



Family Surveillance by Algorithm

The Rapidly Spreading Tools Few Have Heard Of

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Our country's latest reckoning with structural racism has involved critical reflection on the role of the criminal justice system, education policy, and housing practices in perpetuating racial inequity. But another area long overdue¹ for collective reexamination is the child welfare system and the algorithms working behind the scenes. That's why the ACLU has conducted a nationwide survey to learn more about these tools.

CHILD WELFARE AS DISPARATE POLICING

Women and children who are Indigenous,² Black,³ or experiencing poverty⁴ are disproportionately placed under child welfare's scrutiny.⁵ Once there, Indigenous⁶ and Black⁷ families fare worse than their white counterparts at nearly every critical step. These disparities are partly the legacy of past social practices and government policies that sought to tear apart Indigenous⁸ and Black⁹ families. But the disparities are also the result of the continued policing of women in recent years through child welfare practices, public benefits laws,¹⁰ the failed war on drugs,¹¹ and other criminal justice policies¹² that punish women who fail to conform to particular conceptions of "fit mothers."¹³

As Professor Dorothy Roberts wrote in 2002, it is against this backdrop that the child welfare system's "[v]ague definitions of neglect, unbridled discretion, and lack of training form a dangerous

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combination in the hands of caseworkers charged with deciding the fate of families.”¹⁴ Nearly two decades later, the definition of “neglect” has not been meaningfully narrowed.¹⁵ Statistics and first-hand accounts confirm that this amorphous standard gives state agencies considerable leeway to justify child welfare involvement. According to the most recent federal compilation of state data, 61 percent of all cases in which agencies substantiated maltreatment allegations involved only neglect and no other forms of mistreatment.¹⁶

The faces of these neglect findings include American Idol finalist Syesha Mercado, who was deemed a neglectful mother after her 13-month-old son had difficulty transitioning from breast milk to formula and was refusing to eat.¹⁷ Syesha took her son to the hospital where, instead of providing assistance, a state-contracted “child abuse pediatrician” with a known history of wrongfully reporting medical conditions as child abuse called child welfare authorities and accused Syesha of neglect.¹⁸ In August 2021, Syesha’s nightmare continued when she was pulled over by local police who seized her days-old newborn Ast because Syesha had not reported her birth to authorities while she was still fighting to regain custody of her son. Syesha was reunited with Ast after much media attention and public outrage, but continues to fight for the return of Amen’Ra.

Meanwhile, Erin Yellow Robe, a member of the Crow Creek Sioux Tribe, fought for over a year and a half to be reunited with her four children. Erin’s children were placed in foster care as the result of an unsubstantiated rumor that she had been misusing prescription medication. And, despite the requirements of the federal Indian Child Welfare Act and the willingness of relatives and tribal members to take in her children, authorities placed them with white foster parents.¹⁹ Then there’s Samantha Johnson, who lost her housing when her college financial aid ran out and, with nowhere else to go, ultimately moved her 9-year-old daughter and herself into a \$50 per night hotel, only to find herself the subject of a child welfare investigation based on allegations that she used drugs and was not providing her daughter with sufficient housing.²⁰ As one service provider explained, the child welfare system treats structural failings such as inadequate healthcare, housing insecurity, underemployment, and unlivable minimum wages as the personal flaws and moral failings of parents and sets out to “fix” them.²¹ For Black and Indigenous families, the child welfare system operates much more as a family regulation system that lasts for years, and potentially a lifetime.²²

TURNING TO PREDICTIVE ANALYTICS FOR SOLUTIONS

Many child welfare agencies have begun turning to risk assessment tools for reasons ranging from wanting the ability to predict which children are at higher risk for maltreatment to improving agency operations.²³ Though some jurisdictions abandoned these early forays,²⁴ Allegheny County, Pennsylvania has been using the Allegheny Family Screening Tool (AFST) since 2016.²⁵ In the simplest sense, the AFST generates a risk score for complaints received through the county’s child maltreatment hotline by looking at whether certain characteristics of the agency’s past cases are also present in the complaint allegations. Key among these characteristics are family member demographics and prior involvement with the county’s child welfare, jail, juvenile probation, and behavioral health systems.²⁶ Intake staff then use this risk score as an aide in deciding whether to follow up on a complaint with a home visit or a formal investigation, or to dismiss it outright.

Like their criminal justice analogues,²⁷ however, child welfare risk assessment tools do not predict the future. Instead, they measure the probability that a certain event might occur, which serves as a proxy for the thing they are trying to guard against. For example, in the criminal justice system, a recidivism risk assessment tool measures the odds that a person will be *arrested* in the future,²⁸ not the odds that they will actually commit a crime.²⁹ Being under arrest doesn’t necessarily mean you did something illegal. Similarly, a child’s removal from the home by a child welfare agency, which is often the target of a prediction model, doesn’t necessarily mean a child was in fact maltreated. The occurrence of these proxy events often depends on the actions of decision-makers, like the child welfare agency caseworker or a mandatory reporter such as a hospital employee – people who are part of the systems that created the race-, gender-, and poverty-based disparities that these tools are supposed to remedy.

Given the sparse reporting and public discussion around child welfare agencies’ use of predictive analytics, we examined the extent to which U.S. jurisdictions are using one category of these tools: models that systematically use data collected by a jurisdiction’s public agencies to attempt to predict the likelihood that a child in a given situation or location will be maltreated in the future. Specifically, we surveyed the use of these tools in all 50 states, D.C, and the U.S. territories through a review of news articles, predictive analytics tool websites, materials from public records requests, official child welfare agency reports, and responses to inquiries to ACLU affiliates. (See the methodology note on page 7 for more information.)

We found the following: Local or state child welfare agencies in at least 26 states and D.C. have considered using these predictive analytics tools as part of their family regulation system. Of these, jurisdictions in at least 11 states are currently using them. (See the National Survey Table at the end of this paper for more information.) Large jurisdictions such as New York City,³⁰

Oregon,³¹ and Allegheny County³² have been using predictive analytics for several years now. Some states, such as Oregon³³ and Pennsylvania,³⁴ are exploring from among multiple predictive analytics tools. Some of the tools currently in use, such as the AFST, are used when deciding whether to refer a complaint for further agency action, while others are used to flag open cases for closer review because the tool deems them to be higher-risk scenarios.

THE FLAWS OF PREDICTIVE ANALYTICS

Despite the growing popularity of these tools, few families or advocates have heard about them, much less provided meaningful input into their formulation, implementation, or oversight.³⁵ Nor are families informed when and how a tool’s assessment influenced an agency’s decision to investigate or take other action on allegations of abuse or neglect. Yet, the choices made while designing the tool and deciding how to use it are not just about writing proper computer code or maximizing statistical accuracy. They also include countless policy decisions and value judgments, any or all of which can impact whether and how a tool promotes “fairness” or reduces racial disproportionality.³⁶

Consider that, at the most general level, to create a predictive tool, someone must come up with a list of characteristics (a.k.a. variables) that will then be checked against the jurisdiction’s historical case files to see which ones are associated with different types of outcomes (e.g., future removal of child from their home). But who decides what variables should be looked at and what outcomes should be considered?

Furthermore, similar to the tools we have seen in the criminal legal system, any tool built from a jurisdiction’s historical data runs the risk of perpetuating and exacerbating, rather than ameliorating, the biases that are embedded in that data.³⁷ Take for instance the unavoidable incorporation of structural discrimination when tools use proxies for maltreatment like those noted above.³⁸ Historically over-regulated and over-separated communities may get caught in a feedback loop that quickly magnifies the biases in these systems. Even with fancy – and expensive – predictive analytics, the family regulation system risks surveilling certain communities simply because they have surveilled people like them before. Or, as one legal scholar memorably framed it, “bias in, bias out.”³⁹

If the variables selected in the end will deem certain people inherently risky because they match the “profile” of people disproportionately targeted by the agency in recent years, should those people be told how the tool “ranked” them and given the chance to modify or explain their situation?

Who decides what “high risk” means and how do we decide what is an effective response to a “high-risk” situation? When a caseworker sees a “high” risk score for a Black person, do they respond in the same way as they would for a white person? Are the tools preventing people with “low” risk scores from being dragged into the system, or are they just increasing the number of families under scrutiny? Is it possible for parents to challenge risk scores? Are there alternative uses of predictive analytics, perhaps ones trained on child welfare agency performance or success of service programs in reuniting families and not on family behavior, that could take advantage of data but avoid civil liberty intrusions?

WHAT THE ACLU IS DOING

Ultimately, we must ask whether these tools are the best way to spend hundreds of thousands, if not millions of dollars, when such funds are urgently needed to help families avoid the crises that lead to abuse and neglect allegations. The time for interrogating these tools is now, before they become entrenched as they have in the criminal justice system.⁴⁰ Information about the data used to create a predictive algorithm, the policy choices embedded in the tool, and the tool’s impact system-wide and in individual cases are some of the things that should be disclosed to the public both before a tool is adopted and throughout its use. In addition to such transparency, jurisdictions need to make available opportunities to question and contest a tool’s implementation or application in a specific instance if our policymakers and elected officials are to be held accountable for the rules and penalties enforced through such tools.

In this vein, the ACLU has requested data from Allegheny County and other jurisdictions to independently evaluate the design and impact of their predictive analytics tools and any measures designers or jurisdictions may be taking to address fairness, due process, and civil liberty concerns. As of September 2021, Allegheny County and the AFST designers have expressed willingness to share information and discuss the tool’s operation and results.

In the meantime, you can learn whether your local government is considering or using predictive analytics tools as part of its family regulation system by reviewing the map and the National Survey Table below. If you have additional information you’d like to share with the ACLU, we invite you to contact us at womensrights@aclu.org with “[Predictive Analytics & Child Welfare]” in the subject line. It’s time that all of us ask our local policymakers to end the unnecessary and harmful policing of families through the family regulation system.

A few illustrations of the tools we found follow:

Allegheny Family Screening Tool

TO BUILD THE AFST, tool creators looked at how certain characteristics of people involved in the county’s historical investigations across multiple systems — such as a parent’s prior involvement with the criminal legal or child welfare system — related to removal of a child from home within two years of a complaint.⁴¹ When being used, intake staff will enter information about a maltreatment complaint, after which the tool will generate a predicted “risk score” based on whether characteristics correlated to removal within two years are also present in the intake complaint. This tool was profiled in Professor Virginia Eubanks’ 2018 book, *Automating Inequality*.⁴²

Hello Baby

IN 2020, ALLEGHENY COUNTY officials launched a new program called Hello Baby that uses a separate risk assessment tool.⁴³ The tool developed for this program assigns each newborn in the county to one of three risk tiers that is supposed to indicate the likelihood that they will be “removed from home and placed in foster care within the first three years of life.”⁴⁴ The tool was developed using data pulled from the county’s birth, child welfare, prison, court, housing, and juvenile probation records and, as with the AFST, identifies characteristics within this data set that correlate to removal and placement in foster care before the age of three.⁴⁵

Parents of newborns in the highest risk tier are visited by a “family engagement specialist” and a social worker who identify services that the parents need and offer them to the family. If they accept, the Hello Baby team may consult with child welfare personnel while overseeing their use of the services “based on the family’s wishes.”⁴⁶ As the Hello Baby FAQ itself acknowledges, engaging with service providers may increase the risk that the family will be reported to child protective services because the Hello Baby outreach team and other providers are mandated reporters who are “obligated to report any maltreatment they may observe.”⁴⁷ At the present time, the Hello Baby pilot program is still in its early stages so no evaluation of its practical impact has been released.

