



## Using Data and Science to Support Strong Families

### Overview

RIPL developed state-of-the-art science to help policymakers **make informed, data-driven decisions** about where to direct support, understand long-term outcomes of current removal policy, and develop the resources needed to conduct their own robust, timely analysis **to support strong families and protect vulnerable children in Rhode Island.**

### Using Science to Help Children in Need

In 2017, about 674,000 children in the U.S. were determined by CPS to be victims of maltreatment or abuse, and 1,720 children died from abuse or neglect.<sup>1</sup> Understanding the key drivers of maltreatment, where to send support services, and the impact of current policies on families is vital to developing fact-based strategies that work from evidence instead of instinct.

We partnered with the Office of the Governor and executive agencies in Rhode Island to unlock the power of data and science to give policymakers the facts they need. Together, we:

First, **we built a tool that predicts with up to 80% accuracy which children will experience a substantiated maltreatment investigation** in the coming year. The tool uncovers **key life factors and policy interactions** that predict a substantiated child maltreatment investigation, and delivers a **spatial model of risk scores for Census block groups and neighborhoods** to help policymakers make informed, data-driven decisions about **where to target support services to help families grow together** and reduce the risk of domestic maltreatment.

Second, **we measured the causal impact of removal from a home on a child's short- and long-run outcomes.**<sup>2</sup> RIPL found that among children

removed under the age of six, **removal improves educational outcomes for girls, raising test scores by over 1 student-level-standard-deviation** (see *Figure 1*), and significantly reduces special needs and disciplinary infractions as well.

Third, **we empowered Rhode Island government to unlock its own data to answer pressing policy questions.**

We built a scientifically-designed, secured, linked, and anonymized data lake prototype of the executive agencies' own data, which enabled them to pursue and complete a multi-department project to evaluate how to prevent child maltreatment in Rhode Island, including uncovering common risk factors for child maltreatment. The agency then tackled these risk factors head-on through targeted policies using real-time data, and now has all the tools it needs to conduct additional analyses to design timely fact-based policies to protect families and communities for years to come.

With these approaches, policymakers are empowered with facts at their fingertips to efficiently and proactively provide effective services to communities who need additional support. These low-cost, high-impact tools can be built using data that state and county governments already have.

*Figure 1: Causal Impact of Removal on Test Scores by Gender*

