

# CHILD WELFARE

# 

# **RESULTS FIRST**

APRIL 2018

# **Table of Contents**

Acknowledgments	5
Results First Advisory Committee	5
Report Authors	5
Executive Summary: Results First Child Welfare Analysis	6
1. Results First child welfare analysis	8
A. Report overview	8
B. Scope and assumptions	9
2. The causes and consequences of maltreatment	. 10
A. Impact of maltreatment on children	. 10
B. A complex system of factors leads to maltreatment	. 11
3. The child welfare system in Minnesota	. 13
A. Governance and funding	. 13
B. How a report proceeds through the child welfare system	. 16
C. Overrepresentation of children of color and American Indian children	. 24
4. Marginal costs of child welfare involvement	. 27
A. Costs per child and major expenses	. 27
B. Costs not included in the model	. 29
5. Inventory and benefit-cost analysis findings	. 30
A. Inventory of services	. 30
B. Benefit-cost analysis	. 33
Appendix A: Child welfare inventory of services	. 39
Appendix B: Summary of research methods	. 52
A. Inventory of services	. 52
B. Benefit-cost analysis	. 53
C. Meta-analysis and effect sizes	. 55
D. Calculating benefits	. 56
E. Calculating marginal cost per participant	. 57
Appendix C: Relative rate index methodology	. 59
References	. 60

# **Table of Figures**

Figure 1: Summary of child welfare inventory	6
Figure 2: Comparison of benefit-cost ratios for child welfare services	7
Figure 3: A framework for evidence-based decision-making	8
Figure 4: Key actors in child welfare	13
Figure 5: Minnesota child welfare system funding, by source (2016, in millions)	15
Figure 6: Major expenditure categories in the child welfare system	16
Figure 7: Overview of Minnesota's child welfare process	17
Figure 8: Summary data for child welfare in Minnesota (2016)	18
Figure 9: Maltreatment report referral source	18
Figure 10: Alleged victims in 2016 screened-in maltreatment reports	20
Figure 11: Number of placement episodes by primary removal reason (2016)	23
Figure 12: Relative rate of child welfare involvement in Minnesota, by race (2016)	25
Figure 13: Cost model components & major expenses	27
Figure 14: Summary of inventory ratings by service category	31
Figure 15: Explanation of a benefit-cost ratio	33
Figure 16: Benefit-cost analysis terms	54

# Acknowledgments

The team is incredibly grateful to our data collection partners and policy stakeholders. In particular, staff from the Department of Human Services Child Safety and Permanency Division; volunteer members of the Minnesota Association of County Social Service Administrators' Results First Child Welfare subcommittee (county staff from Beltrami, Dakota, Grant, Hennepin, Olmsted, Ramsey, Scott, and St. Louis counties), and the Pew-MacArthur Results First team.

## **Results First Advisory Committee**

Myron Frans, Commissioner, Minnesota Management & Budget Emily Johnson Piper, Commissioner, Minnesota Department of Human Services Larry Pogemiller, Commissioner, Office of Higher Education Tom Roy, Commissioner, Minnesota Department of Corrections Michelle Benson, Senator, Minnesota Senate Clark Johnson, Representative, Minnesota House of Representatives. Ron Latz, Senator, Minnesota Senate Diane Loeffler, Representative, Minnesota House of Representatives Tony Lourey, Senator, Minnesota Senate Marion O'Neill, Representative, Minnesota House of Representatives Dawn Torgerson, Deputy State Court Administrator, Minnesota Judicial Branch Toni Carter, Commissioner, Ramsey County Kelly Harder, Director of Community Services, Dakota County Gary Hendrickx, Commissioner, Swift County Tim Houle, County Administrator, Crow Wing County Cathy Chavers, Chairwoman, Bois Forte Band of Chippewa

#### **Report Authors**

Laura Kramer, Jocelyn Rousey, and Pete Bernardy. For more information, contact: ResultsFirstMN@state.mn.us

# **Executive Summary: Results First Child Welfare Analysis**

The Minnesota Legislature instructed Minnesota Management and Budget (MMB) to conduct benefit-cost analyses for state investments using the Pew-MacArthur Results First framework. This framework allows Minnesota to estimate the cost effectiveness of select services using national evidence. Under this framework, MMB does not evaluate the impact of services as currently implemented in Minnesota. Rather, MMB estimates the benefits Minnesota can expect if the outcomes of our services resemble those found in previous evaluations. Insights generated from the analysis have the potential to inform state and local decision-makers.

This report examines benefits and costs associated with child welfare services. Counties, tribes,<sup>1</sup> the Minnesota Department of Human Services, and the Minnesota Department of Health administer a range of services aimed at reducing and preventing child maltreatment and out-of-home care. These investments also have the opportunity to decrease crime, improve health care outcomes, and increase future earnings, thereby generating benefits to participants and the state.

In 2016, county child welfare agencies and tribes assessed 75,000 reports of alleged child maltreatment and oversaw the care of 15,000 children in out-of-home care. These numbers reflect a complex web of socioeconomic factors that influence how ready and able a parent or caregiver is to care for his or her child. In 2016, \$505 million from federal, state, and county sources funded targeted services aimed at supporting children and families involved in the child welfare system.

Of the 74 services examined in this report with a goal of preventing or reducing maltreatment and out-of-home care, 11 are rated Proven Effective, meaning they have a strong enough base of research supporting their positive impact. An additional 10 programs are rated Promising based on the available research conducted on those programs. There is a limited amount of rigorous research evaluating the impact of child welfare services due, in part, to the ethical considerations of traditional research methods that provide services to some children and families and not others in order to determine the impact of a service.

#### 5 services have benefit-cost ratios (3 Proven Effective and 2 Promising) Of the 74 child welfare services: t 11 are 10 are Promising Proven 47 are Theory Based (One qualifying Effective (Qualifying evidence is not currently available) study showing Multiple qualifying favorable impact) studies showing favorable impact) 5 are a Category 1 of Services Note: A qualifying study uses a randomized control trial or quasi-experimental design, meaning there is a treatment and control group to test the impact of the service. Pending Category of Services: A group of services a client may receive, dependent on need. (Currently under review) Some services may be evidenced-based, but they have not been studied holistically.

#### Figure 1: Summary of child welfare inventory

<sup>&</sup>lt;sup>1</sup> This analysis includes high-level tribal data available to state agencies, but it does not include the specific services and costs associated with individual tribal child welfare systems.

For the benefit-cost analysis, we use a statistical model to monetize benefits from reductions in child maltreatment, out-of-home care, crime, and infant mortality in addition to increases in employment earnings. These projected outcomes come from existing rigorous evaluations of child welfare services.

Our reliance on high-quality research means that we are currently able to examine five services offered as part of Minnesota's child welfare system. Four of the child welfare services in the benefit-cost analysis have estimated benefits that exceed their costs. Estimated benefits per dollar invested range from \$1.20 to \$0.70. Two services are less expensive than the alternative intervention and therefore do not have an associated benefit-cost ratio. However, they still generate benefits that exceed their costs. Most benefits accrue to participants through future labor market earnings.

Benefit-cost analysis is a valuable tool for informing decisions about how to use scarce public resources, but cost-effectiveness is only one factor to consider when evaluating child welfare investments. Equity, innovation, and the well-being of individual children and families are other key factors.

Service or Practice	Per participant benefit minus cost	Benefit-cost ratio (A+B)	Taxpayer ratio (A)	Other societal ratio (B)
Northstar Kinship Assistance (Subsidized Guardianship)	\$6,720	· · · · · · · · · · · · · · · · · · ·	ensive than the standard alte enerates benefits from redu	•
Family Assessment (Alternative Response)	\$990		nsive than the standard alte enerates benefits from reduc	
Healthy Families America (home visiting)	\$1,200	\$1.20	\$0.00	\$1.20
Other Long-Term Home Visiting	\$360	\$1.10	\$0.20	\$0.90
Nurse Family Partnership (home visiting)	(\$2,770)	\$0.70	\$0.20	\$0.50

#### Figure 2: Comparison of benefit-cost ratios for child welfare services

*Per participant benefit minus cost* is the difference between the present value of cash inflows (anticipated benefits) from a given service and the present value of cash outflows (costs).

Benefit-cost ratio is the net present value of anticipated benefits to state residents for every dollar invested in the service.

*Taxpayer benefits* (*blue*) accrue from avoided child welfare system costs, avoided health care and criminal justice costs, avoided public assistance costs, and increased tax revenues from labor earnings.

