

IMPROVING OUTCOMES FOR KIDS & FAMILIES

Beyond Predictive Analytics & Data Sharing

Policy Brief by **IN EQUALITY / Stop the Cradle to Prison Algorithm Coalition**

OVERVIEW

Communities, families, and those who work with youth have long known that **strengths-based, front-end supports are exponentially more effective than criminal justice responses**, which are expensive, ineffective, and socially destructive with life-long consequences. Before local government entities in Ramsey County and the City of St. Paul explore the uncertain waters of big data in the name of efficiency, they have an inherent responsibility to answer important ethical, design and oversight questions in light of histories of systemic overreach and over-punishment, in order to safeguard against potential future harms.

Despite community concerns and without public engagement, the City of St. Paul, Ramsey County, and St. Paul Public Schools have entered into a broad Joint Powers Agreement (JPA)¹ to **“implement a collaborative system of information collection and sharing and develop and apply predictive analytics to that information.”** The legal agreement expands the ability of the participating agencies to collect, share, and use cross-linked identifiable data about children and families²: “Non-District parties may receive information that would not otherwise be available to them.”³ In a joint presentation to the school board, public school and county attorney staff proposed a plan to **apply predictive analytics to that data to create an “alert system” to intervene for children who are flagged as high risk for future juvenile justice system contact.**

The collection, use, sharing and interpretation of sensitive children’s and family data will be governed by a board that structurally **excludes the participation and oversight of communities, families, or advocates.** The data-sharing JPA outlines a governing board that names elected officials including: Mayor of St. Paul, City Council members, and the County Attorney, as well as the chief of St. Paul Police Department. Communities have expressed distrust with the scope and stated intention of the data-sharing initiative and predictive analytics, including formal letters from: **The Coalition to Stop the Cradle to Prison Algorithm, NAACP St. Paul, Black Ministerial Alliance, InEquality, and the St. Paul Federation of Teachers.** **This brief explores concerns with the excessive data sharing authority outlined in the JPA and provides community recommendations for moving forward.**

¹ The JPA has been signed by: City of Saint Paul; Ramsey County, through its Social Services Dept, Community Corrections Dept, County Attorney’s Office, Sheriff’s Office and Public Health Dept; Northeast Metro 916 Intermediate School District, and Saint Paul Public Schools Independent School District 625.

² Participating agencies will not have automatic access to that information, but, the agreement states that access will be expanded, without identifying any prohibitions against who will see that information or how it will be used.

³ JPA, pg 2

KEY CONCERNS

Any analysis to predict interaction with criminal justice systems will likely draw upon data that reflect bias in decision making about children, and cloak that data in a veneer of “scientific authority.”

The JPA makes no commitment to reducing systems’ disproportionate harm on communities of color, or accounting for bias and history reflected in data inputs.

Assigning risk scores to predict stigmatized human behavior is not a neutral intervention. Risk becomes interpreted as “threat” when applied to children of color.

The board governing the data sharing platform excludes community oversight, and includes elected officials and law enforcement, making children’s data vulnerable to criminalizing political agendas.

Families and children will not trust or access services that are triggered when children are flagged with stigmatizing risk scores.

The proposed data sharing platform and legal agreement are not aligned with best practices, allowing for almost every possible scenario involving the use and sharing of children’s sensitive, identifiable data between agencies.