Geospatial Risk Scoring

A TOOL CREATED BY a company called Predict-Align-Prevent⁴⁸ uses location-based predictive analytics, as opposed to person-based predictive analytics like the AFST or Hello Baby, to estimate where children are “at the greatest risk of maltreatment” based on past child maltreatment locations.⁴⁹ Geographic risk features identified in the pilot city of Richmond included proximity to motels and vacant housing⁵⁰ — both of which correlate to poverty and are indicators of likely underinvestment in low-income communities. Predict-Align-Prevent’s own ethical review warned that the tool might increase stigmatization of neighborhoods, increase neighborhood

surveillance and thereby generate self-reinforcing data, and discriminate against communities overrepresented in the neighborhoods identified as high-risk.⁵¹ Tool designers may present geo-spatial risk scoring as a way to avoid privacy concerns or racial profiling of individuals, but their use in the child welfare context bears many similarities with predictive policing and warrants investigation for comparable equity and civil liberties concerns.⁵²

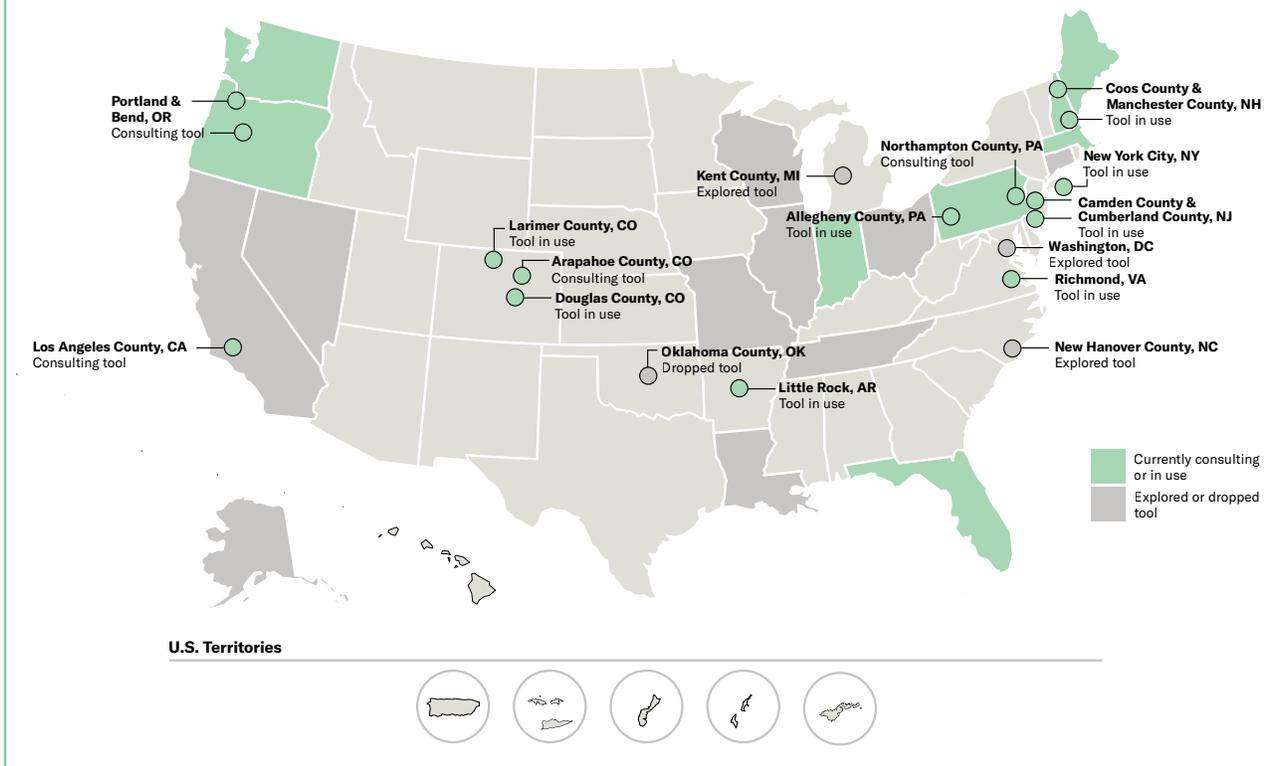
Open Case Risk Scoring

A PRIVATE COMPANY called Eckerd Connects developed the Eckerd Rapid Safety Feedback tool which, according to its website, selects cases from among an agency’s open matters for prioritized review.⁵³ Since its release, however, use of the tool appears to be on the decline. In 2017, Illinois very publicly dropped the tool after “it didn’t seem to be predicting much.”⁵⁴ Alaska, Louisiana, Ohio, and Oklahoma have followed suit, though other states continue to partner with Eckerd. In Florida, “[c]ases selected involve children under the age of four in which there is at least one prior investigation on any member of the household and the current allegation is for substance misuse and family violence threatens harm.”⁵⁵ In New Hampshire, factors include the “number of prior assessments, frequency of assessments, type of allegation, age of the child, and household composition.”⁵⁶

METHODOLOGY NOTE

This survey is based on publicly available sources, including newspaper articles, the websites of predictive analytics tool creators, responses to public records requests filed on MuckRock by Todd Feathers and Beryl Lipton, and when available, the most recent reports submitted by each state’s child welfare agency to the federal Administration for Children and Families (i.e., the 2020-2024 Child and Family Services Plan and either the 2020 or 2021 Annual Progress and Services Report). The findings were supplemented by a questionnaire sent to all 54 state and local ACLU affiliates, to which 47 responded. We individually emailed each affiliate with our initial findings and asked for any additional information or suggested corrections.

Jurisdictions in at least half of U.S. states have considered using predictive analytics in child welfare decisions.



We limited our survey to tools that systematically apply historical data to predict, on an individual or geospatial basis, the likelihood of some outcome in the child welfare system that is considered a proxy for child maltreatment, such as removal from the home in the next few years. The National Survey Table specifies whether a tool is used citywide, countywide, statewide, or territory-wide. Common descriptions of these tools can include: predictive analytics, regression techniques, and supervised machine learning. Tools focused on predicting the risk of emancipation, such as Georgia’s Cold Case Project⁵⁷ or Colorado’s emancipation risk tool,⁵⁸ are not included in this survey.

The Structured Decision Making (SDM) model and the Child and Adolescent Needs and Strengths (CANS) assessment are also not included in this survey as they are primarily based on clinical judgement and policy, even though like predictive analytics tools, they are algorithms and can be evaluated for their impacts on families.⁵⁹ For example, a sample California SDM Family Risk Assessment form asks social workers to take into account whether the primary or secondary caregiver has a criminal arrest history,⁶⁰ which disproportionately impacts Black communities. Nevertheless, these tools are widespread. Thirty-four states and D.C. currently use SDM,⁶¹ while all 50 states use versions of CANS in “child welfare, mental health, juvenile justice, and early intervention applications.”⁶²

Note that this survey also does not include the “Birth Match” system, which automatically flags new births by mothers who have lost parental rights, because Birth Match does not systematically apply historical data. In Michigan, for example, the automated Birth Match system identifies each child born to a parent “who previously had parental rights terminated in a child protective proceeding, caused the death of a child due to confirmed abuse and/or neglect, or had been manually added to the birth match list.”⁶³ Other jurisdictions that have used or are using Birth Match include New York City, Maryland, Minnesota, and Texas.⁶⁴

For jurisdictions marked as using the Predict-Align-Prevent tool, the survey only includes child welfare agencies the company has explicitly identified as those it is working with on its FAQ page.⁶⁵ The survey does not include agencies to whom Predict-Align-Prevent has only formally presented its tool or joined in a consulting role, as described on its news page.⁶⁶ This excluded group of jurisdictions includes Michigan, Florida, Connecticut, and Colorado’s Otero, Bent, and Crowley counties.⁶⁷

Finally, while this survey is the result of our best interpretation of publicly available sources and assessment of ACLU state and local affiliates, we invite individuals who have additional information to contact us at **womensrights@aclu.org** with “[Predictive Analytics & Child Welfare]” in the subject line.

NATIONAL SURVEY TABLE

For purposes of this survey, “tool” is defined as any tool that systematically applies historical data to predict, on an individual or geospatial basis, the likelihood of some outcome in the child welfare system that is treated as a proxy for future child maltreatment. When a jurisdiction falls into multiple categories, the “in use” and “consulting” categories take priority over the “explored” and “dropped” categories for purposes of the map’s coloring.

Key

STAGE OF ADOPTION: In use, Consulting, Explored, Dropped, None found

In use = Tool is currently being used either on a pilot or regular basis.

Consulting = Tool development, adoption, or partnership is being explored by jurisdiction. Does not include general interest, such as one line in a strategic plan that states the agency will “perhaps” use predictive analytics in the future.⁶⁸

Explored = Tool was not implemented after development or no mention of tool in official child welfare agency websites or reports, recent media coverage, or private tool developers’ webpages but discontinuation could not be specifically confirmed.

Dropped = Discontinuation confirmed in a public source such as official child welfare agency website or report or in media coverage.

None found = No mention of the tool found in official child welfare agency websites or reports, recent media coverage, or private tool developers’ webpages.

TOOL TYPES: Open Case Review, Screening, Hot Spot Model, Re-Entry Prediction, Predictive Risk Modeling Supervision Tool, Pre-Reunification Risk Model, Service Termination Conference Model, Reunification Predictive Risk Model, Removal, Service-Matching, Unknown

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
Alabama	Statewide	None found		
Alaska	Statewide	Dropped	Eckerd Rapid Safety Feedback (Open Case Review)	Alaska discontinued its partnership with Eckerd in 2018 “after difficulties in implementation and questionable results of this process were found.” ⁶⁹
Arizona	Statewide	None found		

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
Arkansas	Little Rock	In use	Predict-Align-Prevent (Hot Spot Model)	In 2020, Predict-Align-Prevent issued a report predicting areas in Little Rock, AR where children were “at the greatest risk of maltreatment” based on an analysis of “where child maltreatment events are clustered.” ⁷⁰ The state plans to use the data to develop a “prevention plan.” ⁷¹
California	Los Angeles County	Consulting	Predictive Risk Modeling Supervision Tool	Creators of the Allegheny Family Screening Tool from Auckland University of Technology’s Centre for Social Data Analytics are developing a “child welfare risk stratification model to estimate investigation complexity and risk.” ⁷²
	Los Angeles County	Dropped	SAS (Screening)	In 2017, Los Angeles County announced it ended a pilot with SAS after its screening tool “incorrectly identified an extremely high number (3,829 cases) of false positives (i.e., children who received high risk scores who were not at risk for a negative outcome)” and “lacked transparency about how variables influenced scores.” ⁷³
	Statewide	Explored	USC (Screening)	From 2016-2018, California funded a proof-of-concept study for a predictive risk modeling tool. The state then began hosting county stakeholder conversations to discuss possible implementation. ⁷⁴
Colorado	Douglas and Larimer Counties	In use	Decision Aide (Screening)	In early 2017, Douglas County commissioned creators of the Allegheny Family Screening Tool from Auckland University of Technology’s Centre for Social Data Analytics to develop a prototype screening tool that uses data from child welfare and public welfare eligibility systems to estimate “the likelihood that a child involved in a referral will be subject to a removal within two years of the referral.” By January 2020, the first version of the Douglas County Decision Aide went live. The team has also built and deployed a call screening tool for Larimer County. ⁷⁵
	Arapahoe County	Consulting	Screening	Auckland University of Technology’s Centre for Social Data Analytics is also working on a screening tool for Arapahoe County. ⁷⁶
	Three counties	In use	Eckerd Connects (Re-Entry Prediction)	In 2018, Colorado began piloting a partnership with Eckerd Connects in three counties to identify children “at high risk of re-entry” to foster care and “support caseworkers in case decision making.” ⁷⁷