**Other societal benefits** (green) accumulate to society through increased labor market earnings, avoided health costs, avoided victimization costs, and in some cases avoided premature deaths related to infant mortality.

# 1. Results First child welfare analysis

A bipartisan provision enacted during the 2015 legislative session directed Minnesota Management and Budget (MMB) to implement an evidence-based policy framework. Through the Minnesota Results First Initiative, MMB uses high-quality evidence to estimate the extent to which publicly funded services generate positive, cost-effective outcomes for Minnesotans. We collaborate with state, local, and national entities to identify and estimate the benefits and costs of a range of public services that support the well-being of Minnesotans.

As policymakers face difficult budget choices, knowing which services have proven outcomes that lead to taxpayer savings is valuable. When applied consistently, these insights improve outcomes and maximize benefits for Minnesotans.

#### A. Report overview

Minnesota's Results First Initiative uses a framework based on research synthesis and benefit-cost modeling made available by the <u>Pew Charitable Trusts and MacArthur Foundation</u>. The approach enables us to identify opportunities for investment that generate positive outcomes for individuals and achieve long-term savings. Minnesota is one of a growing number of states that are customizing this approach to their state-specific context and using its results to inform policy and budget decisions.

#### Figure 3: A framework for evidence-based decision-making

The nationally recognized Results First Initiative framework uses a three-step process:

- 1. **Use high-quality research** from across the nation to identify which services work
- 2. Use this research and state-specific data to project the effect of implementing these services
- 3. **Compare services' costs and projected benefits** to identify the return on investment of public dollars

The Results First framework has two major products: the inventory of services and the benefit-cost analysis. The child welfare inventory identifies the degree to which there is evidence of effectiveness for each of the services implemented in Minnesota. The primary outcomes assessed are child maltreatment and out-of-home care. Additional child and family wellbeing outcomes are also included. We developed an inventory of 74 child welfare services and conducted in-depth, benefit-cost analyses on five services for which there is sufficient research and fiscal data available. The benefit-cost analyses estimate the monetary value of a given change in maltreatment or placement outcomes. Changes in these outcomes affect taxpayer expenses, such as child protective services, public health care, criminal justice involvement, and increased tax revenues related to labor market earnings. The benefit-cost ratio compares per-participant benefits to the per-participant cost of the service.

Section 5 presents findings from the inventory and benefit-cost analysis. To frame that analysis, the report first outlines factors that influence which families come into contact with the system (Section 2), describes how the state's child welfare system operates (Section 3), and highlights significant findings from the cost model that enables the benefit-cost analysis (Section 4).

# **B. Scope and assumptions**

The child welfare system is complex, and supporting families and their children involves a variety of resources and jurisdictions working together. In order to present a concise analysis, the services examined in the inventory and benefit-cost analysis include only those that have a stated goal to prevent or reduce maltreatment and outof-home care. It excludes services aimed exclusively at adults or the juvenile justice population as well as school-

based services and general children's mental health services. MMB includes many of these services in previous Results Firsts reports (available at <u>mn.gov/mmb/results-first)</u>.

We primarily used data from the Minnesota Department of Human Services and the Minnesota Courts, supplemented with context and data from a sample of Minnesota counties: Beltrami, Dakota, Grant, Hennepin, Olmsted, Ramsey, Scott, and St. Louis. This sample includes counties of varying size and location throughout the state, but it is not necessarily representative of human service agencies throughout the state.

To the extent that tribal data is available to the Department of Human Services, the summary data in this report includes tribal child welfare information. However, this analysis does not include the services and costs specific to the child welfare activities of tribal nations. Determinations of evidence of effectiveness are not specific to tribal populations unless otherwise noted.

#### **Key terms and outcomes**

In selecting services to examine in this report, we focused on those that impact two key child welfare outcomes: maltreatment and out-of-home care.

State statute (M.S. 626.556) defines **maltreatment** as physical, mental or threatened injury inflicted by a caregiver on a child. It can also take the form of neglect, whereby a caregiver fails to provide a child with food, clothing, shelter, health, medical, or other required care.

State statute (M.S. 260C.007) defines **out-ofhome care** as a situation in which a social services agency places children away from their parents or guardians. These alternative care settings include a foster families, relatives, group homes, emergency shelters, and residential facilities.

In conducting the benefit-cost analysis described in this report, we did not directly evaluate service outcomes or the effectiveness of services delivered in Minnesota. Rather, we estimated the benefits the state can expect if services have the same impact found in high-quality evaluations previously conducted in Minnesota or elsewhere in the country. To achieve the estimated benefit, practitioners must implement evidence-based services in Minnesota in the same way as the services evaluated in the research used to estimate impacts. This analysis assumes services are being implemented with fidelity. The analysis compares evidence-based services to the "treatment as usual" (as opposed to "no treatment"). Treatment as usual varies depending on how comparison groups are set-up in the underlying academic research.

# 2. The causes and consequences of maltreatment

# A. Impact of maltreatment on children

In 2016, more than 75,000 reports came in across Minnesota containing allegations of child maltreatment (Minnesota Department of Human Services 2017b). In them, teachers, doctors, neighbors, law enforcement officers and other mandated or concerned reporters detailed allegations ranging from physical and emotional abuse to neglect arising from poverty, parental substance use, and domestic violence. A county or tribal social services agency reviews each report and determines whether the allegations meet the statutory definition of maltreatment<sup>2</sup> and how best to proceed.

Of the more than 75,000 reports filed in 2016, nearly 31,000 (41%), had follow-up family assessments or investigations (Minnesota Department of Human Services 2017b). In 2016, just over 15,000 children experienced some type of out-of-home care (Minnesota Department of Human Services 2017c).

Maltreatment has severe impacts on children's development and their long-term mental and physical health. Maltreatment is considered a type of adverse childhood experience (ACE), a category of traumatic experiences that threatens someone's life, safety, or well-being and elicits intense feelings such as fear, terror, helplessness, hopelessness, and despair that overwhelm their capacity to cope with the experience (Buffington, Dierkhising, and Marsh 2010). There are different types of ACEs, such as sexual, physical, and emotional abuse or assault; neglect; forced displacement; and many others (Hurley Swayze and Buskovic 2015). The ACEs listed above are capable of inducing a toxic stress response. Toxic stress can result from strong, frequent, or prolonged activation of the body's stress response systems in the absence of the buffering protection of a supportive adult relationship (Shonkoff 2012). Long-term effects of ACEs and the trauma children experience during youth have negative effects on physical and emotional development (Adams 2010; Ford et al. 2007; National Child Traumatic Stress Network 2009) and social and behavioral development (American Academy of Child and Adolescent Psychiatry 2011; Ford et al. 2007). Trauma also increases the likelihood of developing life-long psychiatric conditions (Adams 2010; National Child Traumatic Stress Network 2017).

In addition to the immediate physical or emotional harm a child experiences, the toxic stress resulting from maltreatment and ACEs specifically has been linked to impaired cognitive and social-emotional skills; higher risk of chronic health conditions such as heart, lung, and liver diseases; obesity; high blood pressure; and psychiatric disorders. Impaired brain function caused by toxic stress may manifest in risky behaviors such as substance misuse and higher rates of delinquency, teen pregnancy, low academic achievement, adult criminal behavior, and crime (Child Welfare Information Gateway 2013). The Centers for Disease Control and Prevention estimated that, nationally, new cases of child abuse and neglect in 2008 produced a total lifetime economic burden of \$143 billion in 2017 dollars,<sup>3</sup> which is comparable to the cost of other major diseases such as stroke and diabetes (Centers for Disease Control and Prevention 2016).

<sup>&</sup>lt;sup>2</sup> M.S. 626.556, Subd. 2

<sup>&</sup>lt;sup>3</sup> Inflated from 2010 dollars to 2017 dollars according to the Bureau of Labor Statistic CPI Calculator.

Given the significant individual and social impacts of maltreatment, ensuring a child's safety is the paramount goal of any child welfare agency. However, it is sometimes difficult to know how best to ensure that safety. While staying in a home may be detrimental and dangerous for children, removing them from their home carries its own set of traumas and long-term effects.<sup>4</sup> Thus, social workers and the courts must constantly weigh the impact of keeping families together versus separating them. They make a judgement call about what is best for each child. High profile news stories, political factors, and evolutions in child welfare research and practice all influence whether the system prioritizes keeping families together or placing kids in out-of-home care. Historical trends indicate that the child welfare system's approach to child safety is like a pendulum, oscillating between the two poles of keeping kids with their families or removing them (Governor's Task Force on the Protection of Children 2015).