Biased inputs + biased algorithms = biased outcomes

Communities of color experience staggering disparities and negative outcomes in Ramsey County, particularly in the areas of school suspensions and discipline, policing and arrests, out of home placements in criminal justice facilities, and removals through the child welfare system. **Yet the data-sharing JPA makes no commitment to reducing systems' disproportionate harm on communities of color, and instead would scrutinize individual children to reduce "delinquent behavior by youth in communities and in schools."** Using data from these institutions to predict individual children's behavior will likely serve to further magnify those disparities in scores that over-identify children of color as "risks." **Communities fear the predictions will essentially operate like racial profiling of children predicted to engage in crime.**

Efforts to reduce racial bias in human decision-making move away from individual discretion, and increasingly rely on tools like risk assessments and predictive algorithms. However, **these tools can hard-wire the very biases they are trying to correct** by relying on data that reflects both subjective human bias as well as systemic oppression, and using algorithms that reflect unexamined assumptions and historic social judgements. And these tools often carry the veneer of authority through "science" and "objectivity," while obscuring actual data inputs. Any tool to predict interaction with criminal justice systems will likely draw upon data that reflect bias in decision making about children. For example, black youth, particularly boys, are perceived to be less innocent and youthful than white peers. **Saint Paul Public Schools have wide disparities in suspensions. Recent analysis shows that black youth in Ramsey County are 4.44 times more likely to be arrested than white youth, and 3.54 more likely to be admitted to detention⁷.**

Predicting behavior: Risk becomes "threat" when applied to children of color

Proponents of the data-sharing JPA are quick to argue that the intention is to apply a public health prevention model to facilitate the efficient and targeted delivery of services to youth. If the legal agreement were structured to facilitate collaboration around services rather than sharing data, communities may have far fewer concerns. Early language to promote the data sharing agreement, however, described the intention to **create an "alert system" to "flag" children at risk of involvement with criminal justice systems.** The agencies who entered into the JPA ignored important questions about the ethics of applying a predictive risk model to human behavior, and reducing children to social "risks."

Assigning risk scores to predict stigmatized human behavior (e.g., delinquency or developmentally appropriate juvenile law breaking) is not a neutral intervention. **Defining individual "risk" can mean different things to different agencies and frequently results in perceptions of threat when applied to people of color in a traditional public safety lens.** According to legal scholar Andrew Guthrie Ferguson: "Once a person has a high score, this knowledge will color criminal suspicion and increase perceived danger, resulting in more frequent and more aggressive interactions with people the algorithm deems "high risk."⁸

Minnesota's racial disparities are higher than national numbers, with black students in the state eight times more likely to be suspended or expelled than their white peers, and American Indian students 10 times more likely⁵. St. Paul Public School district is among the dozens identified by the Minnesota Department of Human Rights with high rates of disparities, and has now entered into a "collaboration agreement." One third of classroom exclusions are for minor and subjective behaviors like eye rolling or talking back⁶. If the JPA data relies on data from subjective suspensions, students of color and students with disabilities will inevitably be identified as higher risk.

The Chicago Police Department adopted a predictive policing approach, the Strategic Subject List, to identify individuals at risk of gun violence as victims or perpetrators. The list does not distinguish whether the risk is to be victimized or to offend, and was intended to help reduce violence and increase the delivery of interventions. But a RAND analysis found that the list impacted police interactions, resulting in more surveillance and arrests of those on the list, and rarely resulted in community-based interventions⁹. The RAND study also found that, "Individuals on the SSL are not more or less likely to become a victim of a homicide or shooting than the comparison group, and this is further supported by city-level analysis."¹⁰

4 JPA, Section 4, Purpose, pg 4

5 Anthony Lonetree, "[Minnesota school districts grapple with discipline disparities](#)," Star Tribune, Sept. 28, 2018

6 Josh Verges, "[St. Paul schools to scrutinize student suspensions under human rights agreement](#)," Pioneer Press, June 29, 2018

7 Racial Disparities of Black Youth in Ramsey County, RRI, 2016

8 Andrew Guthrie Ferguson, "[Police Are Using Algorithms to Tell if You Are a Threat](#)," Time, October 3, 2017

9 "[Predictions put into practice: a quasi-experimental evaluation of Chicago's predictive policing](#)," RAND

10 Ibid. Note that CPD has now changed the algorithm.

Big data and predictive analytics: Expensive and inaccurate

Other jurisdictions have found that the data and lists generated by predictive tools have been so broad and inaccurate as to be effectively meaningless. **Children’s privacy protections could be sacrificed, in other words, in pursuit of an tool that won’t work.** Illinois Department of Children and Family Services dropped the predictive data mining program because it was unreliable¹¹. Los Angeles abandoned a pilot predictive analytics model which promised to overwhelm the system with false positives¹². Closer to home, the University of Minnesota used MN-Link and administrative data in an effort to screen youth at higher risk of violent criminalization. Despite access to multiple and carefully managed data sets, the study was not able to feasibly predict association with violent crime¹³.

