in areas as basic as education, housing, and employment.” *Id.* at 18.

2. People with mental and substance use disorders are overrepresented in the criminal justice system, which is both a consequence and a source of stigma." *Id.* at 5 Mental illness, drug addiction, neighborhood poverty, and school dropouts are factors that increase the risk of involvement with the criminal justice system. Blacks and Hispanics are disproportionately affected by disparities in the system, from arrest through parole release, which have a substantial cumulative effect on their rates of incarceration." *Id.* at 27.
3. "[I]nstitutional policies that treat substance use disorders primarily as a criminal issue (e.g., the U.S. war on drugs) rather than a health concern have promoted a stigmatizing environment that excludes and marginalizes people with substance use disorders . Antidrug messages and harsh criminal sentences for drug use appear to label people with these disorders as unwanted by society). Thus the social processes designed to control substance misuse may actually promote its continuation by increasing shame and deepen the public and structural stigmatization of this population." *Id.* at 48.
- D. "Adverse childhood experiences, such as abuse and neglect, but also single parenthood and divorce as well as parental substance abuse increase the risk of substance abuse in adulthood. These risk factors often accumulate in children that enter the child welfare system." Annika von Borczyskowski, et al., *Alcohol and Drug Abuse Among Adults Who Grew Up in Substitute Care – Findings from a Swedish National Cohort Study*, 35 Children and Youth Services Review 1954 (2013).
- E. "Research has consistently demonstrated that integrated treatment, in which both mental illness and substance use disorders are addressed concurrently, is the most effective response to the needs of individuals with dual diagnoses. . . . Research conducted over the last decade has shown that, without integrated services, people with co-occurring disorders have higher rates of hospitalization, homelessness, serious medical conditions, and incarceration.<sup>5</sup> Given the large number of people with mental illness that have co-occurring substance use disorders, integrated substance abuse treatment is a critical element in a comprehensive system of care for people with mental illness." Criminal Justice Mental Health Consensus Project, *A Judge's Primer on Mental Illness, Substance Use Disorders, Co-occurring Disorders, and Integrated Treatment 2* (undated) <http://www.pacenterofexcellence.pitt.edu/documents/judges-primer.pdf>.

## **XXVIII. Violence and Mental Health**

- A. "People with People with treated mental illness are at no higher risk for committing violence than the general population and are at higher risk for being the victims of violence. Scandinavian studies have indicated that treatment of mental illness can reduce violence risk 15-fold (Nielssen and Large, 2010)." National Academies of Sciences, *Engineering, and Medicine, Violence and Mental Health: Opportunities for Prevention and Intervention: Proceedings of a Workshop 6* (2018), <https://www.nap.edu/catalog/24916/violence-and-mental-health-opportunities-for-prevention-and-early-detection>
- B. "Violence associated with a diagnosed serious mental illness is more likely to be self-directed than directed at others, even if one includes family and friends. Ninety percent of the

approximately 38,000 suicides each year in the United States involve mental illness, while less than 5 percent of the approximately 14,000 homicides each year involve mental illness (CDC, 2005).” *Id.*

#### **XXIX. Autism Spectrum Disorder**

- A. “Many justice-involved individuals with ASD (Autism Spectrum Disorder) may remain undiagnosed or even misdiagnosed for years.” Isabella Michna et al., *Correctional Management and Treatment of Autism Spectrum Disorder*, 44 J. Am. Acad. Psychiatry Law 253 (2016). “ASD has a range of associated deficits that vary widely across this population, including: difficulty in reading emotions on the faces of others, nonverbal communication, social interactions, and motor coordination; a tendency to state what they think without regard for social consequences; idiosyncratic interests; literal interpretation of language; and an ability to be honest to the point of offending others.<sup>4</sup> Behaviors such as aggression may emerge consequent to misreading another’s intentions or confusion regarding why their behavior or comment is received negatively.” *Id.* at 254.
1. “Clinicians and custody staff in correctional settings without knowledge of ASD may misunderstand presenting behaviors as intentional misbehavior. Given their cognitive and emotional social challenges, individuals with ASD may have an increased likelihood of confrontations with others and may be particularly vulnerable to bullying and exploitation and, consequently, more likely to be socially isolated than other prisoners. Jail and prison settings expose the individual to harm and risk where the individual with ASD is not fully able to understand the situation” *Id.* at 255.