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
Connecticut	Statewide	Explored	Eckerd Rapid Safety Feedback (Open Case Review)	Connecticut began piloting Eckerd Connects' Eckerd Rapid Safety Feedback tool in October 2016. ⁷⁸ In comparing the 2019 and 2020 Eckerd Rapid Safety Feedback websites, however, it appears that Connecticut stopped working with Eckerd Connects at some point in between. ⁷⁹
Delaware	Statewide	None found ⁸⁰		
District of Columbia	Districtwide	Explored	Predict-Align-Prevent (Hot Spot Model)	In March 2020, Predict-Align-Prevent issued a report presenting results for its analysis predicting "geospatial child maltreatment risk." ⁸¹
Florida	Statewide	In use	Eckerd Rapid Safety Feedback (Open Case Review)	Eckerd Rapid Safety Feedback launched in January 2013 in Hillsborough County and then expanded to Pinellas County and Pasco County before being used statewide. ⁸²
	Statewide	Explored	SAS (Unknown)	Florida also contracted with SAS to "do a research project to predict which families are most likely to cause the death of a child through maltreatment," although the company's tool was never operationalized. ⁸³ To predict child fatalities, SAS looked at records such as criminal histories, behavioral health data, drug and alcohol treatment data, public assistance records, and whether a mother participated in a home visiting program. ⁸⁴
Georgia	Statewide	None found ⁸⁵		
Hawai'i	Statewide	None found ⁸⁶		
Idaho	Statewide	None found ⁸⁷		
Illinois	Statewide	Dropped	Eckerd Rapid Safety Feedback (Open Case Review)	In December 2017, Illinois terminated its contract with Eckerd Connects because the Rapid Safety Feedback tool "didn't seem to be predicting much," overwhelming caseworkers with large numbers of children allegedly "at risk for serious injury or death" during the next two years while failing to flag high-profile child deaths that did occur. ⁸⁸
Indiana	Statewide	In use	Eckerd Rapid Safety Feedback (Open Case Review)	Indiana's adoption of the Eckerd Rapid Safety Feedback model went live in January 2018 and continues to be used. ⁸⁹
Iowa	Statewide	None found ⁹⁰		

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
Kansas	Statewide	None found ⁹¹		
Kentucky	Statewide	None found		
Louisiana	Statewide	Dropped	Eckerd Rapid Safety Feedback (Open Case Review)	Louisiana stopped using Eckerd reviews in September 2019. ⁹²
Maine	Statewide	In use	Eckerd Rapid Safety Feedback (Open Case Review)	Maine began using Eckerd reviews in March 2016 and continues to use the real-time review model. ⁹³
Maryland	Statewide	None found ⁹⁴		
Massachusetts	Statewide	Consulting	Hot Spot Model	Massachusetts' 2020-2024 Child and Family Services Plan states that it "is in the process of securing new software that will allow for heat mapping of the state, identifying 'hot spots' for prevention work that may help predict areas where the likelihood of high rate of child maltreatment may occur." ⁹⁵
	Statewide	Consulting	Pre-Reunification Risk Model	In addition, for the 2022 fiscal year budget, the Massachusetts governor proposed requiring the use of "an assessment of safety and risk using a research or analytical based or actuarial tool" prior to family reunification. ⁹⁶
Michigan	Kent County	Explored	Mindshare (Open Case Review)	A Kent County foster care agency contracted with MindShare to provide "predictive analytics that indicate the projected outcome of a child/family at a given time." ⁹⁷
Minnesota	Statewide	None found ⁹⁸		
Mississippi	Statewide	None found		
Missouri	Statewide	Explored	Predict-Align-Prevent (Hot Spot Model)	Predict-Align-Prevent listed the Missouri Department of Social Services as one of the state agencies it was working with on its webpage in early 2021 but no longer includes it. ⁹⁹
Montana	Statewide	None found		
Nebraska	Statewide	None found ¹⁰⁰		
Nevada	Statewide	Explored	Eckerd Rapid Safety Feedback (Open Case Review)	A 2015 article in The Imprint listed Nevada as one of the states Eckerd was working with at the time, but Nevada no longer appears on Eckerd's website. ¹⁰¹

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
New Hampshire	Statewide	In use	Eckerd Rapid Safety Feedback (Open Case Review)	New Hampshire is currently working with both Eckerd and Predict-Align-Prevent. ¹⁰² The Eckerd tool uses factors like the “number of prior assessments, frequency of assessments, type of allegation, age of the child, and household composition.” ¹⁰³
	Manchester and Coos Counties	In use	Predict-Align-Prevent (Hot Spot Model)	A 2020 report by the Alliance for Strong Families and Communities identifies Manchester and Coos Counties as specific communities within New Hampshire that PAP is working with. ¹⁰⁴
New Jersey	Cumberland and Camden Counties	In use	Predict-Align-Prevent (Hot Spot Model)	New Jersey has contracted with Predict-Align-Prevent and so far launched the tool in Cumberland and Camden Counties. ¹⁰⁵
New Mexico	Statewide	None found ¹⁰⁶		
New York	New York City	In use	Severe Harm Predictive Model (Open Case Review)	New York City’s 2020 algorithmic tool directory identifies two algorithmic tools in use by the city’s Administration for Children’s Services (ACS). The first one supports selection of cases “involving children with the highest likelihood to experience future severe harm,” defined as “substantiated allegations of physical or sex abuse in the following 18 months” for review by the ACS Quality Assurance unit. If the unit “identifies gaps in documentation or practice, the field office conducting the investigation is notified of these gaps so that they are addressed.” ¹⁰⁷
		In use	Service Termination Conference Model	The second tool prioritizes cases whose service termination conferences will be facilitated by ACS rather than a prevention program provider. ¹⁰⁸
North Carolina	New Hanover County	Explored	SAS (Open Case Review)	In 2016, news reports and press releases stated that New Hanover County had contracted with SAS to develop a tool that monitors risk factors for children. ¹⁰⁹
North Dakota	Statewide	None found ¹¹⁰		
Ohio	Statewide	Dropped	Eckerd Rapid Safety Feedback (Open Case Review)	Ohio started working with Eckerd in 2017 and began a soft launch in early 2018. However, “[a]fter extensive work on the algorithm it was decided that the state would be better served by casting a wider net on the population of cases eligible for review and to not limit cases to those identified the algorithm.” ¹¹¹
Oklahoma	Oklahoma County	Dropped	Eckerd Rapid Safety Feedback (Open Case Review)	Oklahoma began piloting Eckerd’s tool in “Region 3,” Oklahoma County, in as early as 2016 but no longer employs it. ¹¹²

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
Oregon	Statewide	In use	Safety at Screening Tool (Screening)	Oregon has developed its own predictive risk models in-house and operates a screening tool that aims to “calculate the probability that a child will be removed from home and/or involved in a future investigation” using historical child welfare administrative data and information about the current report. ¹¹³
	Statewide	In use	Reunification Predictive Risk Model	The state is piloting a tool that “estimates the likelihood of a successful reunification for any child currently in foster care” based on past child welfare administrative data. ¹¹⁴
	Statewide	Consulting	Child Protective Services Predictive Risk Model (Removal)	Oregon is considering developing a tool that “estimates the risk of future adverse events for children named on an allegation of abuse/neglect that was assigned for CPS investigation” to help staff decide whether to place the child into foster care. ¹¹⁵
	Portland and Bend	Consulting	Predict-Align-Prevent (Hot Spot Model)	Oregon is also listed as a partner on Predict-Align-Prevent’s website. ¹¹⁶ A 2020 report by the Alliance for Strong Families and Communities identifies Portland and Bend as specific communities within Oregon that PAP is working with. ¹¹⁷
Pennsylvania	Allegheny County	In use	Allegheny Family Screening Tool (Screening)	In August 2016, Allegheny County, Pennsylvania became one of the first U.S. jurisdictions to implement a predictive analytics-based screening tool, which assists call screeners in deciding whether to investigate a call or not by outputting a score. This score is meant to predict the likelihood of out-of-home placement within two years based on child welfare, birth, prison, juvenile probation, and behavioral health records. ¹¹⁸
	Allegheny County	In use	Hello Baby (Service-Matching)	In the summer of 2020, Allegheny County began piloting a service-matching tool called Hello Baby that assigns each newborn a service tier based on the risk that the newborn will be “removed from home and placed in foster care within the first three years of life” using the county’s birth, child welfare, prison, court, housing, and juvenile probation records. ¹¹⁹
	Northampton County	Consulting	Screening	In March 2021, news reports revealed that Northampton County had contracted with the Allegheny Family Screening Tool creators to develop a screening tool there as well. ¹²⁰
	Statewide	Consulting	Screening	The Pennsylvania Department of Human Services’ 2021 Racial Equity Report revealed that “a feasibility study is being conducted for application of a predictive risk model” for the statewide child maltreatment hotline. ¹²¹

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
Rhode Island	Statewide	None found ¹²²		
South Carolina	Statewide	None found		
South Dakota	Statewide	None found		
Tennessee	Statewide	Explored	Eckerd Rapid Safety Feedback (Open Case Review)	Media reports identify Tennessee as a state that was working with Eckerd as early as 2017, but the state no longer appears on Eckerd's website. ¹²³
Texas	Statewide	None found ¹²⁴		
Utah	Statewide	None found ¹²⁵		
Vermont	Statewide	None found		
Virginia	Richmond	In use	Predict-Align-Prevent (Hot Spot Model)	In March 2019, Predict-Align-Prevent released its place-based predictive modeling results for Richmond, Virginia in a report commissioned by the state. ¹²⁶
Washington	Statewide	Consulting	Predict-Align-Prevent (Hot Spot Model)	Predict-Align-Prevent lists Washington as one of the states it is working with on its webpage. ¹²⁷
West Virginia	Statewide	None found ¹²⁸		
Wisconsin	Statewide	Explored	Screening	In 2018, Wisconsin contracted with the University of Illinois to develop a screening tool that identifies families most at-risk for a future referral. ¹²⁹ Wisconsin subsequently chose not to implement the tool. ¹³⁰
		Dropped	Re-entry Prevention Model (Re-Entry Prediction)	In July 2013, the University of Illinois began developing a risk model "to identify which reunified children were at highest risk of re-entering substitute care within 12 months," ultimately selecting five variables: the number of prior out-of-home care episodes, parent incarceration as a reason for removal, removal from a single-parent household, actionable items on the CANS life functioning domain, and placement in a treatment foster home during the most recent episode. ¹³¹ Wisconsin stopped using this tool in 2019 "because the federal IV-E demonstration project that provided the funding for the program ended." ¹³²
Wyoming	Statewide	None found ¹³³		
Puerto Rico	Territory-wide	None found		

State	Specific Jurisdiction	Stage of Adoption	Tool Name/Creator (Tool Type)	Description
U.S. Virgin Islands	Territory-wide	None found		
Guam	Territory-wide	None found		
Northern Mariana Islands	Territory-wide	None found		
American Samoa	Territory-wide	None found		