# **B. A complex system of factors leads to maltreatment**

There is a growing understanding that social, economic, and environmental factors have an undeniable impact

on people's overall health and wellbeing. These "social determinants of health" play a role in explaining why some families become involved in the child welfare system while others do not. Child safety is linked to the physical, mental, and economic wellbeing of not just a child's parents or caregivers but also the broader community in which he or she lives. The Centers for Disease Control and Prevention (CDC) maltreatment prevention strategy involves influencing all levels of the social ecology – from community and neighborhoods to individual behaviors - to create safe, stable, nurturing relationships and environments for children (Fortson 2016). The impact of these broad factors can persist across time and generations, such that the disparities present in today's system reflect both historical and present-day biases and inequalities.

# Other Results First Reports

Child welfare is the fifth policy area examined in the Minnesota Results First Initiative. The first four were juvenile justice, substance use, adult mental health, and adult criminal justice.

These policy areas often overlap – for example, 27 percent of new out-of-home placements in 2016 were the result of parental substance use. In this context, prevention of maltreatment and out-of-home placements requires a more holistic approach to child welfare than is captured in this report alone.

Visit **mn.gov/mmb/results-first** to read other Results First reports and learn more about the various services available to residents across Minnesota.

Child maltreatment necessarily involves an

interaction between a child and his or her parent or caregiver. However, the services highlighted in this report focus mostly on supporting the child or the family as a unit and do not include services that support parents'

<sup>&</sup>lt;sup>4</sup> Like the broader population of maltreated children, children who have spent time in out-of-home care typically display a higher likelihood of negative outcomes associated with mental and physical illness, limited educational attainment, and other outcomes (Geenen et al. 2015). However, it is difficult to determine how much of that impact is related to foster care rather than the maltreatment that led to the child being placed in out-of-home care. Research shows that the longer a child spends in out-of-home care, the higher their likelihood of experiencing multiple placements, and this instability can lead to behavioral and attachment problems, mental health issues, educational under-achievement, and higher unemployment and poverty rates as adults (Sudol 2009). Research also shows that kinship care, in which a child is placed with a family member, leads to better outcomes than when he or she is placed in non-kin foster care, including better behavioral and mental health outcomes (Winokur, Holtan, and Batchelder 2014).

broader needs and which could help prevent maltreatment from initially occurring. Many child welfare interventions include referring caregivers to mental health and substance use treatment, social safety net programs, and other services that impact how ready and able an adult is to care for a child. The scope of this report reflects the need to present a concise analysis and intentionally omits services serving parents only. However, previously published Results First reports address some of the broader services that support parents.

The following discussion touches on several broader factors that affect the wellbeing of Minnesota's children and families.

#### Poverty

Neglect is the most common form of alleged child maltreatment and accounted for more than half of the 31,000 maltreatment reports in 2016 that met the statutory definition of maltreatment and were screened in for follow-up action (Minnesota Department of Human Services 2017b). Though neglect can mean many things and often results from parental substance use or exposure to domestic violence, it is frequently associated with factors related to poverty such as housing instability or food insecurity. However, poverty alone should never be considered neglect.

Data from the Fourth National Incidence Study of Child Abuse and Neglect showed that children from lowsocioeconomic status families were more than 7 times as likely to be neglected (Sedlak et al. 2010). While poverty itself does not necessarily lead to child maltreatment, a limited income is a significant source of stress for families such that any additional stressor (such as a substance use disorder, a behavioral problem, depression, or a health crisis) can more easily overwhelm a family's capacity to confront and manage that stress. For instance, a high-income family may be better positioned than a low-income family to proactively find and afford treatment for a child with a behavioral problem or a parent with a substance use disorder.

Case workers help families in financial crisis by connecting them to supportive resources and sometimes providing material or financial supports in instances where it will remedy the primary concern that would otherwise cause a child to be removed from his or her home. These types of family preservation supports can include paying for locks on doors and windows, food and diapers, housing vouchers or security deposits, among other things. Often these small expenses supplant the need to place a child in out-of-home care while the parent figures out how to pay for the needed change themselves.

#### **Parent wellbeing**

Since 2012, there has been a 113 percent increase in prenatal drug exposure in Minnesota, rising to 1,330 children affected in 2016 (Kovan 2018). Further, in 2016, parental drug use became the most common primary reason for placing a child into out-of-home care, accounting for 27 percent of all placements (Minnesota Department of Human Services 2017c). Maltreatment cases stemming from parental substance use and mental health disorders are complex to address. A combination of health, counseling, and legal interventions may be needed to treat a disorder

#### **Results First: Substance Use Report**

In August 2017, Results First released a report evaluating substance use treatment programs. Similar to this report, it examined the array of services available across Minnesota aimed at preventing or treating substance use disorder, including some services that specifically target parents and families. Visit **mn.gov/mmb/results-first** to learn more and download the report. and ensure a child's safety. These cases can mean a substantial investment of county and tribal time and resources.

Adding to that complexity, county and tribal resources are stretched thin as the number of families coming into contact with the child welfare system increases in the wake of the opioid crisis. While efforts are underway to tackle the crisis from many angles, some counties are using specialized "family dependency treatment courts" to address the effects of substance use specifically in the child welfare context.<sup>5</sup> Depending on the circumstances of a case, a family may have their case heard in a family dependency treatment court where a multidisciplinary team of legal personnel, county case workers, and treatment providers oversees an intensive intervention program aimed at reunifying the family once parents have completed treatment and begun recovery. There are three such courts in Minnesota – in Blue Earth County, Dakota County, and in a combined system for Faribault, Martin, and Jackson Counties.

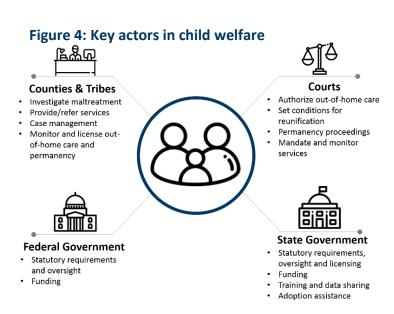
# 3. The child welfare system in Minnesota

## A. Governance and funding

#### **Key actors**

At the state level,<sup>6</sup> the Minnesota Department of Human Services (DHS) provides counties with high-level oversight, training, and data-sharing platforms. DHS also oversees adoptions and "state guardianship" children, a subset of children in out-of-home care for whom the DHS Commissioner becomes the court-appointed guardian, though daily care is usually delegated to the county or tribe.<sup>7</sup>

Within Minnesota, the state's 87 counties and two American Indian Initiative tribes are the primary providers of child welfare-related social



services.<sup>8</sup> The White Earth Nation and Leech Lake Band of Ojibwe are recognized as American Indian Initiative tribes and assume all of the child welfare duties of a county for children and families living on tribal land.

<sup>7</sup> M.S. 259.

<sup>&</sup>lt;sup>5</sup> Other specialized courts include those meant to address non-child welfare related substance use, driving while impaired (DWI) offences, mental health, and veteran-specific cases.

<sup>&</sup>lt;sup>6</sup> Minnesota's child welfare system is governed by several state statutes. Those most pertinent to this report include: 245A (licensing of foster care facilities), 256 (Human Services), 256M (Vulnerable Children and Adults Act, including Dept. of Human Services and county responsibilities), 256N (Northstar Care for Children Act, including foster, kinship and adoption benefits and assistance), 259 (adoptions), 260 (out-of-home care), 260C (juvenile protection), and 626.556 (maltreatment reporting).

<sup>&</sup>lt;sup>8</sup> M.S. 262.556M and M.S. 256.01, subd. 14b

This county and tribal administered structure, as opposed to centralized state authority, is unlike that of most other states. Counties and tribes retain much of the control over the overall shape and direction of their child services divisions.<sup>9</sup> Counties' and tribes' primary responsibilities are to investigate allegations of maltreatment, provide or refer families to supportive services or treatment, facilitate and monitor out-of-home care, license family foster homes, participate in court proceedings, provide ongoing case management services, and work to help children reach permanency. <sup>10</sup> Permanency refers to children reunifying with parents and returning home or achieving another permanent outcome such as adoption.

Counties and tribes can administer services directly to families through staff such as case workers, counselors and nurses, or they might contract with local providers for additional or specialized capacity. For example, counties may contract with child-placing agencies (also called Rule 4 agencies) to license family foster care

homes.<sup>11</sup> These agencies charge counties an administrative fee and also provide supportive services to the foster parents they have licensed. Additionally, child-placing agencies frequently provide adoption support services through county or state contracts.