#### **XXX. Depressive Symptoms**

- A. Depression or depressive symptoms associated with other disorders may be associated with violent behavior. A Swedish study of persons with a history of depression and criminal records found that “[t]hose in the depressed group were approximately 3 times more likely than the general population to commit violent crimes, such as homicide, attempted homicide, aggravated assault, or robbery.” Menahem Krakowski & Karen Nolan, *Depressive Symptoms Associated with Aggression*, *Psychiatric Times* (Feb. 27, 2017) <http://www.psychiatrictimes.com/special-reports/depressive-symptoms-associated-aggression>.

#### **XXXI. Fetal Alcohol Syndrome**

Fetal Alcohol Syndrome, which results from having a mother drink alcohol while pregnant, is associated with many behavioral malfunctions, including “[t]rouble getting along with others”; “[p]oor social skills”; “[t]rouble adapting to change or switching from one task to another”; “[p]roblems with behavior and impulse control”; “[p]roblems staying on task”; “[d]ifficulty planning or walking toward a goal.” Julie Och, U.S. Probation Office, *Fetal Alcohol Spectrum Disorders and Crime*, *XLI News & Views* 4 (March 14, 2016). Among the recommendations for helping persons with FASD who have been convicted of a crime is to “[p]rovide alternatives to prison such as halfway houses, group home treatment centers, or home confinement.” *Id.*

### **XXXII. Persons Convicted of Immigration Offenses**

- A. The U.S. Dep't of State issues Travel Warnings for places in countries that may have an "unstable government, civil war, ongoing intense crime or violence, or frequent terrorist attacks. Such information may help explain why a person has chosen to enter the United States rather than remain in an unsafe environment.  
<https://travel.state.gov/content/passports/en/alertswarnings.html>.
- B. Research shows that immigrants have significantly lower rates of criminality than native-born citizens and may have contributed to the historic crime-drop of the last 20 years. The Sentencing Project, *Immigration and Public Safety* (2017).
- C. A survey of 1100 recently deported migrants in Mexico conducted between 2009 and 2012 shows that prosecution and punishment has no deterrent effect and can result in severe consequences: "[D]eterrence by arrest, incarceration, and removal is largely ineffective." Jeremy Slack et al., *In Harm's Way: Family Separation, Immigration Enforcement Programs and Security on the US-Mexico Border*, 3 J. on Migration & Human Security 109, 114 (2015). "The separation of women from family or friends with whom they are traveling places them at increased risk of theft, violence, and abuse." *Id.* at 119. "[P]eople who consider the United State their homes are willing to endure hardships at the border, discrimination in the United States, and the harsh penalties of an increasingly criminalized immigration system." *Id.* at 124.

### **XXXIII. Persons Convicted of Sex Offenses**

- A. "For offenders convicted of child pornography offenses, having an official record of contact sexual behavior were generally not associated with significantly higher recidivism rates. The general rearrest rates for child pornography offenders with contact sexual records (15 percent) was nearly the same as child pornography offenders without any records of contact sexual offending (13 percent). . . . "Last, in a somewhat surprising finding, this research shows that child pornography offenders with backgrounds of contact sexual offending exhibit only slightly higher risk characteristics and recidivism rates compared to child pornography offenders with no records of contact sexual offending. This finding is at odds with some studies showing offenders who commit child pornography and contact crimes having significantly higher risk levels and recidivism rates compared to child pornography-only offenders (Babchishin et al., 2015). It is interesting to note, however, that the USSC also found similar rates of general recidivism between child pornography offenders with and without histories of criminally sexual dangerous behavior (USSC, 2012)." Thomas Cohen \* Michelle Spidell, *How Dangerous Are They? An Analysis of Sex Offenders Under Federal Post-Conviction Supervision*, 80 Federal Probation J. 28, 30-31 (Sept. 2016), <http://www.uscourts.gov/statistics-reports/publications/federal-probation-journal/federal-probation-journal-september-2016>.
- B. A study of persons convicted of child sexual abuse and who desisted from further crimes, found that "individuals who desisted from reoffending did more than address their sexual offense-related needs; they appeared to achieve some degree of lifestyle stability and this highlights the importance of social reintegration among this population." Michael Lasher & Robert McGrath,