ENDNOTES

- 1 *Ending Family Punishment: The Problem*, Movement for Family Power, <https://www.movementforfamilypower.org/ending-family-punishment> [<https://perma.cc/C2WD-CWFU>] (last visited Aug. 3, 2021).
- 2 Nat'l Indian Child Welfare Ass'n & Pew, *Time for Reform: A Matter of Justice for American Indian and Alaskan Native Children* (2007), https://www.pewtrusts.org/-/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/foster_care_reform/nicwareportpdf.pdf [<https://perma.cc/VL7Q-G3WQ>].
- 3 Alan J. Dettlaff & Reiko Boyd, *Racial Disproportionality and Disparities in the Child Welfare System: Why Do They Exist, and What Can Be Done to Address Them?*, 692 *Annals Am. Acad. Pol. & Soc. Sci.* 253 (2020), <https://journals.sagepub.com/doi/abs/10.1177/0002716220980329> [<https://perma.cc/J5GW-8USR>].
- 4 Jerry Milner & David Kelly, *It's Time to Stop Confusing Poverty With Neglect*, *The Imprint* (Jan. 17, 2020), <https://imprintnews.org/child-welfare-2/time-for-child-welfare-system-to-stop-confusing-poverty-with-neglect/40222> [<https://perma.cc/DD42-ESCJ>].
- 5 Elizabeth Brico, *In the Child Welfare System, Somebody's Always Watching You*, *TalkPoverty* (Nov. 1, 2019), <https://talkpoverty.org/2019/11/01/child-welfare-somebodys-watching/> [<https://perma.cc/4568-8PM4>].
- 6 Nat'l Indian Child Welfare Ass'n, *Disproportionality in Child Welfare Fact Sheet* (2019), <https://www.nicwa.org/wp-content/uploads/2019/10/2019-AIAN-Disproportionality-in-Child-Welfare-FINAL.pdf> [<https://perma.cc/Z669-BQS3>].
- 7 Dorothy Roberts & Lisa Sangoi, *Black Families Matter: How the Child Welfare System Punishes Poor Families of Color*, *The Appeal* (Mar. 26, 2018), <https://theappeal.org/black-families-matter-how-the-child-welfare-system-punishes-poor-families-of-color-33ad20e2882e/> [<https://perma.cc/B4PQ-NMDZ>].
- 8 Ruth Hopkins, *How Foster Care Has Stripped Native American Children of Their Own Cultures*, *Teen Vogue* (May 22, 2018), <https://www.teenvogue.com/story/foster-care-has-failed-native-american-youth> [<https://perma.cc/9F4P-56JC>].
- 9 Paul M. Renfro, *America's Long War on Children and Families*, *Bos. Rev.* (June 23, 2020), <http://bostonreview.net/race-politics/paul-m-renfro-america%E2%80%99s-long-war-children-and-families> [<https://perma.cc/5LEJ-FY6J>] (reviewing Laura Briggs' 2020 book *Taking Children: A History of American Terror*).
- 10 Gene Demby, *The Mothers Who Fought To Radically Reimagine Welfare*, *NPR* (June 9, 2019), <https://www.npr.org/sections/codeswitch/2019/06/09/730684320/the-mothers-who-fought-to-radically-reimagine-welfare> [<https://perma.cc/JR9F-WF4B>].
- 11 Movement for Family Power, "Whatever they do, I'm her comfort, I'm her protector." How the Foster System has Become Ground Zero for the U.S. Drug War (2020), <https://www.movementforfamilypower.org/ground-zero> [<https://perma.cc/KC6Y-FNMC>].
- 12 ACLU & Human Rights Watch, 'You Miss So Much When You're Gone': The Lasting Harm of Jailing Mothers Before Trial in Oklahoma (2018), <https://www.aclu.org/report/you-miss-so-much-when-youre-gone> [<https://perma.cc/AV2M-8UKF>].
- 13 Debbie Nathan, *The Long, Dark History of Family Separations*, *Reason* (Oct. 13, 2020), <https://reason.com/2020/10/13/the-long-dark-history-of-family-separations/> [<https://perma.cc/KVS6-ZF8U>].
- 14 Dorothy Roberts, *Shattered Bonds: The Color of Child Welfare* 55 (2002).

- 15 Diane L. Redleaf, *Where Is It Safe and Legal to Give Children Reasonable Independence?*, ABA (Sept. 30, 2020), <https://www.americanbar.org/groups/litigation/committees/childrens-rights/articles/2020/where-is-it-safe-and-legal-to-give-children-reasonable-independence/> [https://perma.cc/56J9-EXG3].
- 16 Children’s Bureau, *Child Maltreatment 2019*, at 22 (2021), <https://www.acf.hhs.gov/sites/default/files/documents/cb/cm2019.pdf> [https://perma.cc/E2QW-ZXS6].
- 17 Minyvonne Burke, *‘American Idol’ alum reunited with her daughter, still fighting for custody of her son*, NBC News (Aug. 21, 2021), <https://www.nbcnews.com/news/us-news/american-idol-alum-reunited-her-daughter-still-fighting-custody-her-n1277369> [https://perma.cc/J2BH-9UL8].
- 18 Daphne Chen, *Bad medicine*, USA Today (Dec. 9, 2019), <https://stories.usatodaynetwork.com/torn-apart/sally-smith/> [https://perma.cc/H9KX-897A].
- 19 Laura Sullivan & Amy Walters, *Incentives And Cultural Bias Fuel Foster System*, NPR (Oct. 25, 2011), <https://www.npr.org/2011/10/25/141662357/incentives-and-cultural-bias-fuel-foster-system> [https://perma.cc/6MK8-T6P5].
- 20 Samantha Johnson, *Girl Gone – When life dealt me a hard blow, CPS took my daughter*, Rise (Nov. 15, 2017), <https://www.risemagazine.org/2017/11/girl-gone-when-life-dealt-me-a-hard-blow-cps-took-my-daughter/> [https://perma.cc/7Y36-ZGG9].
- 21 Emma S. Ketteringham, *Live in a Poor Neighborhood? Better Be a Perfect Parent.*, N.Y. Times (Aug. 22, 2017), <https://www.nytimes.com/2017/08/22/opinion/poor-neighborhoods-black-parents-child-services.html> [https://perma.cc/QRV7-Z6J9].
- 22 Emma Williams, *‘Family Regulation,’ Not ‘Child Welfare’: Abolition Starts with Changing our Language*, The Imprint (July 28, 2020), <https://imprintnews.org/opinion/family-regulation-not-child-welfare-abolition-starts-changing-language/45586> [https://perma.cc/Z8H3-WSBH].
- 23 Christopher Teixeira & Matthew Boyas, MITRE Corp., *Predictive Analytics in Child Welfare: An Assessment of Current Efforts, Challenges and Opportunities 6-7* (2017), <https://aspe.hhs.gov/sites/default/files/private/pdf/257841/PACWAnAssessmentCurrentEffortsChallengesOpportunities.pdf> [https://perma.cc/5PFR-BCV9].
- 24 Memorandum from Judge Michael Nash (Ret.), Exec. Director, Office of Child Protection, to L.A. County Board of Supervisors, on Examination of Using Structured Decision Making and Predictive Analytics in Assessing Safety and Risk in Child Welfare 10 (May 4, 2017), http://file.lacounty.gov/SDSInter/bos/bc/1023048_05.04.17OCPReportonRiskAssessmentTools_SDMandPredictiveAnalytics_.pdf [https://perma.cc/D5WW-BU6G] (Los Angeles dropped a tool by SAS after it flagged “an extremely high number of false positives”).
- 25 *The Allegheny Family Screening Tool: Predictive Risk Modeling in Child Welfare in Allegheny County*, Allegheny Cnty., <https://www.allegheny-county.us/Human-Services/News-Events/Accomplishments/Allegheny-Family-Screening-Tool.aspx> [https://perma.cc/H6XQ-UWY9] (last visited July 28, 2021).
- 26 Rhema Vaithianathan et al., *Allegheny Family Screening Tool: Methodology, Version 2*, at 3 (2019), https://www.alleghenycountyanalytics.us/wp-content/uploads/2019/05/Methodology-V2-from-16-ACDHS-26_PredictiveRisk_Package_050119_FINAL-7.pdf [https://perma.cc/98VQ-J5CH].
- 27 Abigail Z. Jacobs & Hanna Wallach, *Measurement and Fairness*, 2021 Proc. ACM Conf. on Fairness, Accountability & Transparency 375 (2021), <https://dl.acm.org/doi/abs/10.1145/3442188.3445901> [https://perma.cc/FR84-WJEA].
- 28 Riccardo Fogliato et al., *On the Validity of Arrest as a Proxy for Offense: Race and the Likelihood of Arrest for Violent Crimes*, 2021 AAAI/ACM Conf. on Artificial Intelligence, Ethics & Soc’y (2021), <https://arxiv.org/pdf/2105.04953.pdf> [https://perma.cc/TVQ9-NUGM].
- 29 Julia Angwin et al., *Machine Bias*, ProPublica (May 23, 2016), <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing> [https://perma.cc/ESW2-B9YQ].
- 30 NYC Algorithms Management & Pol’y Officer, *Summary of Agency Compliance Reporting 8* (2020), <https://www1.nyc.gov/assets/ampo/downloads/pdf/AMPO-CY-2020-Agency-Compliance-Reporting.pdf> [https://perma.cc/S3H2-B83M].
- 31 Oregon Dep’t of Hum. Servs., *Oregon DHS Safety at Screening Tool – Development and Execution*, <https://www.oregon.gov/dhs/ORRAI/Documents/Safety%20at%20Screening%20Tool%20Development%20and%20Execution%20Report.pdf> [https://perma.cc/MG5Q-7PHX] (last visited June 25, 2021).
- 32 *The Allegheny Family Screening Tool: Predictive Risk Modeling in Child Welfare in Allegheny County*, Allegheny Cnty., <https://www.allegheny-county.us/Human-Services/News-Events/Accomplishments/Allegheny-Family-Screening-Tool.aspx> [https://perma.cc/H6XQ-UWY9] (last visited June 25, 2021).
- 33 Oregon Dep’t of Hum. Servs., *2021 Annual Progress and Services Report 51-53* (2020), <https://www.oregon.gov/dhs/CHILDREN/Documents/APS%20Report%202020.pdf> [https://perma.cc/YM9X-D8VY].
- 34 *Hello Baby*, Allegheny Cnty., <https://www.alleghenycounty.us/Human-Services/News-Events/Accomplishments/Hello-Baby.aspx> [https://perma.cc/F8RX-5EP5] (last visited June 25, 2021).
- 35 Kim M. Reynolds, *J. Khadijah Abdurahman: Predictive Analytics, Child Welfare, and Storytelling’s Power (Part 1 of 2)*, Our Data Bodies (May 25, 2020), <https://www.odbproject.org/2020/05/25/j-khadijah-abdurahman-predictive-analytics-child-welfare-and-storytellings-power-part-1-of-2/> [https://perma.cc/HU55-62PS].
- 36 ACLU & NYU Law, *What Does Fairness Look Like? Conversation on Race, Risk Assessment Tools, and Pretrial Justice* (2018), <https://www.law.nyu.edu/sites/default/files/Final%20Report-ACLU-NYU%20CRIL%20Convening%20on%20Race%20Risk%20Assessment%20Fairness.pdf> [https://perma.cc/ZJ25-586G].
- 37 Dorothy E. Roberts, *Digitizing the Carceral State*, 132 Harv. L. Rev. 1695 (2019), <https://harvardlawreview.org/2019/04/digitizing-the-carceral-state/> [https://perma.cc/QPF3-GT8D].