Because families involved in child welfare typically face numerous challenges ranging from poverty to drug use to mental health challenges, case workers often refer families to services that span jurisdictional boundaries. They coordinate with public health officials, mental health providers, housing authorities, and parenting education

#### **Collaborative Safety**

Collaborative Safety is an organization that applies safety science concepts and principles to reviewing critical incidents, including child fatalities and near fatalities. Minnesota's Department of Human Services (DHS) has partnered with Collaborative Safety to develop its own onsite review process. A significant component of this work involves creating, advancing, and supporting the development of a safety culture within the child welfare system, moving the system away from blame and towards accountability.

programs, among others. Counties and tribes may also coordinate with other jurisdictions depending on where children and families live and where the placement occurs. In some cases, counties contract with one another to make the best use of existing resources and specialties.

Minnesota and tribal courts become involved if it is necessary to remove children from their home to ensure their safety. Case workers and county or tribal attorneys interact with county and tribal courts to file the necessary orders and establish the conditions for family reunification. Though police can remove a child immediately if they feel a child is in imminent danger, the county must file a Child in Need of Protection or Services (CHIPS) petition as courts are the only mechanism that can authorize removing a child from his or her family. Courts can also mandate in-home services and monitor case plans. Throughout the court proceedings,

<sup>&</sup>lt;sup>9</sup> M. S. 256M and M.S. 256.01, subd. 14b

<sup>&</sup>lt;sup>10</sup> Survey data from the Minnesota Department of Human Services indicates there are around 300 FTEs managing report intake and screenings in county offices and within two American Indian tribes. Another 500 FTEs manage assessment and investigation of alleged maltreatment cases. Additional personnel provide ongoing child protective services and other child welfare services, bringing the estimated total number of local child welfare personnel in Minnesota to around 2,000 FTEs (Minnesota Department of Human Services 2018a).

<sup>&</sup>lt;sup>11</sup> M.A.R. 9545.0755 - M.A.R.9545.0845

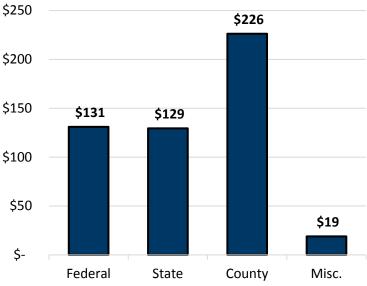
child welfare case personnel, including social services staff and attorneys, monitor and update the court as to the conditions of the child's placement and parents' progress towards the stipulations for reunification.

At the federal level, the 1974 Child Abuse Prevention and Treatment Act governs most child welfare-related efforts. Additionally, Titles IV-B and IV-E of the Social Security Act provide the largest pools of federal funding to support child welfare, particularly foster care and adoption efforts. Additional funding is provided under the Social Services Block Grant from Title XX of the Social Security Act to fund a variety of child welfare services. Each of these funding sources has requirements that influence Minnesota's child welfare system.

#### **Funding and expenditures**

In 2016, the federal government, the State of Minnesota, and the state's 87 counties spent more than \$505 million on child welfare services for Minnesota children.<sup>12</sup> This includes, but is not limited to, case

management, investigations and assessments, out-of-home care, adoptions, and many of the administrative functions necessary to support these activities. Notably, it excludes court costs and tribal funding (except state dollars for American Indian Initiative tribes). In any given year, counties typically provide around half of the needed funding through property taxes and other local sources. In 2016, county sources accounted for \$226 million; federal funding accounted for \$131 million; and state allocations (including the Vulnerable Children and Adults Grant, other state funding sources, and grants to American Indian Initiative tribes) accounted for \$129 million. There was an additional \$19 million in miscellaneous sources. (Department of Human Services, Financial Operations Division 2017; Minnesota Department of Human Services 2018b).



# Figure 5: Minnesota child welfare system funding, by source (2016, in millions)

Source: Minnesota Department of Human Services

<sup>&</sup>lt;sup>12</sup> This expenditure figure is based primarily on the Children Program data in the 2016 Social Services Expenditure and Grant Reconciliation Report (SEAGR). Data from Budgeting, Reporting and Accounting for Social Services (BRASS) codes 105, 124, 135, 136, 141, 147, 185, 186, 191, and 194 were removed from the calculations because they pertained to non-child welfare related services and care such as juvenile justice or services for children with disabilities. Data from BRASS codes 175 and 178 were removed because these line items are reconciliations of county expenditures captured elsewhere. All other BRASS codes were assumed to be pertinent to the child welfare system, though some overlap may still exist with populations in the juvenile justice system or those receiving disability-related services. Additional costs paid by the state or federal government were added to the SEAGR data including state contracts and grants, adoptions and kinship assistance, state funding for American Indian Initiative tribes, and personnel costs for the Department of Human Services' Child Safety and Permanency Division. Not included in the cost estimates are payments made by the federal government to American Indian tribes or tribal funding of child welfare activities, as this data was unavailable. Costs associated with the judicial staff, county attorneys, court administration and other publically-funded legal personnel are also not included, though average per-child costs were estimated and used in this report's benefit-cost model.

Federal and state funding primarily supports adoption and foster care-related expenses and is typically distributed through block grant funding under the Federal Foster Care Program, which is administered under Title IV-E of the Social Security Act. Title IV-E waivers allow states to use money saved by reducing placements to fund other prevention and intervention services.<sup>13</sup> Additional funding is allocated to states through the federal Social Services Block Grant and administered in Minnesota under the state's Vulnerable Children and Adults Act to support a variety of services and administrative costs (McQuarter 2015). In all cases, states oversee the flow of federal funding to counties.

Expenditure category	2016 expenditure
Case management	\$125 million
Family foster care	\$86 million
Adoption & kinship care assistance	\$71 million
Family investigation & assessment	\$49 million
Referrals and information	\$23 million
Other expenditures (less than \$15 million each)	\$151 million

#### Figure 6: Major expenditure categories in the child welfare system

**Source:** Social Services Expenditure and Grant Reconciliation Report Statewide for Calendar Year 2016; Department of Human Services Financial Operations Division.

**Note:** Case management includes Budgeting, Reporting and Accounting for Social Services (BRASS) codes 192,193. Family foster care includes BRASS code 181. Adoption and kinship care assistance includes BRASS codes 182, 196, direct state and federal adoption assistance, Northstar assistance and adoption support. Family investigation and assessment includes BRASS codes 104 and 108. Referrals and information includes BRASS codes 101. "Other expenditures" includes all other BRASS codes stipulated in Footnote 12.

#### B. How a report proceeds through the child welfare system

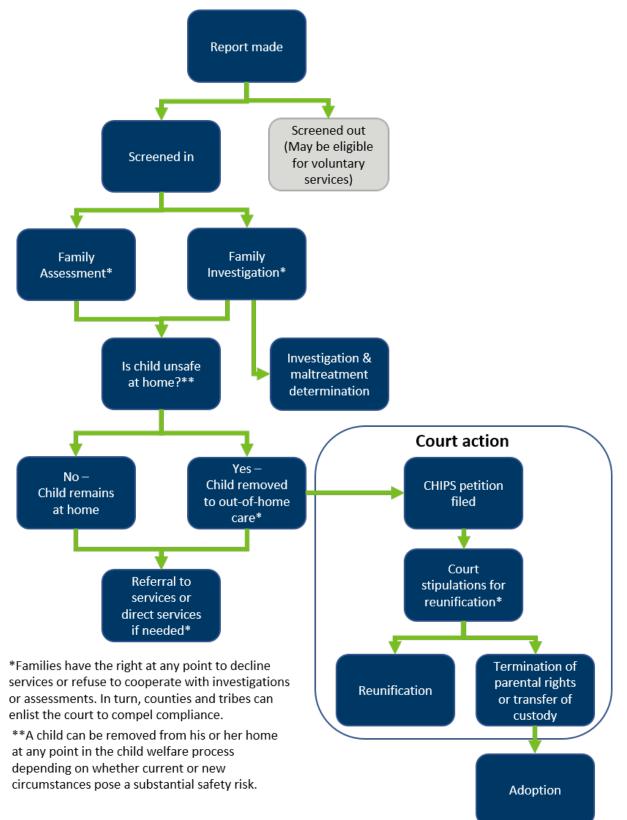
The filing of a maltreatment report begins a highly individualized process that evaluates the seriousness of the allegations made, a family's needs, and the type of response needed to meet those needs and ensure child safety.