A widely-publicized analysis in ProPublica has generated serious debate about the fairness of popular risk assessment tools, which ProPublica found to be more likely to incorrectly rate black defendants as “high risk” while falsely identifying white defendants as “low-risk.”¹⁴ The assessment, in other words, overpredicted the risk of recidivism for black defendants, and underpredicted the risk of recidivism for white defendants. These “classification” errors disproportionately impact black defendants, and can result in harsher treatment. And a subsequent study of the popular COMPAS risk assessment suggests a more fundamental flaw: **the risk assessment software “is no more accurate or fair than predictions made by people with little or no criminal justice expertise.”**¹⁵

Interlinked data platform: Lacks community oversight, vulnerable to criminalizing political agendas

The language of the JPA allows large-scale data **sharing of children’s sensitive and identifiable data for undefined opportunities.** One purpose articulated by the agreement is to identify children at risk of contact with the juvenile justice system. But the agreement does not outline parameters for who can access the information, how it might be used, or who would interpret information generated from the data. The legal structure of the agreement **prohibits community participation in the oversight** or governance of the data use, and is instead governed by a board that includes elected officials and law enforcement, thereby making the project vulnerable to changing political agendas.

For example, if the county were to elect a tough-on crime County Attorney, that prosecutor would have a say in how the data is used, without structural oversight from community or advocates. The very existence of a real-time, interlinked platform with identifiable data could create incentives for the governing agencies and other law enforcement like the county Sheriff to access and use that data, particularly in response to public hysteria. The current political climate has criminalized migrants and refugees, and embraces failed tough-on-crime reactions that will disproportionately impact all communities of color. What would prevent the governing agencies from accessing this data in reaction to hyper-politicized and racially biased hysteria in the name of “safety” for preventive crack downs or targeted police suppression?

Ramsey County and the City of St. Paul have been in conversation about adopting a Gang Violence Initiative (GVI) that attempts to identify individuals at risk of gun violence for interventions that involve both police supervision and community services. Typically, GVI has relied on youth who are already justice-involved. Should there be an interest in expanding the parameters, however, there is nothing in the JPA that would prohibit that program from accessing broader data for youth not yet justice-involved.

A common factor contributing to the use of confinement for youth is a history of failed programs and services, many that were often mismatched and not elective in the first place. That data may be tracked as a child’s risk instead of the failed program, but community would not govern how that data is interpreted.

Collaboration vs. data sharing: Look to best practices, not excessive legal powers

Systems frequently look for ways to improve information sharing and coordination for the purposes of efficient individual case management, and improved policy and program development, implementation, and evaluation. Coordination and data sharing, however, must always **prioritize the rights and interests of families and youth.** The broad legal authority outlined in the agreement of the data-sharing JPA, however, does not meet the best-practice standards.

¹¹ [“David Jackson and Gary Marx, Data mining program designed to predict child abuse proves unreliable, DCFS says,” Chicago Tribune, December 6, 2017](#)

¹² [“Judge Michael Nash, Examination of using structured decision making and predictive analytics in assessing safety and risk in child welfare,” May 4, 2017](#)

¹³ Center for Advanced Studies in Child Welfare, “Exploration of a screening tool for predicting increased risk of young people in Minneapolis becoming victims of violent crime,” Minn-Link Research Brief, No. 26, Fall 2015

¹⁴ Julia Angwin, et al, “Machine Bias: There’s software used across the country to predict future criminals. And it’s biased against blacks,” ProPublica, May 23, 2016.