- 38 Rashida Richardson, *Racial Segregation and the Data-Driven Society: How Our Failure to Reckon with Root Causes Perpetuates Separate and Unequal Realities*, 36 Berkeley Tech. L.J. (forthcoming 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3850317 [<https://perma.cc/6EJZ-BD8W>].
- 39 Sandra G. Mayson, *Bias In, Bias Out*, 128 Y.L.J. 2122 (2019), <https://www.yalelawjournal.org/article/bias-in-bias-out> [<https://perma.cc/G7BJ-F4Q9>].
- 40 *Mapping Pretrial Injustice: A Community-Driven Database*, Movement Alliance Project, <https://pretrialrisk.com/> [<https://perma.cc/ZPA8-UY76>].
- 41 Rhema Vaithianathan et al., *Allegheny Family Screening Tool: Methodology, Version 2 app. b*, at 16-20 (2019), https://www.alleghenycountyanalytics.us/wp-content/uploads/2019/05/Methodology-V2-from-16-ACDHS-26_PredictiveRisk_Package_050119_FINAL-7.pdf [<https://perma.cc/98VQ-J5CH>].
- 42 Virginia Eubanks, *A Child Abuse Prediction Model Fails Poor Families*, *Wired* (Jan. 15, 2018), <https://www.wired.com/story/excerpt-from-automating-inequality/> [<https://perma.cc/786P-JAAM>]; *see also* Allegheny Cnty., *DHS Response to 'Automated Inequality' by Virginia Eubanks* (Jan. 31, 2018), <https://www.alleghenycounty.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=6442461672> [<https://perma.cc/6Q3A-HDB8>].
- 43 *Hello Baby*, Allegheny Cnty., <https://www.alleghenycounty.us/Human-Services/News-Events/Accomplishments/Hello-Baby.aspx> [<https://perma.cc/F8RX-5EP5>] (last visited July 28, 2021).
- 44 Rhema Vaithianathan et al., *Implementing the Hello Baby Prevention Program in Allegheny County: Methodology Report 13* (2020), https://www.alleghenycountyanalytics.us/wp-content/uploads/2020/09/hello-baby-Methodology-Report_9-9-20-v2.pdf [<https://perma.cc/B7P6-4GKG>].
- 45 Rhema Vaithianathan et al., *Implementing the Hello Baby Prevention Program in Allegheny County: Methodology Report 14-15* (2020), https://www.alleghenycountyanalytics.us/wp-content/uploads/2020/09/hello-baby-Methodology-Report_9-9-20-v2.pdf [<https://perma.cc/B7P6-4GKG>].
- 46 Allegheny Cnty., *Hello Baby Frequently Asked Questions 13* (2020), <https://www.alleghenycounty.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=6442472458> [<https://perma.cc/HX6F-X689>].
- 47 Allegheny Cnty., *Hello Baby Frequently Asked Questions 13* (2020), <https://www.alleghenycounty.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=6442472458> [<https://perma.cc/HX6F-X689>].
- 48 Predict-Align-Prevent, <https://www.predict-align-prevent.org/> [<https://perma.cc/E5MW-HLH7>] (last visited Aug. 24, 2021).
- 49 Predict-Align-Prevent, *Little Rock, Arkansas Technical Report for the Arkansas Division of Children and Family Services* (2020), <https://papereports.org/little-rock-ar/> [<https://perma.cc/J242-YVVH>].
- 50 Predict-Align-Prevent, *Richmond, Virginia Technical Report Developed for the Virginia Department of Social Services Division of Family Services 5* (2019), https://b9157c41-5fbc-4e28-8784-ea36ffdbce2f.filesusr.com/ugd/fbb580_2f1dda2ff6b84f32856bc95d802d6629.pdf [<https://perma.cc/5W8M-7MKR>].
- 51 Tim Dare, *Ethical Evaluation of the Predict-Align-Prevent Program 13* (2018), https://b9157c41-5fbc-4e28-8784-ea36ffdbce2f.filesusr.com/ugd/fbb580_0bf866ed131c4e8b8614c809995c6f06.pdf [<https://perma.cc/5VEL-FAW2>].
- 52 Will Douglas Heaven, *Predictive policing algorithms are racist. They need to be dismantled.*, *MIT Tech. Rev.* (July 17, 2020), <https://www.technologyreview.com/2020/07/17/1005396/predictive-policing-algorithms-racist-dismantled-machine-learning-bias-criminal-justice/> [<https://perma.cc/9SNA-3MQC>].
- 53 *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://eckerd.org/family-children-services/ersf/> [<https://perma.cc/QS9Y-J8CM>] (last visited July 28, 2021).
- 54 David Jackson & Gary Marx, *Data mining program designed to predict child abuse proves unreliable, DCFS says*, *Chi. Trib.* (Dec. 6, 2017), <https://www.chicagotribune.com/investigations/ct-dcfs-eckerd-met-20171206-story.html> [<https://web.archive.org/web/20210607003951/https://www.chicagotribune.com/investigations/ct-dcfs-eckerd-met-20171206-story.html>].
- 55 Florida Dep't of Child. & Fams., *2021 Annual Progress and Services Report 48* (2020), http://www.centerforchildwelfare.org/kb/FIPerformance/APSR-June2020_Approved11062020.pdf [<https://perma.cc/U3FU-TMQY>].
- 56 New Hampshire Dep't of Health & Hum. Servs., *2020-2024 Child and Family Services Plan 177* (2019), <https://www.dhhs.nh.gov/dcyf/documents/nh-cfsp-2020-24-report.pdf> [<https://perma.cc/A2XE-X2K7>].
- 57 Tom C. Rawlings, *Georgia's Cold Case Project: Improving Outcomes for Children in Foster Care*, *ABA* (Dec. 1, 2015), https://www.americanbar.org/groups/public_interest/child_law/resources/child_law_practiceonline/child_law_practice/vol-34/december-2015/georgia-s-cold-case-project-improving-outcomes-for-children-in-/ [<https://perma.cc/NNS4-CXXS>].
- 58 Colorado Dep't of Hum. Servs., *2022 Annual Progress and Services Report 38, 62-63* (2021) (draft), <https://www.co4kids.org/sites/default/files/2022%20APSR%20Draft.pdf> [<https://perma.cc/9PX4-GJA5>].
- 59 Kristian Lum & Rumman Chowdhury, *What is an "algorithm"? It depends whom you ask*, *MIT Tech. Rev.* (Feb. 26, 2021), <https://www.technologyreview.com/2021/02/26/1020007/what-is-an-algorithm/> [<https://perma.cc/UD92-YT6Y>].
- 60 NCCD, *SDM 3.0 Policy and Procedures Manual 79* (2017), <https://www.cdss.ca.gov/Portals/9/SDM%20Policy%20and%20Procedure%20Manual.pdf> [<https://perma.cc/5FMT-2VLR>].
- 61 *Structured Decision Making*, California Dep't of Soc. Servs., <https://www.cdss.ca.gov/inforesources/child-welfare-protection/structured-decision-making> [<https://perma.cc/X7XW-KBNE>] (last visited July 15, 2021) (listing California, Alaska, Michigan, Oklahoma, Wisconsin, Rhode

Island, Indiana, Georgia, New Mexico, New York, Washington, D.C., Colorado, Minnesota, Ohio, New Hampshire, Missouri, Vermont, Virginia, Florida, New Jersey, Tennessee, Connecticut, Massachusetts, Washington, Louisiana, Nevada, North Carolina, Maryland, Kansas, Nebraska, Utah, Delaware, Arizona, and Texas).

- 62 *The Child and Adolescent Needs and Strengths (CANS)*, Praed Found., <https://praedfoundation.org/tcom/tcom-tools/the-child-and-adolescent-needs-and-strengths-cans/> [<https://perma.cc/3ZGA-9RCU>] (last visited July 15, 2021).
- 63 Michigan Dep't of Health & Hum. Servs., Children's Protective Services Manual: Special Investigative Situations 8 (2020), <https://dhhs.michigan.gov/OLMWEB/EX/PS/Public/PSM/713-08.pdf> [<https://perma.cc/5DB6-SFPQ>].
- 64 Paul Lanier et al., *Preventing Infant Maltreatment with Predictive Analytics: Applying Ethical Principles to Evidence-Based Child Welfare Policy*, 35 J. Fam. Violence 1, 5 (2020), http://www.caichildlaw.org/Misc/Lanier_et_al-2019-Journal_of_Family_Violence.pdf [<https://perma.cc/6M9M-637N>].
- 65 *Frequently Asked Questions*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/faq> [<https://perma.cc/K6WP-TSE2>] (last visited July 28, 2021).
- 66 *News*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/news> [<https://perma.cc/2MJT-YH6W>] (last visited Aug. 4, 2021).
- 67 *Compare News*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/news> [<https://perma.cc/2MJT-YH6W>] (last visited July 15, 2021), with *Frequently Asked Questions*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/faq> [<https://perma.cc/K6WP-TSE2>] (last visited July 15, 2021).
- 68 See, e.g., Georgia Div. of Fam. & Child. Servs., 2020-2024 Child and Family Services Plan 139 (2019), <https://dfcs.georgia.gov/document/document/2020-2014-georgia-child-family-services-plan-and-report-cfsp/download> [<https://perma.cc/KE4W-99MD>] ("The state will continue to assess data to ensure accurate and adequate identification of high-risk populations, perhaps even advancing toward the use of predictive analytics.").
- 69 Alaska Dep't of Health & Soc. Servs., 2019 Annual Progress and Services Report 29, http://dhss.alaska.gov/ocs/Documents/Publications/pdf/2019_APSR.pdf [http://web.archive.org/web/20210425164950/http://dhss.alaska.gov/ocs/Documents/Publications/pdf/2019_APSR.pdf]. For confirmation of lack of current use, see Letter from Jillian Gellings, Project Analyst, Alaska Dep't of Health & Soc. Servs., to Todd Feathers, Freelance Journalist, Re: Alaska Public Records Act Request received June 7, 2021 (June 10, 2021), <https://www.muckrock.com/foi/alaska-235/child-welfare-predictive-analytics-systems-111819/> [<https://perma.cc/V4MX-RPWU>] ("The Department of Health and Social Services does not use or contract for child welfare predictive models.").
- 70 Predict-Align-Prevent, Little Rock, Arkansas Technical Report for the Arkansas Division of Children and Family Services (2020), <https://papreports.org/little-rock-ar/> [<https://perma.cc/J242-YVVH>].
- 71 Arkansas Dep't of Hum. Servs., 2020-2024 Child and Family Services Plan 149 (2019), http://hs.ar.gov/images/uploads/dcms/Arkansas_Child_and_Family_Services_Plan_2020_2024_FINAL_with_CB_Feedback_with_corrections_LJ_ceh%281%29.pdf [<https://perma.cc/ST2U-B62M>].
- 72 *Professor Rhema Vaithianathan: Leading ISSR's Centre for Social Data Analytics*, U. Queensland (Dec. 7, 2020), <https://issr.uq.edu.au/article/2020/11/professor-rhema-vaithianathan-leading-issr%E2%80%99s-centre-social-data-analytics> [<https://perma.cc/6ZMB-VW96>].
- 73 Memorandum from Judge Michael Nash (Ret.), Exec. Director, Office of Child Protection, to L.A. County Board of Supervisors, on Examination of Using Structured Decision Making and Predictive Analytics in Assessing Safety and Risk in Child Welfare 10 (May 4, 2017), http://file.lacounty.gov/SDSInter/bos/bc/1023048_05.04.17OCPReportonRiskAssessmentTools_SDMandPredictiveAnalytics_.pdf [<https://perma.cc/SR6L-T66P>].
- 74 California Dep't of Soc. Servs., Annual Progress and Services Report 172 (2019), <https://www.cdss.ca.gov/Portals/9/Child-Welfare-Programs/CFSP/Final-Report-for-FYs-2015-2019-APSR.pdf> [<https://perma.cc/XTD9-6U5N>] ("Stakeholder conversations are ongoing to discuss possible use-cases."); *California Child Welfare Predictive Risk Model Proof of Concept*, Auckland Univ. of Tech. Ctr. for Soc. Data Analytics, <https://csda.aut.ac.nz/research/our-projects/california-child-welfare-predictive-risk-model-proof-of-concept> [<https://perma.cc/K4C5-VJN9>]. However, a recent public records request response suggests no current follow-up. See Letter from Jason Montiel, Information Officer II, California Dep't of Soc. Servs., to Todd Feathers, Freelance Journalist, Re: No Responsive Documents (May 11, 2021), <https://www.muckrock.com/foi/california-52/child-welfare-predictive-analytics-systems-111822/> [<https://perma.cc/7DFE-SS8N>] ("[T]he CDSS does not currently have any contracted or internal work using predictive analytics in child welfare and within its system, the Child Welfare Services/Case Management System (or CWS/CMS), which is also the system utilized by county departments.").
- 75 *Professor Rhema Vaithianathan: Leading ISSR's Centre for Social Data Analytics*, U. Queensland (Dec. 7, 2020), <https://issr.uq.edu.au/article/2020/11/professor-rhema-vaithianathan-leading-issr%E2%80%99s-centre-social-data-analytics> [<https://perma.cc/6ZMB-VW96>]; Auckland Univ. of Tech. Ctr. for Soc. Data Analytics, Implementing a Child Welfare Decision Aide in Douglas County: Methodology Report 4 (2019), https://csda.aut.ac.nz/_data/assets/pdf_file/0009/347715/Douglas-County-Methodology_Final_3_02_2020.pdf [<https://perma.cc/7VPL-RE9V>]; *Douglas County Decision Aide*, Auckland Univ. of Tech. Ctr. for Soc. Data Analytics, <https://csda.aut.ac.nz/research/our-projects/douglas-county-decision-aide> [<https://perma.cc/4HTF-FK5K>].
- 76 Auckland Univ. of Tech. Ctr. for Soc. Data Analytics, Pennsylvania ChildLine PRM: Statement of Work prepared for Pennsylvania Department of Human Services, May 2021, at 3 (2021) (on file with the ACLU) ("Since the first family screening tool was developed for Allegheny County, the Centre has deployed PRM tools with US counties Larimer and Douglas and is working on applications for Northampton and Arapahoe. The Centre is also working with state-level agencies.").
- 77 Colorado Dep't of Hum. Servs., 2022 Annual Progress and Services Report 39 (2021) (draft), <https://www.co4kids.org/sites/default/files/2022%20APSR%20Draft.pdf> [<https://perma.cc/9PX4-GJA5>].