Figure 7 shows a simplified process overview of the child welfare system in Minnesota. Depending on the nature of the situation, children and families experience different aspects at different times. At each point in the process many different people may be engaged with the family.<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> The Families First Act, which passed as part of the federal government's continuing resolution in early 2018, amended elements of Title IV-E and may impact funding, though the precise impact of the changes is still unclear.

<sup>&</sup>lt;sup>14</sup> The Minnesota Department of Human Services (DHS) releases annual reports on child maltreatment and out-of-home placements, summarizing recent trends and impact.





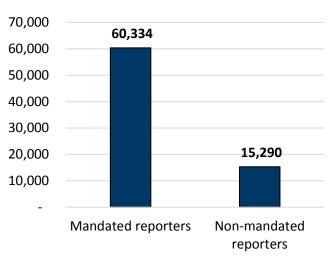
Maltreatment reports	Investigation and assessment	Courts cases	Out-of-home care	Adoptions and permanency
<ul> <li>75,624 reports filed</li> <li>30,936 reports screened in</li> <li>39,736 victims</li> </ul>	<ul> <li>Family Investigation: 11,777 reports / 18,506 children</li> <li>Family Assessment: 18,334 reports / 25,929 children</li> </ul>	<ul> <li>4,122 CHIPS cases filed</li> <li>2,366 permanency cases filed</li> </ul>	<ul> <li>15,004 children in 15,654 placements</li> <li>177 average days in care</li> <li>18% reentry rate<sup>15</sup></li> </ul>	<ul> <li>1,993 children in state guardianship</li> <li>868 children adopted</li> <li>51 children aged out<sup>16</sup></li> <li>43 tribal customary adoptions</li> <li>414 transfers of custody</li> </ul>

#### Figure 8: Summary data for child welfare in Minnesota (2016)

#### **Reports of maltreatment**

Maltreatment reports are intended to capture the essential details that child welfare workers need to determine whether to intervene with a family, including: the child or children involved, the alleged offender, and the nature of the suspected maltreatment. While anyone can report suspected child maltreatment, professionals who work with children and families are legally required to file a report if they suspect maltreatment. These mandated reporters include medical and mental health professionals, educators and childcare providers, social services workers, law enforcement, clergy, guardians ad litem, and probation and correctional services personnel. Nearly 80 percent of reports filed in 2016 came from mandated reporters (Minnesota Department of Human Services 2017b).

#### Figure 9: Maltreatment report referral source



Source: Minnesota Department of Human Services

If a reporter feels a child is in immediate danger, he or she should make a report directly to law enforcement. Otherwise the reporter can contact the Department of Human Services, the Department of Health, the Department of Education, law enforcement, and counties. (Minnesota Department of Human Services 2017a). By statute, all reports filed must be cross-reported to law enforcement.<sup>17</sup>

<sup>&</sup>lt;sup>15</sup> Re-entry refers to when a child returns to out-of-home care within 12 months of being reunited with their families after an initial out-of-home placement.

<sup>&</sup>lt;sup>16</sup> Foster care support typically ends when a child reaches age 18. Under Minnesota law, children can chose to remain in foster care until they turn 21.

<sup>&</sup>lt;sup>17</sup> M.S. 626.556 subd.10

Once local child welfare personnel receive a report, they must determine if the allegation meets the statutory definition of maltreatment.<sup>18</sup> If so, and if the report contains enough identifying details to locate the child or family, they screen in the report for further assessment or investigation. Of the reports filed in 2016, 41 percent were screened in. They represented 39,736 alleged victims, nearly 60 percent of whom were age 8 or younger (Minnesota Department of Human Services 2017b).

The number of maltreatment reports filed and the number of reports screened in have increased in recent years. Screened-in reports alone grew by 25 percent from 2015 to 2016. The increase reflects several factors. Community standards and county screening practices shifted following a highly publicized child death in 2013. The percent of maltreatment reports from the community has increased sharply, and recommendations from the Governor's Task Force on Child Protection led to revisions in maltreatment report intake and screening procedures as well as changes to statute requiring counties and tribes to follow those guidelines (Kovan 2018).

#### Screened-out reports

In some instances, maltreatment reports are not detailed enough or do not meet the statutory definition of maltreatment. Consequently, these reports are not screened in for family investigation or family assessment. However, this does not mean a family is not in need of support. Counties and tribes may follow up on screened-out reports to offer supportive services to address underlying sources of stress for the family and prevent them from escalating into a more serious episode. Counties and tribes also track and consider screened-out reports when evaluating whether a new report should be screened in for family assessment or investigation.

#### Assigning reports to family investigation or family assessment

Depending upon the nature and severity of the allegations, a screened-in maltreatment report triggers one of three responses from county agencies: a facility investigation, <sup>19</sup> family investigation, or family assessment. Facility investigations account for a small percent of all responses (2.6%), and so this report focuses on family investigations and assessments.

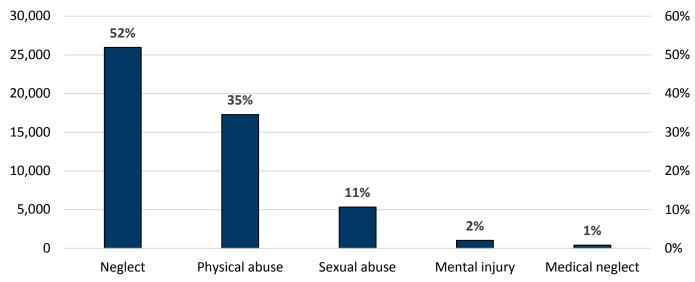
Determining whether a report is assigned to a family investigation or family assessment depends on both mandatory considerations, such as the type of alleged maltreatment, as well as discretionary considerations, such as the frequency, similarity, or recentness of past maltreatment reports. Children in reports that involve substantial endangerment or sexual abuse must be assigned to an investigation. Additionally, there are several other reasons that county and tribal social services can assign a report to an investigation at their discretion.

Alleged neglect and physical abuse account for a large majority of screened-in reports (Minnesota Department of Human Services 2017b). In 2016, county personnel assigned 11,777 reports (38%) representing 18,506 children to family investigation, while 18,334 reports (60%) representing 25,929 alleged victims were assigned to family assessment.

At any time during a family investigation or family assessment, a case worker may determine a child is unsafe and ask law enforcement to assess the situation for a protective hold to remove the child from the home.

<sup>&</sup>lt;sup>18</sup> State statute (M.S. 626.556) defines maltreatment as physical, mental or threatened injury inflicted by a caregiver on a child. It can also take the form of neglect, whereby a caregiver fails to provide a child with food, clothing, shelter, health, medical, or other required care.

<sup>&</sup>lt;sup>19</sup> 825 reports (2.6 percent) were tracked into facility investigation to address maltreatment allegations in licensed family foster homes and family child care homes, and related to registered personal care attendants.



#### Figure 10: Alleged victims in 2016 screened-in maltreatment reports

Source: Minnesota Department of Human Services, Child Safety and Permanency Division

#### Family Assessment or Family Investigation

When a report is assigned to a family assessment or investigation, a case worker seeks to understand the circumstances behind the maltreatment report, assess current and future safety risks, and determine which services are needed. Case workers also decide whether ongoing child protective services are needed and, if so, provide in-home ongoing case management and monitoring when parents agree to it or a court mandates it.

There are several critical differences between family investigations and family assessments. In family investigations, the case worker makes a formal determination of whether or not maltreatment occurred. In 2016, case workers issued a determination of maltreatment for 47 percent of investigations involving a total of 18,606 children (Minnesota Department of Human Services 2017b). Additionally, there are often more formative investigative techniques employed in a family investigation. Family assessment, sometimes referred to as alternative response, can be a less invasive and more collaborative alternative to a formal investigation where the conclusion of the process is finding a fault.

Under state statute, child welfare agencies must conclude an investigation or assessment within 45 days of receipt of the maltreatment report. <sup>20</sup> On average, investigations take 38 days and family assessments take 40 days. Sixty-two percent of 2016 investigations and 66 percent of 2016 assessments were completed within the mandated 45 days (Minnesota Department of Human Services 2018c).

#### Court involvement in child removal

#### Child in Need of Protection or Services (CHIPS) Cases

At any point throughout the child protection process, case workers may be concerned about an immediate safety risk for the children involved. When this occurs, law enforcement assesses the situation and may exercise a protective hold to remove the children from the home. Within 72 hours of removal, an emergency protective

<sup>&</sup>lt;sup>20</sup> M. S. 626.556 Subd. 10e

custody hearing occurs. At this time, the county attorney submits a CHIPS petition to the court if appropriate. This petition authorizes the removal of a child from his or her home and placement in out-of-home care.