*Desistance from Sexual and Other Violent Offending Among Child Sexual Abusers*, 20 *Crim. Justice & Behav.* 1 (2016).

- C. "The research indicates that treatment in the community is more effective than treatment in institutions. Although there may be obstacles to changing existing exclusionary policies; evidence demonstrates that sex offenders, both adolescent and adult, can be treated successfully in community settings." Bitna Kim et al., *Sex Offender Recidivism Revisited: Review of Recent Meta-analyses on the Effects of Sex Offender Treatment*, 17 *Trauma, Violence, and Abuse* 1, 11 (2016).
- D. A validation study of the Child Pornography Offender Risk Tool (CPORT) found different recidivism rates for persons convicted of no-contact child pornography offenses (4.9% recidivism rate) and those convicted of contact offenses (21.1% recidivism rate). Angela Weke, et al., *A Validation Study of the Child Pornography Offender Risk Tool (CPORT)*, *Sexual Abuse: A J. of Research and Treatment* (Mar. 29, 2018) (published on line).

#### **XXXIV. United States Sentencing Commission**

- A. USSC, *2017 Sourcebook of Federal Sentencing Statistics*, <http://www.ussc.gov/research/sourcebook-2017>
- B. Archive of Earlier Sourcebooks, <http://www.ussc.gov/research/sourcebook/archive>
- C. USSC, Interactive Sourcebook of Federal Sentencing Statistics, <http://isb.ussc.gov/Login>.
- D. Data Reports by Guideline, <https://www.ussc.gov/research/data-reports/guideline>
- E. USSC, *Quick Facts*, <http://www.ussc.gov/research/quick-facts>.
  - 1. Immigration
    - a. Illegal Reentry (March 2017)
    - b. Alien Smuggling (March 2017)
  - 2. Economic Crime
    - a. Health Care Fraud (March 2017)
    - b. Government Benefits Fraud (March 2017)
    - c. Credit Card Fraud (March 2017)
    - d. Mortgage Fraud (March 2017)
    - e. Securities & Investment Fraud (March 2017)
    - f. Theft, Property Destruction, & Fraud (August 2016)
    - g. Tax Fraud (August 2016)
    - h. Copyright & Trademark Infringement (August 2016)

- i. Counterfeiting (August 2016)
- 3. Offender Groups
  - a. Offenders in the Federal Bureau of Prisons (October 2016)
  - b. Organizational Offenders (October 2016)
  - c. Career Offenders (July 2016)
  - d. Native Americans in the Federal Offender Population (July 2016)
  - e. Women in the Federal Offender Population (July 2014)
- 4. Firearms
  - a. Section 924(c) Offenders (July 2016)
  - Felon in Possession of a Firearm (July 2016)
- 5. Drugs
  - a. Drug Trafficking (May 2016)
  - b. Powder Cocaine Trafficking (June 2016)
  - c. Crack Cocaine Trafficking (June 2016)
  - d. Marijuana Trafficking (June 2016)
  - e. Methamphetamine Trafficking (June 2016)
  - f. Heroin Trafficking (June 2016)
  - g. Oxycodone Trafficking (June 2016)
- 6. Sentencing Issues
  - a. Mandatory Minimum Penalties (May 2016)
- 7. Other Chapter Two Offenses
  - a. Robbery Offenses (August 2016)
  - b. National Defense (December 2013)
- 8. Archives of other Quick Facts on Drugs, Immigration, Economic Crimes, Firearms, Offender Groups, Robbery, <http://www.ussc.gov/research/quick-facts/quick-facts-archives>.
- F. Data Reports on Federal Sentencing Practices by geography, guideline quarter, prison impact, retroactivity <http://www.ussc.gov/topic/data-reports>.
- G. Research Reports, <http://www.ussc.gov/topic/research-reports>, including
  - a. Criminal History and Recidivism of Federal Offenders (March 2017)
  - b. Recidivism Among Federal Drug Trafficking Offenders (Feb. 2017)
  - c. Recidivism Among Federal Offenders: A Comprehensive Overview (March 2016)