- 78 Connecticut Dep't of Child. & Fams., 2020-2024 Child and Family Services Plan 93 (2019), <https://portal.ct.gov/-/media/DCF/DataConnect/CFSP/Connecticut-CFSP-2020-2024-FINAL.pdf> [<https://perma.cc/9PX4-GJA5>].
- 79 *Compare Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://web.archive.org/web/20190224155104/https://eckerd.org/family-children-services/ersf/> (2019 archive), with *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://web.archive.org/web/20200512040721/https://eckerd.org/family-children-services/ersf/> (2020 archive).
- 80 For confirmation of lack of current use, see E-mail from Jen Rini, Community Relations Coordinator, Delaware Dep't of Servs. for Child., Youth & Their Fams., to Todd Feathers, Freelance Journalist, Re: Delaware Freedom of Information Act Request: Child welfare predictive analytics systems (May 13, 2021), <https://www.muckrock.com/foi/delaware-236/child-welfare-predictive-analytics-systems-111870/> [<https://perma.cc/F5LK-C9JM>] (“DSCYF does not utilize predictive analytics models for child welfare, therefore, we do not have the records you are seeking.”).
- 81 See Predict-Align-Prevent, *Predicting Child Maltreatment Washington, D.C.*, GitHub, https://github.com/PredictAlignPrevent/PredictingChildMaltreatment_WashingtonDC [<https://perma.cc/MH5Y-JB7V>]. However, a recent public records request response suggests no current follow-up. See Letter from Wendy Singleton, FOIA Officer, DC Child & Fam. Servs. Agency, to Todd Feathers, Freelance Journalist, Re: 2021-FOIA-04943 (June 11, 2021), <https://www.muckrock.com/foi/washington-48/child-welfare-predictive-analytics-systems-111826/> [<https://perma.cc/7XWG-QL94>] (“Our system does not currently handle anything related to predictive analytics.”).
- 82 News Release, *DHS partners with Tom Ward and Eckerd Kids to bring new technology to child protective investigations*, Oklahoma Dep't of Hum. Servs. (June 23, 2016), <https://oklahoma.gov/okdhs/newsroom/2016/june/comm06232016.html> [<https://perma.cc/AQU6-UKV5>]; Florida Dep't of Child. & Fams., 2020-2024 Child and Family Services Plan 42 (2019), <http://centerforchildwelfare.fmhi.usf.edu/kb/FIPerformance/CFSP%202020-2024%20%20Approved%2010-3-2019.pdf> [<https://perma.cc/CE2L-TJ3H>]; Florida Dep't of Child. & Fams., 2021 Annual Progress and Services Report 48 (2020), <http://www.centerforchildwelfare.org/kb/FIPerformance/APSR-June2020-Approved11062020.pdf> [<https://perma.cc/U3FU-TMQY>]; Casey Family Programs, *Predictive Analytics: Applications for Child Welfare 17* (2015), https://www.sauerff.org/application/files/7015/4352/1686/Predictive_Analytics_Applications_for_Child_Welfare.pdf [<https://perma.cc/PT7V-HY65>] (“In 2014, the Florida Department of Children’s Services (DCF) initiated the implementation of Rapid Safety Feedback statewide on child protective investigation cases.”).
- 83 Elizabeth Brico, *New Algorithms Perpetuate Old Biases in Child Welfare Cases*, Undark (Sept. 20, 2018), <https://undark.org/2018/09/20/new-algorithms-perpetuate-old-biases-in-child-welfare-cases/> [<https://perma.cc/9PFN-DYZ7>]. See also Daniel Hempel, *Managing the Flow: Predictive Analytics in Child Welfare*, The Imprint (Apr. 6, 2017), <https://imprintnews.org/analysis/managing-flow-predictive-analytics-child-welfare/25871> [<https://perma.cc/D7XL-Z5JE>].
- 84 Elizabeth Brico, *New Algorithms Perpetuate Old Biases in Child Welfare Cases*, Undark (Sept. 20, 2018), <https://undark.org/2018/09/20/new-algorithms-perpetuate-old-biases-in-child-welfare-cases/> [<https://perma.cc/9PFN-DYZ7>]; Daniel Hempel, *Managing the Flow: Predictive Analytics in Child Welfare*, The Imprint (Apr. 6, 2017), <https://imprintnews.org/analysis/managing-flow-predictive-analytics-child-welfare/25871> [<https://perma.cc/D7XL-Z5JE>].
- 85 For confirmation of lack of current use, see E-mail from Jessica Loeding, Senior Director of Communications, Georgia Div. of Fam. & Child. Servs., to Todd Feathers, Freelance Journalist, Re: Georgia Open Records Act Request: Child welfare predictive analytics systems (May 10, 2021), <https://www.muckrock.com/foi/georgia-230/child-welfare-predictive-analytics-systems-111829/> [<https://perma.cc/R483-M55Z>] (“No, the Division does not use predictive analytics systems.”).
- 86 For confirmation of lack of current use, see E-mail from Amanda Stevens, Public Information Officer, Hawai'i Dep't of Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Hawaii Uniform Information Practices Act Request: Child welfare predictive analytics systems (May 17, 2021), <https://www.muckrock.com/foi/hawaii-247/child-welfare-predictive-analytics-systems-111830/> [<https://perma.cc/448D-UDRE>] (“The Department of Human Services (DHS) does not utilize any software that provides predictive analytics models or modeling capability for child welfare. However, if DHS contractors (company, nonprofit, or other entities) use predictive analytics models in the work they do, we are unable to verify that information.”).
- 87 For confirmation of lack of current use, see E-mail from Public Records, Idaho Dep't of Health & Welfare, to Todd Feathers, Freelance Journalist, Re: Idaho Public Records Act Request: Child welfare predictive analytics systems (May 5, 2021), <https://www.muckrock.com/foi/idaho-228/child-welfare-predictive-analytics-systems-111831/> [<https://perma.cc/38CU-CML3>] (“Idaho’s Child Welfare system does not run predictive analytics.”).
- 88 David Jackson & Gary Marx, *Data mining program designed to predict child abuse proves unreliable, DCFS says*, Chi. Trib. (Dec. 6, 2017), <https://www.chicagotribune.com/investigations/ct-dcfs-eckerd-met-20171206-story.html> [<https://web.archive.org/web/20210607003951/https://www.chicagotribune.com/investigations/ct-dcfs-eckerd-met-20171206-story.html>].
- 89 Indiana Dep't of Child Servs., 2020-2024 Child and Family Services Plan 77, 118 (2019), [https://www.in.gov/dcs/files/Child_and_Family_Services_Plan_\(CFSP\)_2020-2024.pdf](https://www.in.gov/dcs/files/Child_and_Family_Services_Plan_(CFSP)_2020-2024.pdf) [<https://perma.cc/TPQ8-LJL2>]; *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://eckerd.org/family-children-services/ersf/> [<https://perma.cc/QS9Y-J8CM>] (last visited July 28, 2021).
- 90 For confirmation of lack of current use, see Letter from Matt Highland, Public Information Officer, Iowa Dep't of Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Iowa Open Records Law Request: Child welfare predictive analytics systems (May 14, 2021), <https://www.muckrock.com/foi/iowa-246/child-welfare-predictive-analytics-systems-111834/> [<https://perma.cc/J63J-EN9M>] (“The Iowa Department of Human Services (department) has no current contract with any company, nonprofit, or other entity that currently provides software to the department that includes predictive analytics models for child welfare.”).
- 91 For confirmation of lack of current use, see Letter from Eric Smith, Public Information Officer, Kansas Dep't for Child. & Fams., to Todd Feathers, Freelance Journalist, Re: The Kansas Open Records Act Request: Child welfare predictive analytics systems (May 4, 2021), <https://www.muckrock.com/foi/kansas-111/child-welfare-predictive-analytics-systems-111835/> [<https://perma.cc/BUB8-JWT7>] (“DCF doesn’t use any predictive analytics models or software.”).