Parents and guardians have the right to contest the petition, and the subsequent case runs parallel to the case worker's investigation or family assessment. However, few contested cases proceed to trial; of the 4,133 CHIPS petitions filed in 2016, 297 (7%) went to trial. As part of the court proceedings, case workers develop a case plan that details the circumstances under which a child can return home. Regular court hearings monitor parents' progress toward meeting the requirements of their case plan. Children are assigned an attorney (if over the age of 10) as well as a guardian ad litem<sup>21</sup> to advocate specifically for their best interests. Parents are also assigned a public defender if they do not obtain their own attorney.

#### Permanency Cases

Courts are also involved in ensuring permanency for a child, meaning that after being removed from his or her family, a child returns home within one year or else the court can proceed with finding an alternative, permanent living arrangement. When the court determines it is not safe for the child to return home, the judge may order a transfer of custody or terminate parental rights, making the child eligible for adoption and under state guardianship of the Commissioner of Human Services. Most permanency cases are settled before they go to trial. Of the 2,366 cases filed in 2016 representing 3,605 children, only 473 (20 percent) went to trial.

Rather than resolve the case within 365 days, the courts can extend proceedings if case workers or anyone else involved with the case demonstrate a compelling reason. For example, a parent might need additional time to complete a substance use treatment program, after which they would be able to again care for their child. This court leniency can facilitate eventual family reunification. However, some families' cases remain in legal limbo for years. Representatives of Minnesota's Children's Justice Initiative, a collaboration between the state's judicial branch and department of human services, work with county stakeholders to identify and resolve longterm cases.

#### **Out-of-home care**

When the court orders the removal of children from their home, the children can be placed in one of several out-of-home care settings depending on availability and the children's specific needs and circumstances.<sup>22</sup> In 2016, 15,004 children experienced 15,654 placements, representing a 10 percent increase in the number of placements from the previous year. Of those children, 7,441 entered out-of-home care in 2016, and 1,811 entered care prior to 2016 but remained for some portion of the year (Minnesota Department of Human Services 2017c). The number of episodes is usually higher than the number of children involved because some family reunifications fail and children return to out-of-home care.

<sup>&</sup>lt;sup>21</sup> Guardians ad litem (GALs) are professionals who are appointed by the court to advocate on behalf of the best interests of the child involved in a CHIPS or permanency case. GALs may be volunteers or paid staff, and they are substantively involved in court proceedings.

<sup>&</sup>lt;sup>22</sup> There are three main reasons a child enters out-of-home care: parental maltreatment, child mental health (including intellectual and developmental disabilities), and child delinquency. The high-level data presented above includes placements for all three reasons, not just those related to maltreatment, though these account for the majority of placements. Parental maltreatment accounted for 5,990, or 78 percent, of out-of-home placements that began in 2016. Of those, 27 percent were related to parental drug use and 25 percent related to neglect (Minnesota Department of Human Services 2017c). Children's mental health and child delinquency cases typically involve older children and lead to the child being placed in a treatment or disciplinary setting.

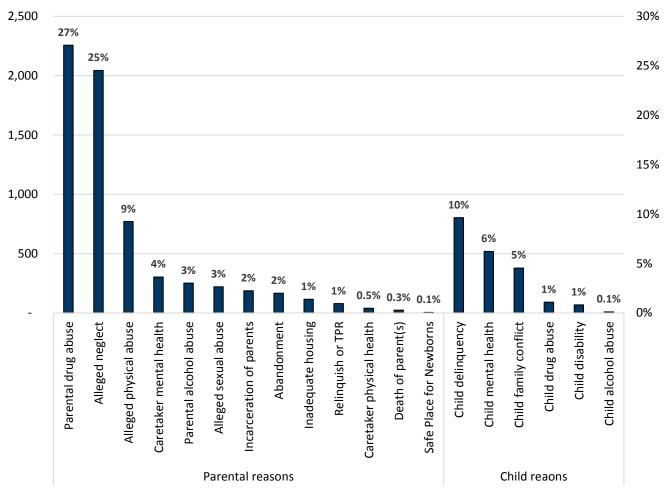
By law, child welfare agencies must first attempt to find a relative, known as kinship care, who can care for a child before placing the child in non-relative foster care.<sup>23</sup> This requirement is informed by awareness that kinship care is a more stable placement, allows children to maintain connections to their families and communities, and is associated with better behavioral and mental health outcomes compared to non-relative foster care (Winokur, Holtan, and Batchelder 2014). Of the children who entered care in 2016, there were 3,217 children in kinship care (43%). There were 3,612 more children (49%) in non-relative family foster care, and the remaining children were in facility settings (Minnesota Department of Human Services 2017c).<sup>24</sup>

Children spent 177 days on average in foster care in 2016 before being reunited with their families or achieving some other permanent outcome such as the transfer of permanent legal and physical custody (TPLPC) to a relative, state guardianship, or adoption (Department of Human Services 2017). Throughout a placement, case managers work with the family to develop and support a reunification plan.

Minnesota has a high rate of return to out-of-home care within 12 months of initially leaving out-of-home care to return to their family. Minnesota's re-entry rate was 18 percent in 2016 compared to the federal performance standard of 8 percent (Minnesota Department of Human Services 2017c). This high re-entry rate could be a result of the state reunifying a higher percentage of families (63%) compared to the national average (51%) (U.S. Department of Health and Human Services 2017). It could also result from an insufficient amount of preparation and support for children and the families prior to and after reunification. Adequate preparation and support may be particularly critical in this context because re-entering children tend to be older and have behavioral problems such as parent-child conflict, delinquency, or mental health needs that lead to re-entry (Minnesota Department of Human Services n.d.; LaLiberte 2014).

<sup>&</sup>lt;sup>23</sup>M.S. 260.012

<sup>&</sup>lt;sup>24</sup> Other out-of-home care settings include treatment centers, group homes, correctional facilities, pre-kinship or preadoptive homes, corporate or shift staff foster homes, intermediate care facilities, and supervised independent living settings.



#### Figure 11: Number of placement episodes by primary removal reason (2016)

Source: Minnesota Department of Human Services, Child Safety and Permanency Division

Note: Data based on placements beginning in 2016.

#### **Ongoing case management**

After a case worker completes a family investigation or family assessment, he or she might recommend in-home ongoing case management in order to continue supporting the family. As part of these ongoing services, families might receive housing supports, material assistance, and referrals to needed public assistance programs and health, mental health, or other support services. During this time, case workers continue to meet with children and families and assess their progress toward case plans goals. In 2016, 9,825 children had a case opened to receive ongoing case management services, and those services lasted for an average of just over six months (Minnesota Department of Human Services 2017d).

#### Adoption or "aging out"

When children's family situations prevent them from reunifying with their primary caregivers, counties, tribes and the courts work to find the children an alternative permanent outcome such as adoption, transfer of custody to a relative, or tribal customary adoption.

A transfer of permanent legal and physical custody (TPLPC) to a relative gives a child's relative permanent rights and responsibilities for the child. However, the child continues a legal relationship with his or her parents, though their rights are secondary to the relative custodian. The child's birth parents may request the child return to their care at some point. The custodial relationship of the relative ends when the child turns 18. In 2016, 414 children underwent a TPLPC to achieve permanency. Similarly, a tribal customary adoption is a form of permanency within tribal courts that does not terminate parental rights. There were 43 tribal customary adoptions in 2016.

In the case of adoption, if the child's parent is amenable, the court can accept a parent's consent to adoption. Otherwise the county attorney files a petition to terminate parental rights (Minnesota Department of Human Services n.d.). If the court terminates parental rights, the child becomes a state ward under the guardianship of the Commissioner of Human Services and is eligible for adoption. Throughout 2016, 1,993 children experienced state guardianship at some point. Once adopted, the court grants adoptive parents all of the rights and responsibilities of the birth parent for the child's lifetime. In 2016, 868 children were adopted, the majority of whom (54%) were 5 years old or younger (Minnesota Department of Human Services 2017c).