- d. Simple Possession of Drugs in the Federal Criminal Justice System (Sept. 2016)
- H. Reports to the Congress, <http://www.ussc.gov/research/reports-congress>, including
  - a. Career Offender Enhancements (July 2016)
  - b. Mandatory Minimum Penalties in the Federal Criminal Justice System (Oct. 2011)
  - c. Federal Child Pornography Offenses (Dec. 2012)
- I. USSC, *Results of Survey of United States District Judges January 2010 through March 2010* (June 2010), [http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-projects-and-surveys/surveys/20100608\\_Judge\\_Survey.pdf](http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-projects-and-surveys/surveys/20100608_Judge_Survey.pdf).
- J. USSC, *Results of 2014 Survey of United States District Judges: Modification and Revocation of Probation and Supervised Release* (Feb. 2015), [http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-projects-and-surveys/surveys/20150225\\_Judges\\_Survey.pdf](http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-projects-and-surveys/surveys/20150225_Judges_Survey.pdf).
- K. Other publications on multiple topics, <http://www.ussc.gov/research/topical-index-publications>

#### **XXXV. Internet Resources**

- A. General
  - 1. Developing Mitigation Evidence - [https://moe.fd.org/Dev\\_Mitigation.php](https://moe.fd.org/Dev_Mitigation.php) (provides information about “identifying, understanding, and persuasively presenting all mitigating evidence and advocating for the lowest possible sentence”).
  - 2. The Collateral Consequences Resource Center - <http://ccresourcecenter.org> (provides news and commentary about collateral consequences of conviction)
  - 3. The Annie E. Casey Foundation - <http://www.aecf.org> (publishes data on state trends in child well-being, economic well-being, education, health, family, and community)
  - 4. National Academies Press - <https://www.nap.edu> (includes research on behavioral and social sciences, education, and health)
  - 5. Journalist’s Resource - Harvard Kennedy School - <https://journalistsresource.org> (lists research articles on many different topics, including criminal justice, immigration, education, economy, sex offenses)
  - 6. Urban Institute - <http://www.urban.org/research> (economic and social policy research)
  - 7. The Sentencing Project - [www.sentencingproject.org](http://www.sentencingproject.org) (criminal justice policy analysis; focus on over-incarceration and alternative sentencing)
  - 8. Congressional Research Service - <http://www.loc.gov/crsinfo> (provides policy and legal analysis to Congress)
  - 9. Justice Policy Institute – [www.justicepolicy.org](http://www.justicepolicy.org) (research on criminal justice, drug policy, fiscal policy, juvenile justice, social investments, racial disparities)