- 92 Louisiana Dep't of Child. & Fam. Servs., 2020 Annual Progress and Services Report 20-21 (2020), http://www.dcf.la.gov/assets/docs/searchable/Child%20Welfare/APSR/2020_APSR.pdf [<https://perma.cc/QUEU3-H9UC>] (“Only 13% (19 cases) of the Eckerd reviews resulted in subsequent investigation. Eckerd reviews ended in September 2019.”). *Compare Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://web.archive.org/web/20190224155104/https://eckerd.org/family-children-services/ersf/> (2019 archive), with *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://web.archive.org/web/20200512040721/https://eckerd.org/family-children-services/ersf/> (2020 archive).
- 93 Maine Off. of Child & Fam. Servs., 2020-2024 Child and Family Services Plan 54-55 (2019), <https://www.maine.gov/dhhs/sites/maine.gov/dhhs/files/documents/ocfs/documents/Maine%20OCFS%202020-2024%20CFSP%20-%2020091219.docx> [<https://perma.cc/5YV2-S22Y>]; Maine Off. of Child & Fam. Servs., 2019 Annual Progress and Services Report 53-54 (2018), <https://www.maine.gov/dhhs/sites/maine.gov/dhhs/files/documents/ocfs/documents/Maine-Annual-Progress-Services-Report-2018.docx> [<https://perma.cc/E997-HXWC>]; *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://eckerd.org/family-children-services/ersf/> [<https://perma.cc/QS9Y-J8CM>] (last visited July 28, 2021).
- 94 For confirmation of lack of current use, see E-mail from Public Information Act Custodian, Maryland Dep't of Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Maryland Public Information Act Request: Child welfare predictive analytics systems (June 17, 2021), <https://www.muckrock.com/foi/maryland-154/child-welfare-predictive-analytics-systems-111838/> [<https://perma.cc/Z2S3-DCLW>] (“Maryland does not do predictive analytics work at this time.”).
- 95 Massachusetts Dep't of Child & Fams., 2020-2024 Child and Family Services Plan 110 (2019), <https://www.mass.gov/doc/child-and-family-services-plan-fy2020-fy-2024/download> [<https://perma.cc/8D5C-M5X9>].
- 96 H. 1 § 52, 192d Gen. Ct., Reg. Sess. (Mass. 2021), <https://malegislature.gov/Budget/GovernorsBudget> [<https://perma.cc/R97A-HMU8>]. See also Massachusetts Off. of the Child Advocate, Investigative Report: A Multi System Investigation into the Death of David Almond 53 (2021), <https://www.mass.gov/doc/office-of-the-child-advocateinvestigative-reportmarch-2021/download> [<https://perma.cc/FGM8-UTNN>].
- 97 See West Michigan Partnership for Children, Kent County Performance-Based Funding Pilot (West Michigan Partnership for Children): Human Services Subcommittee Update (Mar. 8, 2016), https://www.house.mi.gov/hfa/PDF/HealthandHumanServices/DHHS_HumanServices_Testimony_WMPC_Update_3-8-16.pdf [<https://perma.cc/8ZRZ-3B6Q>]; Susan H. Chibnall et al., Westat, Evaluation of Michigan's Performance-Based Child Welfare System 55-56 (Mar. 2018), <https://www.wmpc.care/downloads/Michigan%20PBCWS%20Annual%20Report%20March%202018.pdf> [<https://perma.cc/KD5Q-E85V>]; Press Release, Mindshare Technology, *Mindshare Technology Applies Predictive Analytics to Child Welfare*, Bus. Wire (Mar. 11, 2014), <https://www.businesswire.com/news/home/20140311006273/en/Mindshare-Technology-Applies-Predictive-Analytics-to-Child-Welfare> [<https://perma.cc/P4KH-AT8J>]; Key Messages: 100% Purchase of Foster Care Services: A Public Private Partnership That Provides Greater Accountability And More Nimble Delivery of Services to Children and Families in Crisis, Kent Cty., <https://www.accesskent.com/pdfs/WMPC.pdf> [<https://perma.cc/DFE5-ZTAB>] (last visited July 28, 2021).
- 98 For confirmation of lack of current use, see E-mail from Katie Bauer, Public Information Officer, Minnesota Dep't of Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Minnesota Government Data Practices Act Request: Child welfare predictive analytics systems (May 7, 2021), <https://www.muckrock.com/foi/minnesota-156/child-welfare-predictive-analytics-systems-111841/> [<https://perma.cc/EAP8-GVL6>] (providing only documents related to the Structured Decision Making model).
- 99 *Compare Frequently Asked Questions*, Predict-Align-Prevent, <https://web.archive.org/web/20210122004232/https://www.predict-align-prevent.org/faq> (Jan. 22, 2021 archive), with *Frequently Asked Questions*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/faq> [<https://perma.cc/K6WP-TSE2>] (last visited July 28, 2021). For confirmation of lack of current use, see Letter from Alex Daskalakis, Special Counsel for Administration, Missouri Dep't of Social Servs., to Todd Feathers, Freelance Journalist, Re: Sunshine Law Request - Child Welfare Program Information, <https://www.muckrock.com/foi/missouri-299/child-welfare-predictive-analytics-systems-111843/> [<https://perma.cc/7WYS-XLBD>] (“The Department of Social Services has not identified any documents that are responsive to your request.”).
- 100 For confirmation of lack of current use, see E-mail from Erik Fern, Attorney III, Nebraska Dep't of Health & Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Nebraska Public Records Act Request: Child welfare predictive analytics systems (May 17, 2021), <https://www.muckrock.com/foi/nebraska-300/child-welfare-predictive-analytics-systems-111845/> [<https://perma.cc/4Q8D-9VQ5>] (“There no responsive documents because Nebraska does not use predictive analytics for child welfare.”).
- 101 See Daniel Hempel, *Uncharted Waters: Data Analytics and Child Protection in Los Angeles*, The Imprint (July 20, 2015), <https://imprintnews.org/featured/uncharted-waters-data-analytics-and-child-protection-in-los-angeles/10867> [<https://perma.cc/CTC8-X3ZR>] (“Eckerd is working to apply its predictive analytics model in Connecticut, Alaska, Oklahoma, Nevada and Maine.”); *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://eckerd.org/family-children-services/ersf/> [<https://perma.cc/QS9Y-J8CM>] (last visited July 28, 2021). For confirmation of lack of current use, see E-mail from Karla Delgado, Social Services Chief, Nevada Dep't of Health & Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Nevada Public Records Act Request: Child welfare predictive analytics systems (May 7, 2021), <https://www.muckrock.com/foi/nevada-301/child-welfare-predictive-analytics-systems-111846/> [<https://perma.cc/P3GS-VDSR>] (“Nevada child welfare does not use any predictive analytics models.”).
- 102 New Hampshire Dep't of Health & Hum. Servs., 2020-2024 Child and Family Services Plan 1, 156, 176-177 (2019), <https://www.dhhs.nh.gov/dcyf/documents/nh-cfsp-2020-24-report.pdf> [<https://perma.cc/932V-E2J6>]; *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://eckerd.org/family-children-services/ersf/> [<https://perma.cc/QS9Y-J8CM>] (last visited July 28, 2021); *Frequently Asked Questions*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/faq> [<https://perma.cc/K6WP-TSE2>] (last visited July 28, 2021).
- 103 New Hampshire Dep't of Health & Hum. Servs., 2020-2024 Child and Family Services Plan 177 (2019), <https://www.dhhs.nh.gov/dcyf/documents/nh-cfsp-2020-24-report.pdf> [<https://perma.cc/A2XE-X2K7>].
- 104 All. for Strong Fam. & Cmtyts., *Transforming Child Welfare Systems to a 21st Century Model that Strengthens and Supports Families and Communities: Innovations from the Field* 31 (2020), <https://familyfirstact.org/sites/default/files/Transforming%20Child%20Welfare%20Systems.pdf> [<https://perma.cc/PBL3-KMRL>].

- 105 Ctr. for the Study of Social Pol’y, Progress of the New Jersey Department of Children and Families July 1 – December 30, 2020, at 13 (2021), <https://cssp.org/wp-content/uploads/2021/08/Charlie-and-Nadine-H-Report-on-Progress-from-July-to-Dec-2020-7.19.21.pdf> [https://perma.cc/D6WY-Q948]; New Jersey Dep’t of Child. & Fams., 2020-2024 Child and Family Services Plan 51-52, 56-57 (2019), <https://www.nj.gov/dcf/childdata/njfederal/New%20Jersey%202020-2024%20CFSP.pdf> [https://perma.cc/9KWY-HH78]; New Jersey Dep’t of Child. & Fams., 2021 Annual Progress and Services Report 55, 61-63 (2020), <https://www.nj.gov/dcf/childdata/njfederal/NJ.DCF.2021.ASPR.pdf> [https://perma.cc/9DSY-WV42]; *Frequently Asked Questions*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/faq> [https://perma.cc/K6WP-TSE2] (last visited July 28, 2021).
- 106 A recent public records request reveals a state contract with a vendor tasked with examining common factors among child mortality cases. As the method they use is not predicting these cases but rather grouping among child mortality cases and excluding all other cases, we do not classify this effort as predictive analytics. However, the data aggregation within the contract suggests this might be a next step in their process. See E-mail from Kathleen Hardy, Records Custodian, New Mexico Child., Youth & Fams. Dep’t, to Todd Feathers, Freelance Journalist, Re: New Mexico Inspection of Public Records Act Request: Child welfare predictive analytics systems (May 14, 2021), <https://www.muckrock.com/foi/new-mexico-227/child-welfare-predictive-analytics-systems-111849/> [https://perma.cc/YW84-CWTR].
- 107 NYC Algorithms Management & Pol’y Officer, Summary of Agency Compliance Reporting 8 (2020), <https://www1.nyc.gov/assets/ampo/downloads/pdf/AMPO-CY-2020-Agency-Compliance-Reporting.pdf> [https://perma.cc/S3H2-B83M].
- 108 NYC Algorithms Management & Pol’y Officer, Summary of Agency Compliance Reporting 8 (2020), <https://www1.nyc.gov/assets/ampo/downloads/pdf/AMPO-CY-2020-Agency-Compliance-Reporting.pdf> [https://perma.cc/S3H2-B83M].
- 109 See Bill Lucia, *As Child Welfare Agencies Turn to Data Analytics ‘We Have to Be Really Careful,’* Route Fifty (Sept. 28, 2016), <https://www.route-fifty.com/management/2016/09/child-welfare-predictive-analytics/131897/> [https://perma.cc/T5F4-CZ2Y]; *States using SAS program to identify high-risk households in child welfare cases*, CBS 17 (Mar. 23, 2016), <https://www.cbs17.com/news/states-using-sas-program-to-identify-high-risk-households-in-child-welfare-cases/> [https://perma.cc/LGK2-54GT]; *How a NC county uses predictive analytics to save lives of at-risk kids*, Smart Cities Council (Sept. 1, 2016), <https://smartcitiescouncil.com/article/how-nc-county-uses-predictive-analytics-save-lives-risk-kids> [https://perma.cc/6WSG-MFQU] (“By integrating data from a variety of sources, such as criminal justice and public health databases, the system will alert DSS workers to changes in a child’s life that could indicate increased risk – for example 911 calls from the child’s home, arrest of family members, school absences, etc.”); *Customer Stories: New Hanover County Department of Social Services*, SAS, https://www.sas.com/en_us/customers/new-hanover-county-dss.html [https://web.archive.org/web/20210116210359/https://www.sas.com/en_us/customers/new-hanover-county-dss.html] (last visited May 25, 2021).
- 110 For confirmation of lack of current use, see E-mail from Marlys Baker, Administrator, North Dakota Dep’t of Hum. Servs., to Todd Feathers, Freelance Journalist, Re: North Dakota Open Records Law Request: Child welfare predictive analytics systems (May 3, 2021), <https://www.muckrock.com/foi/north-dakota-232/child-welfare-predictive-analytics-systems-111852/> [https://perma.cc/9ZCE-5GKN] (“North Dakota has not implemented any predictive models in any child welfare program.”).
- 111 Ohio Dep’t of Job & Fam. Servs., 2020-2024 Child and Family Services Plan 65 (2019), <https://jfs.ohio.gov/ocf/CFSP2020-2024.stm> [https://perma.cc/B3GD-KHAW]; see also Ohio Dep’t of Jobs & Fam. Servs., *Using Predictive Analytics to Identify High Risk Child Welfare Cases* (2017), <https://www.ohiocasa.org/wp-content/uploads/2017/09/T18.pdf> [https://perma.cc/4MYR-LRZH]; E-mail from Bret Crow, Director of Communications, Ohio Dep’t of Job & Fam. Servs., to Beryl Lipton, Reporter, MuckRock, Re: Predictive analytics at family agencies (featuring Eckerd Rapid Safety Feedback) (Ohio Department of Job and Family Services) (June 5, 2019), <https://www.muckrock.com/foi/ohio-116/predictive-analytics-at-family-agencies-featuring-eckerd-rapid-safety-feedback-ohio-department-of-job-and-family-services-74014/> [https://perma.cc/3KUA-Z942] (“After initially testing the program’s feasibility on a pilot basis, we discontinued its use. Ohio does not use a predictive analytics system.”). For confirmation of lack of current use, see E-mail from Ohio Dep’t of Job & Fam. Servs. to Todd Feathers, Freelance Journalist, Re: Ohio Open Records Law Request: Child welfare predictive analytics systems (May 11, 2021), <https://www.muckrock.com/foi/ohio-116/child-welfare-predictive-analytics-systems-111853/> [https://perma.cc/547R-FF9B] (“In 2016 and 2017 when we began contracting with Eckerd Connects, the Ohio Department of Job and Family Services (ODJFS) intended to identify high-risk cases using predictive analytics. However, ODJFS found that there were significant limitations to utilizing predictive analytics and decided not to move forward with its implementation. While ODJFS continues to contract with Eckerd Connects, we are not utilizing predictive analytics at this time and do not intend to do so in the future.”).
- 112 See Oklahoma Dep’t of Hum. Servs., 2020-2024 Child and Family Services Plan 46 (2019), <https://okschoolreadiness.org/uploads/documents/Child%20and%20Family%20Services%20Plan.pdf> [https://perma.cc/CRN2-G2RN]; News Release, *DHS partners with Tom Ward and Eckerd Kids to bring new technology to child protective investigations*, Oklahoma Dep’t of Hum. Servs. (June 23, 2016), <https://oklahoma.gov/okdhs/newsroom/2016/june/comm06232016.html> [https://perma.cc/539P-N3D9]; Oklahoma Dep’t of Hum. Servs., *Child Welfare Services Regions and Districts* (Jan. 22, 2019), <http://www.okdhs.org/okdhs%20publication%20library/m13-02.pdf> [https://perma.cc/XGL3-HZD7]. For confirmation of lack of current use, see E-mail from Ron Baze, General Counsel, Oklahoma Dep’t of Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Oklahoma Open Records Act Request: Child welfare predictive analytics systems (May 11, 2021), <https://www.muckrock.com/foi/oklahoma-248/child-welfare-predictive-analytics-systems-111854/> [https://perma.cc/7RXA-3R2W] (“[T]he Department no longer employs predictive analytics.”).
- 113 Oregon Dep’t of Hum. Servs., 2021 Annual Progress and Services Report 51-53 (2020), <https://www.oregon.gov/dhs/CHILDREN/Documents/APS%20Report%202020.pdf> [https://perma.cc/YM9X-D8VY]; Oregon Dep’t of Hum. Servs., *Oregon DHS Safety at Screening Tool – Development and Execution 2-4*, <https://www.oregon.gov/dhs/ORRAL/Documents/Safety%20at%20Screening%20Tool%20Development%20and%20Execution%20Report.pdf> [https://perma.cc/MG5Q-7PHX] (last visited July 28, 2021).
- 114 The description does not specify whether the tool includes a prediction of the risk of maltreatment in its calculation of the success of reunification, but we list the tool in the table to err on the side of inclusion so that community members may find out more about the tool’s operation. Oregon Dep’t of Hum. Servs., 2021 Annual Progress and Services Report 52 (2020), <https://www.oregon.gov/dhs/CHILDREN/Documents/APS%20Report%202020.pdf> [https://perma.cc/YM9X-D8VY].