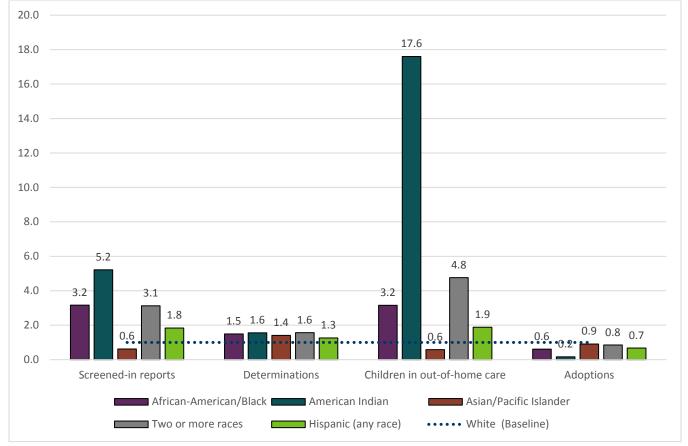
The length of time a child spends under state guardianship varies, and younger children are typically adopted more quickly than older children. Of children adopted in 2016, infants up to age 3 had spent 291 days on average under state guardianship, while children ages 15-18 had spent an average of 629 days under state guardianship.

A small number of children "age out" of the child welfare system without being adopted by age 18. Sometimes these children have intellectual or developmental disabilities and are moving into a different type of care. Others receive services to help them develop independent living skills to help them transition into adulthood. Youth who meet certain requirements can remain in foster care through age 21. In 2016, 51 children aged out, 12 of whom then stayed in care through an extended foster care program (Minnesota Department of Human Services 2017c).

Throughout the pre-adoption time children remain in out-of-home care, and county social workers continue to work with children to support their needs until they find a permanent home for the child. They continue to monitor the appropriateness of their placement and provide connections to services as needed. County workers and contracted organizations work to identify and screen potential adoptive homes, and facilitate the pre- and post-adoption services and supports.

# C. Overrepresentation of children of color and American Indian children

Significant disparities exist with regard to who is involved in the child welfare system. Children of color and American Indian children are overrepresented across the system, from maltreatment reports filed to investigations to out-of-home care. This disproportionality persists over time and is similar to national trends, though American Indian children in Minnesota are particularly disproportionately impacted by the child welfare system.



#### Figure 12: Relative rate of child welfare involvement in Minnesota, by race (2016)

#### Source: Department of Human Services, Office of Child Safety and Permanency

**Note**: A relative rate is calculated by dividing the rate of involvement of one population by the rate of involvement of the comparison population, in this case White children. Thus, a rate equal to one means that the rate of involvement of children in the given race group is equal to that of White children. The baseline population on which the rate is calculated is the U.S. Census-estimated population of children in Minnesota in 2015. Visually, a relative rate index does not reflect the comparative intensity of underrepresentation to overrepresentation; for example, a relative rate of 0.25 is interpreted as an underrepresentation of the same magnitude as a 4.0 rate of overrepresentation even if the former's column in the graph appears to be closer to the baseline (see Appendix C for more details).

Compared to White children, African-American children were more than three times as likely and American Indian children more than five times as likely to be the subject of a screened-in maltreatment report (Minnesota Department of Human Services 2017b). This disproportionality continues as a report proceeds through the child welfare system. A screened-in report is assigned to either a Family Investigation or a Family Assessment depending on both mandatory and discretionary considerations. Generally, when the assignment rests on discretionary reasons, White children's reports are less likely to be tracked into an investigation.<sup>25</sup> Additionally,

<sup>&</sup>lt;sup>25</sup> In 2016, 40 percent of all White children were assigned to Family Investigation for discretionary reasons, compared to 61 percent of African-American children, 57 percent of American Indian children, 63 percent of Asian/Pacific Islander children, 50 percent of Hispanic children and 58 percent of children of two or more races (Minnesota Department of Human Services 2017b).

cases involving children of color and American Indian children are more likely to receive both a formal, initial determination of maltreatment as well as a recurring determination of maltreatment within 12 months.

Children of color and American Indian children in Minnesota are also overrepresented in out-of-home care. In 2016, American Indian children were nearly 18 times more likely than White children to be in out-of-home care. Similarly, children of two or more races were five times more likely and African American children were three times more likely than White children to be in out-of-home care (Minnesota Department of Human Services 2017c).

#### Leading explanations for overrepresentation: risk factors, visibility, and discrimination

Researchers have explored the underlying reasons for these racial disparities at great length, and several leading theories are worth mentioning briefly.<sup>26</sup> Racial disparities are, in part, attributable to the intersection of race and other risk factors that make it more likely that a family's circumstances will draw the attention of mandated or non-mandated reporters. For example, a higher percentage of African American families live in poverty (Semega, Fontenot, and Kollar 2017), and the American Indian community has been disproportionally affected by the opioid crisis (Nolan and Amico 2016). Additionally, families whose circumstances put them in touch with family-focused social services may be more likely to be the subject of a report simply because they are in more frequent contact with mandated reporters. There is also substantial research exploring how unconscious biases can lead case workers to evaluate the safety of a child's home environment differently depending on the race of the child and family (Ards et al. 2012). The presence of unconscious biases is particularly important given the relative homogeny of the child welfare workforce. Self-reported responses in the 2017 Annual Workforce Survey indicate that approximately 80 percent of child welfare workers identify as White (Minnesota Department of Human Services 2018d).

#### **Reducing disparities**

In 2015, Governor Mark Dayton's Task Force on the Protection of Children released a report outlining recommendations for improving the state's child welfare system. The report included 13 recommendations focused on reducing disparities, including developing "cultural navigator" parent mentor positions and cultural certification programs involving field placements or internships; fostering a more diverse base of child welfare workers; and ensuring representation from the African American community, American Indian tribes, and other underrepresented groups in developing services, policies, and protocols. The Minnesota State Legislature subsequently convened the bipartisan and ongoing Legislative Task Force on Child Protection to prioritize the recommendations from the Governor's task force and monitor their implementation (Legislative Task Force on Child Protection 2016).

The 2015 Legislature also allocated \$1.5 million annually for grants to address racial disparities in the state's child welfare system. The first grant cycle will conclude in June 2018. The funding supports 10 grantees ranging from nonprofit advocacy organizations, service providers, and tribal and county social service departments. The grantees developed culturally-specific programs providing home visiting services, legal advocacy, substance use recovery, parenting classes and other supports (ACET, Inc. 2017). The grant program will enter its second grant cycle in July 2018.

<sup>&</sup>lt;sup>26</sup> See Section 1 of "Racialized Perceptions and Child Neglect" (Ards et al. 2012) for a longer discussion of underlying causes of racial disparities in the child welfare system.

Pursuant to state and federal legislation, tribal nations have established agreements with the Department of Human Services to increase coordination by aligning policies, procedures, and responsibilities in cases involving American Indian children.<sup>27</sup> These efforts are meant to provide culturally-appropriate services and preserve American Indian families and communities by maximizing tribes' participation in efforts involving American Indian children, addressing barriers to implementing those services, and preventing foster placements or adoptions with non-Indian families (Atwood 2008). The Indian Child Welfare Manual (see Atwood 2008) outlines jurisdictional issues and the state and federal provisions that inform every step of the child welfare process for cases involving American Indian children, including the development of case plans, voluntary and involuntary out-of-home care placements, and permanency proceedings.

# 4. Marginal costs of child welfare involvement

In preparation for conducting the benefit-cost analysis, we estimated the per-child marginal cost of providing services to a family involved with the child welfare system. These costs consider the role and work of the counties, courts, law enforcement, and other actors, and they aggregate county, state, and federal costs. A Minnesota Association of County Social Services Agencies (MACSSA) subcommittee representing fourteen counties and the Minnesota Department of Human Services provided data and insights into the cost model. (See Appendix B for a longer explanation of the cost-model methodology.)

# A. Costs per child and major expenses

The cost model has several key elements aligned with the child welfare process discussed in Section 3B, including the cost of maltreatment investigations, court involvement, ongoing case management, out-of-home care, and adoptions. These cost estimates represent marginal cost *averages* for the average length of time that a child is involved in each step. Counties may experience variation around these averages, reflecting the unique populations, strengths, and challenges of each county.

Cost model component	Investigations & Family Assessments	Court cases	Ongoing case management	Out-of-home placements	Adoptions
Major expenses	Personnel, travel, drug testing	Judicial staff & county attorney	Personnel, travel, housing supports, material assistance, drug testing	Payments to foster family/facility, personnel, licensing, travel	Adoption assistance, personnel, licensing
Estimated marginal cost	\$1,090	\$3,600 (CHIPS) \$2,710 (Permanency)	\$5,790	\$28,290	\$100,070

#### Figure 13: Cost model components & major expenses

 $<sup>^{\</sup>rm 27}$  25 U.S.C. 1919 and M.S. 260.771

#### **Investigations and Family Assessments**

The estimated cost of an investigation or family assessment in Minnesota is \$1,090. This includes personnel costs for social workers, case aids, and supervisors; report intake and screening; travel costs covering case workers' in-home visits with families; and any drug testing conducted over the course of the investigation. There was a slight difference in the costs of an investigation compared to a family assessment (\$1,180 and \$1,030, respectively), which was then weighted according to the ratio of investigations to assessments in Minnesota. Social workers' time spent with families is the largest contributor to the overall cost of an investigation or assessment, with workers spending an average of 19 and 16 hours, respectively, per case.