¹⁵ Julia Dressel and Hany Farid, “The accuracy, fairness, and limits of predicting recidivism,” Science Advances, January 17, 2018.

¹⁶ [Improving outcomes for youth in the juvenile justice system through responsible information sharing](#), Principles for Category One, Information Sharing Toolkit, www.infosharingtoolkit.org.

Best-practice models presume non-disclosure of children's identifiable information. In instances where limited agreements are made to share information for case management, the **individual must authorize that sharing through an informed consent process**¹⁴. The individual receiving services should ultimately control the decision to share information across agencies. Model agreements to share limited data for service coordination specify their purposes, with clear prohibitions against other applications and access to that data, and detailed safeguards to prevent accidental sharing. **The JPA language, however, ignores this presumption, and allows information sharing without individual consent.**

Coordinating data across multiple agencies for purposes of program research, development, analysis, and accountability involves different protections and presumptions. For purposes of system accountability, agencies may share information to determine if a particular diversion program is more likely to be offered to white children than black children. The data could also be used to evaluate if a particular intervention is achieving expected outcomes, and if not, raise questions as to how the agency should improve that program to meet the needs of the population it serves. In such situations, the **data is presumed to be de-identified**¹⁷, to protect children and families.

The JPA, in contrast, is set up to allow the sharing of linked, identifiable information for many types of unspecified purposes: "determining and coordinating the effective and efficient delivery of services to children and their families, policy development, planning, legislative activities, facilitating future audits... reducing delinquent behavior by youth... reducing youth contact with the juvenile justice system."¹⁸ **The legal agreement is not aligned with best practices, allowing for almost every possible scenario involving the use and sharing of children's sensitive, identifiable data between agencies.**

¹⁷ Ibid, Principles for Category Three, www.infosharingtoolkit.org

¹⁸ JPA, Section 4, Purpose, pg 4

ACKNOWLEDGEMENTS: This policy brief was written with input from many individuals and organizations in the Stop The Cradle to Prison Algorithm Coalition, and with contributions from Laura Jones; Laura LaBlanc of InEquality; Marika Pfefferkorn of the Twin Cities Innovation Alliance; Michelle Alberg; and Carolyn Szczepanski. The brief is dedicated in caring memory of Ed Owens, a founding coalition member who used his time, energy, and heart to fight for the betterment of youth and community.

Conclusion + Recommendations

The City, County and St. Paul Public Schools have indicated a revised implementation timeline to allow for more community input. As the process moves forward under the shadow of the data-sharing legal agreement, the Coalition to Stop the Cradle to Prison Algorithm offers the following recommendations:

- + **Dissolve the over-broad data-sharing Joint Powers Agreement, which includes law enforcement and structurally excludes community participation in the new legal entity**
- + **Prior to further engagement, acknowledge and repair harm from misrepresenting previous community engagements that never vetted this data sharing project**
- + **Involve families and communities as co-partners in the planning and implementation of services -- research shows that best outcomes involve networks of caring adults from families and communities, not just program intervention**
- + **Invest in strengths-based, culturally appropriate programming for children and families, not resource-intensive surveillance tools**
- + **Root agency coordination in concrete collaboration on identified challenges, not overly expansive legal agreements**
- + **Focus on building strengths and wellness, not predicting individual children as societal risks**
- + **Increase data transparency and accountability for all systems, including: school discipline, police stops, arrests, citations, diversion, prosecutorial charging, pleas, dispositions, and child welfare removal data**
- + **Conduct racial impact assessments for major new initiatives, and commit to reducing disproportionate negative system impacts on children of color**
- + **Include legal advocates for children, civil rights and privacy for any new legal agreements related to children's data**
- + **Always allow children and families to have informed consent over the sharing of identifiable information between agencies**

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