- 115 Oregon Dep't of Hum. Servs., 2021 Annual Progress and Services Report 52 (2020), <https://www.oregon.gov/dhs/CHILDREN/Documents/APPS%20Report%202020.pdf> [<https://perma.cc/YM9X-D8VY>].
- 116 *Frequently Asked Questions*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/faq> [<https://perma.cc/K6WP-TSE2>] (last visited July 28, 2021).
- 117 All. for Strong Fam. & Cmtyts., Transforming Child Welfare Systems to a 21st Century Model that Strengthens and Supports Families and Communities: Innovations from the Field 31 (2020), <https://familyfirstact.org/sites/default/files/Transforming%20Child%20Welfare%20Systems.pdf> [<https://perma.cc/PBL3-KMRL>].
- 118 *The Allegheny Family Screening Tool: Predictive Risk Modeling in Child Welfare in Allegheny County*, Allegheny Cnty., <https://www.allegheny-county.us/Human-Services/News-Events/Accomplishments/Allegheny-Family-Screening-Tool.aspx> [<https://perma.cc/H6XQ-UWY9>] (last visited July 28, 2021).
- 119 *Hello Baby*, Allegheny Cnty., <https://www.alleghenycounty.us/Human-Services/News-Events/Accomplishments/Hello-Baby.aspx> [<https://perma.cc/F8RX-5EP5>] (last visited July 28, 2021); Rhema Vaithianathan et al., Implementing the Hello Baby Prevention Program in Allegheny County: Methodology Report 13-15 (2020), https://www.alleghenycountyanalytics.us/wp-content/uploads/2020/09/hello-baby-Methodology-Report_9-9-20-v2.pdf [<https://perma.cc/B7P6-4GKG>].
- 120 Laurie Mason Schroeder, *Can an algorithm tell when children are in danger? Northampton County to use controversial analytics tool to screen reports of neglect*, Morning Call (Mar. 12, 2021), <https://www.mcall.com/news/breaking/mc-prem-nws-northampton-county-child-protection-algorithm-20210312-n4ibja66svdnhm2v3rb3smdyq-story.html> [<https://web.archive.org/web/20210625041813/https://www.mcall.com/news/breaking/mc-prem-nws-northampton-county-child-protection-algorithm-20210312-n4ibja66svdnhm2v3rb3smdyq-story.html>].
- 121 Pennsylvania Dep't of Hum. Servs., Racial Equity Report 13 (2021), <https://www.dhs.pa.gov/about/Documents/2021%20DHS%20Racial%20Equity%20Report%20final.pdf> [<https://perma.cc/8KGW-QZJS>].
- 122 While Rhode Island's 2020-2024 Child and Family Services Plan and 2021 Annual Progress and Services Report discuss use of in-house "predictive analytics," Rhode Island does not appear to use predictive analytics to predict future maltreatment locations or make individualized maltreatment risk assessments. See Rhode Island Dep't of Child., Youth & Fams., 2020-2024 Child and Family Services Plan 21-22, 67-68 (2019), http://www.dcyf.ri.gov/documents/federal-reports/ri-cfsp-2016-2020-FINAL_092319.pdf [<https://perma.cc/98BX-SM3R>]; Rhode Island Dep't of Child., Youth & Fams., 2021 Annual Progress and Services Report 78 (2020), <http://www.dcyf.ri.gov/documents/federal-reports/fy-2021-apsr.pdf> [<https://perma.cc/FC3D-H24C>]; Letter from Deborah Buffi, Attorney, Rhode Island Dep't of Child., Youth & Fams., to Todd Feathers, Freelance Journalist, Re: APRA Response to Todd Feathers Muckrock (June 29, 2021), <https://www.muckrock.com/foi/rhode-island-82/ri-child-welfare-predictive-analytics-models-114307/> [<https://perma.cc/488A-UWSV>].
- 123 Compare David Jackson & Gary Marx, *Data mining program designed to predict child abuse proves unreliable, DCFS says*, Chi. Trib. (Dec. 6, 2017), <https://www.chicagotribune.com/investigations/ct-dcfs-eckerd-met-20171206-story.html> [<https://web.archive.org/web/20210607003951/https://www.chicagotribune.com/investigations/ct-dcfs-eckerd-met-20171206-story.html>] ("Eckerd Connects – which recently changed its name from Eckerd Kids – told the Tribune that variants of its Rapid Safety Feedback are used today by child welfare agencies in Ohio, Indiana, Maine, Louisiana, Tennessee, Connecticut and Oklahoma."), with *Eckerd Rapid Safety Feedback*, Eckerd Connects, <https://eckerd.org/family-children-services/ersf/> [<https://perma.cc/QS9Y-J8CM>] (last visited July 28, 2021).
- 124 For confirmation of lack of current use, see E-mail from Marissa Gonzales, Media Relations Director, Texas Dept. of Fam. & Protective Servs., to Todd Feathers, Freelance Journalist, Re: Texas Public Information Act Request: Child welfare predictive analytics systems (May 17, 2021), <https://www.muckrock.com/foi/texas-109/child-welfare-predictive-analytics-systems-111861/> [<https://perma.cc/4L9T-VLS2>] ("[W]hile DFPS does conduct analysis of historical data, the agency does not employ any predictive analytics models.").
- 125 For confirmation of lack of current use, see Letter from Steven Sullivan, GRAMA Specialist, Utah Dept. of Hum. Servs., to Todd Feathers, Freelance Journalist, Re: Government Records Access and Management Act Request: Child welfare predictive analytics systems (May 4, 2021), <https://www.muckrock.com/foi/utah-234/child-welfare-predictive-analytics-systems-111862/> [<https://perma.cc/K35B-QPM2>] ("Utah's Division of Child and Family Services does not employ predictive analytics in any form.").
- 126 Richmond, Virginia Technical Report, Predict-Align-Prevent (2019), https://b9157c41-5fbc-4e28-8784-ea36ffdbce2f.filesusr.com/ugd/fbb580_2f1dda2ff6b84f32856bc95d802d6629.pdf [<https://perma.cc/4UGF-EWKBJ>].
- 127 *Frequently Asked Questions*, Predict-Align-Prevent, <https://www.predict-align-prevent.org/faq> [<https://perma.cc/K6WP-TSE2>] (last visited July 28, 2021).
- 128 For confirmation of lack of current use, see E-mail from Daron A. Light, Assistant General Counsel, West Virginia Dep't of Health & Hum. Res., to Todd Feathers, Freelance Journalist, Re: West Virginia Freedom of Information Act Request: Child welfare predictive analytics systems (June 10, 2021), <https://www.muckrock.com/foi/west-virginia-304/child-welfare-predictive-analytics-systems-111866/> [<https://perma.cc/7KYB-6XJL>] ("The Department is not engaged in the use of any predictive analytics systems as described by your request.").
- 129 Wisconsin Dep't of Child. & Fams., 2021 Annual Progress and Services Report 132 (2020) (draft), <https://dcf.wisconsin.gov/files/cqi-cfsr/pdf/report/apsr.pdf> [<https://perma.cc/BU2G-BMFM>].
- 130 See Letter from Rachel B. Nili, Attorney, Wisconsin Dept. of Child. & Fams., to Todd Feathers, Freelance Journalist, Open Records Request Response (May 24, 2021), <https://www.muckrock.com/foi/wisconsin-146/child-welfare-predictive-analytics-systems-111867/> [<https://perma.cc/J5DJ-ELCF>] ("DCF previously worked with an external research partner (the Children and Family Research Center at the University of Illinois at Urbana-Champaign) to study and work on the potential development of a predictive risk model. No predictive risk model was subsequently implemented by DCF, and as noted above, currently DCF does not have in place any predictive risk models in child welfare.").
- 131 Wisconsin Dep't of Child. & Fam., Implementation of Predictive Analytics in Wisconsin Child Welfare 13, 17, <https://predictive.cfr.illinois.edu/pdf/Wisconsin.pdf> [<https://perma.cc/739A-6L2W>] (last visited July 28, 2021).

- 132 See E-mail from Rachel B. Nili, Attorney, Wisconsin Dept. of Child. & Fams., to Todd Feathers, Freelance Journalist, Wisconsin Open Records Act Request: Child welfare predictive analytics systems (May 24, 2021), <https://www.muckrock.com/foi/wisconsin-146/child-welfare-predictive-analytics-systems-111867/> [https://perma.cc/J5DJ-ELCF]. See also Letter from Rachel B. Nili, Attorney, Wisconsin Dept. of Child. & Fams., to Todd Feathers, Freelance Journalist, Open Records Request Response (May 24, 2021), <https://www.muckrock.com/foi/wisconsin-146/child-welfare-predictive-analytics-systems-111867/> [https://perma.cc/J5DJ-ELCF]. (“DCF previously utilized a predictive risk model that would identify children at highest risk of re-entering out-of-home care within 12 months of reunification so that services could be offered to those families through the Post-Reunification Support (P.S.) Program, which was intended to prevent child re-entry to care. The P.S. Program, including the predictive risk model component, ended in 2019.”).
- 133 For confirmation of lack of current use, see E-mail from Clint Hanes, Ombudsman/Public Information Officer, Wyoming Dep’t of Fam. Servs., to Todd Feathers, Freelance Journalist, Re: Wyoming Public Records Act Request: Child welfare predictive analytics systems (May 5, 2021), <https://www.muckrock.com/foi/wyoming-305/child-welfare-predictive-analytics-systems-111868/> [https://perma.cc/8Q4J-U23A] (“The Department of Family Services does not utilize predictive analytics, therefore I have no information to share with you.”).