10. Vera Institute of Justice - <https://www.vera.org> (research and information on securing equal justice, ending mass incarceration, and strengthening families and communities)
  11. National Academies of Sciences, Engineering, Medicine: Division of Behavioral and Social Sciences and Education - <http://sites.nationalacademies.org/DBASSE/index.htm> (provides evidence-based information on social and behavioral sciences; searchable and subscription based)
  12. Office of Justice Programs, National Institute of Justice - <https://www.nij.gov/Pages/welcome.aspx> (topics include corrections, courts, crime and prevention, drugs and crime, forensic sciences, law enforcement, tribal crime and justice, victims and victimization)
  13. National Criminal Justice Reference Service - <https://www.ncjrs.gov> (offers justice and drug-related information on crime, victim assistance, and public safety)
  14. Bureau of Justice Statistics - <https://www.bjs.gov> (contains data on a multitude of topics related to the criminal justice system)
  15. Justice Center, The Council of State Governments: Collaborative Approaches to Public Safety - <https://csgjusticecenter.org/jc/publications/> (includes publications from numerous non-profit and government sources on a wide variety of topics related to criminal justice)
  16. Oxford Research Encyclopedia of Criminology and Criminal Justice, <http://criminology.oxfordre.com/> (includes free access to publications from experts on a wide variety of criminal justice topics)
- B. Sex Offenses
1. Sex Offense Policy and Research - <http://www.sopresearch.org/researchhighlights> (scholarship on sexual offending and victimization)
- C. Bias
1. Kirwan Institute for the Study of Race and Ethnicity - <http://kirwaninstitute.osu.edu> (research on housing, education, jobs, transportation, health, and criminal justice aimed at racially equitable policy)
- D. Child Development
1. Center on the Developing Child, Harvard University - <http://developingchild.harvard.edu> (scientific research on early childhood)
  2. Child Welfare League of America - <https://www.cwla.org> (child welfare organization that focuses on policies, programs and practices related to child maltreatment and foster care)
- E. Treatment for Criminal Thinking
1. Criminal Thinking Therapy Resource Site - [criminalthinking.net](http://criminalthinking.net) (includes a list of articles and websites relevant to cognitive-behavioral therapy as a treatment approach for criminal thinking).

#### F. Medical Issues

1. PubMed.gov - <https://www.ncbi.nlm.nih.gov/pubmed> (searchable database with over 27 million citations to articles in scientific and medical journals, including links to full text articles; good for reaching mental health and medical information)
2. Medscape - <http://www.medscape.com> (medical news)
3. U.S. National Library of Medicine – <https://medlineplus.gov> (information on health, wellness, disorders, and conditions; prescription drugs)

#### G. Mental health

1. Psychiatric Times - <http://www.psychiatrictimes.com/> (free subscription to obtain information on developments in psychiatry)
2. International Society for Traumatic Stress Studies - <https://www.istss.org/home.aspx> (information on assessing and treating trauma and the scope and consequences of traumatic exposure)
3. National Alliance on Mental Illness- <https://www.nami.org> (information on signs of mental illness, mental health conditions, statistical data on prevalence of mental illness among various populations, treatment, and research)
4. PTSD: National Center for PTSD - <https://www.ptsd.va.gov/index.asp> (research and education on trauma and PTSD)
5. National Center on Criminal Justice & Disability - <https://www.thearc.org/NCCJD> (provides training for criminal justice professionals on the challenges people with intellectual and developmental disabilities face in the criminal justice system; contains state specific data on resources, laws affecting people with I/DD, and other relevant information on people with I/DD).

#### H. Correctional Health Care

1. Essentials of Correctional Nursing - <https://essentialsofcorrectionalnursing.com> (over 200 blog posts discussing the unique challenges of correctional nursing practices).

#### I. Parental and Family Incarceration

1. Rutgers University, The National Resource Center on Children and Families of the Incarcerated, <https://nrccfi.camden.rutgers.edu> (this site is a general resource for those working with families impacted by incarceration)

#### J. Life Expectancy

1. Life Expectancy Can Vary by 20 years Based on Where in the U.S. You Live, <http://time.com/4770631/longevity-map> (an interactive map of life expectancy that tracks mortality rates by location).

#### K. Income and Debt

1. Debt in America: An Interactive Map, <https://apps.urban.org/features/debt-interactive-map> (provides information on how debt affects people across the United States with an interactive map to look at state or county information)
2. Nine Charts about Wealth Inequality in America, [http://apps.urban.org/features/wealth-inequality-charts/?cm\\_ven=ExactTarget&cm\\_cat=UIU+-+](http://apps.urban.org/features/wealth-inequality-charts/?cm_ven=ExactTarget&cm_cat=UIU+-+) (“nine charts illustrate how income inequality, earnings gaps, homeownership rates, retirement savings, student loan debt, and lopsided asset-building subsidies have contributed to these growing wealth disparities”).