#### **Court involvement**

Courts are involved in the child welfare system in two primary ways, either to process a Child in Need of Protection or Services (CHIPS) petition or to adjudicate a permanency case, in which a child is being adopted or placed into some other form of long-term guardianship. Each of these processes includes case filings, individualized case plans, hearings to monitor progress, and sometimes trials to resolve contested orders. The costs of CHIPS and permanency cases are spread across the court personnel, including the judge, support staff, and county attorney. Though county case workers are heavily involved in court proceedings as they prepare CHIPS petitions or updates on the child and family, their time spent on cases is included as part of the costs of out-of-home care.

The estimated marginal cost of CHIPS cases is \$3,600 per child, which includes \$1,720 for court judges and support staff and \$1,880 for the county attorney's time. In contrast, permanency cases cost \$2,710, which includes \$1,600 for the judge and support staff and \$1,120 for the county attorney. The cost of the county attorney's time for permanency cases reflects only their work on cases that go to trial and does not account for time spent on cases that are settled.

This report does not include an estimate for the costs associated with guardians ad litem or attorneys assigned to children, nor does it include the costs incurred from public defenders who may be assigned to represent a parent, if requested.

#### **Ongoing case management**

After a family undergoes assessment or an investigation, the family and child may receive in-home ongoing case management from the county social worker. On average, a family receives ongoing case management for about six months. The estimated cost per child is \$5,790, which includes personnel costs for social workers, case aids and supervisors, as well as travel costs, drug testing costs, housing supports, and additional material assistance. Social workers, estimated to cost \$1,870 per child, are the primary cost driver for this category, while drug testing, housing and material supports, and transportation costs account for the remaining costs.

#### **Out-of-home care**

If children need to be removed from their home, counties can place them in a variety of settings depending on their needs and placement availability. On average, a child spends 177 days, or just under 6 months, in out-of-home care, and their placement costs \$28,290 on average.

Placement settings vary significantly in cost.<sup>28</sup> In 2016, counties collectively billed \$2.5 million for supervised independent living, \$8.8 million for treatment facilities, \$11.8 million for group residential, and \$86.2 million for family foster care. The vast majority of placements made in 2016 (92 percent) were to family foster care settings. In 2016, the average cost of family foster care was \$13,050 per child. Facility placements cost \$38,420 on average, nearly three times as much as family foster care. Some counties in greater Minnesota report using facility care settings more often because of a shortage of family foster care homes.

Aside from payments made to placement families or facilities, other significant cost drivers for out-of-home care are the need for monitoring and licensing. As part of the placement case management, case workers make, at minimum, monthly visits to check up on children in placements, meet with the families with whom the children will reunify, and prepare court reports and other documentation. Their involvement costs are estimated to be \$2,420 per placement. Case aides spend a significant amount of time on each case, assisting with the administrative management of cases, transportation for visitation, and court paperwork. Their estimated cost is \$5,050 per placement. Costs related to licensing foster families or other placement facilities amount to \$1,910 per placement on average.

#### **Adoptions**

In 2016, 1,993 children experienced state guardianship at some point during the calendar year. Of those, 868 were adopted, 51 aged out, and 1,074 remained under guardianship at the end of the year (Minnesota Department of Human Services 2017c). On average, each of these adoptions cost \$100,070 per child, which includes adoption support paid to adoptive families through the Northstar Adoption and Kinship Assistance program for as long as the child is eligible.<sup>29</sup> Depending on how old a child is when he or she is adopted, families receive a base amount of monthly financial support over the course of the child's life until he or she reaches age 18, along with additional, supplemental support to cover any particular needs of the child. This estimated cost also includes the average cost of case management and guardianship for children awaiting adoption, the cost of licensing a family to adopt a child, and the costs associated with recruiting families to adopt prospective children. For children who are not eligible for the Northstar program or whose adoptive families decline to participate, the average costs associated with adoption are \$10,670.

#### B. Costs not included in the model

The cost model developed for this report does not include educational or medical costs because the model captures only those costs related specifically to the child welfare system. Educational, medical, and other support services are accessible to a broader base of families beyond just those involved in the child welfare system, and children and families might already be accessing them prior to becoming involved in the child welfare system. Consequently, these resources were left out of this cost analysis. The cost analysis does not include tribal cost data.

<sup>&</sup>lt;sup>28</sup> This report did not include non-maltreatment related reasons for out-of-home care (such as children's mental health or juvenile delinquency) in these cost estimates.

<sup>&</sup>lt;sup>29</sup> Eligibility requirements for Northstar are complex and are based on federal Title IV-E regulations. See the Northstar Care for Children Practice Guide (Minnesota Department of Human Services n.d.) for further details.

# 5. Inventory and benefit-cost analysis findings

# A. Inventory of services

The Minnesota Results First Initiative worked with representatives from eight counties (Beltrami, Dakota, Grant, Hennepin, Olmsted, Ramsey, Scott, and St. Louis) to develop an inventory of child welfare-focused services, practices, and services available in the state. We also collaborated with the Department of Human Services (including the Child Welfare Disparity Grants), Minnesota Courts' Children's Justice Initiative, and the Minnesota Department of Health to identify additional services. The final inventory contains 74 services, many of which are available across the state while others are unique services created as counties explore new ways to support children and their families. The inventory focuses only on services with a stated goal to prevent or reduce maltreatment and out-of-home care. It excludes services aimed exclusively at adults or the juvenile justice population as well as schoolbased programs and non-targeted children's mental health services. Many of these other services are covered in other Results First reports available at mn.gov/mmb/results-first.

#### **Research Standards and Child Welfare**

For a service to receive a Proven Effective or Promising rating, the service must have been studied using a randomized control trial or quasi-experimental design, meaning there is a treatment and control group to test the impact of the service.

Researchers and practitioners have been disinclined to use such techniques to study some child welfare services because it could be perceived as unethical to deny services to potentially maltreated children and their families. Even waitlists, which can sometimes serve as a control group, are rare due to counties' statutory obligations. However, some quasiexperimental designs can use statistical matching to create artificial control groups. Nevertheless, limited research in the child welfare field often leaves counties to pursue a course of action without good information on whether that action will cause improvements in children's wellbeing.

We matched inventory services to those examined in rigorous research studies in order to rate the services according to their potential effectiveness at preventing or reducing maltreatment and out-of-home care.<sup>30</sup> Services received one of 5 ratings: Proven Effective, Promising, Theory Based, Mixed Effects, or No Effect. One program was rated Pending, as a meta-analysis review is currently underway. To receive a Proven Effective rating, services must have multiple rigorous research studies demonstrating their impact on participants in a treatment group compared to a control group. We use national research clearinghouses that conduct meta-analyses to assign effectiveness ratings.

Figure 14, below, shows the breadth of services included in the inventory and their associated effectiveness ratings. See Appendix A for the complete inventory and Appendix B for an explanation of the rating methodology.

<sup>&</sup>lt;sup>30</sup> Minnesota Management and Budget's categorization of inventory services is based on evidence of effectiveness found in eight <u>national clearinghouses</u>, the <u>Washington Institute of Public Policy</u>, <u>the Cochrane Review</u>, <u>Campbell Collaboration</u>, and <u>Centers for Disease Control and Prevention (CDC) community guide</u>. The categories largely mirror the levels of evidence defined by the <u>Pew-MacArthur Results First Initiative</u>.

Service Category	Proven Effective	Promising	Theory Based	Pending	Category of Services
Administrative approaches	1	2	9	0	0
Assessment services	1	0	0	0	3
Core county social services	0	1	5	0	0
Counseling/Therapy	3	2	3	0	2
Parenting education & support	5	3	13	1	0
Placement prevention services	0	0	6	0	0
Placement & permanency services	1	1	2	0	0
Post-permanency	0	1	2	0	0
Youth services	0	0	7	0	0
Total	11	10	47	1	5

#### Figure 14: Summary of inventory ratings by service category

Source: Minnesota Management and Budget

The process of building the inventory and rating the services yielded several key insights related to how effective available services are at preventing or reducing maltreatment and out-of-home care.

#### A large proportion of child welfare services are Theory Based

Forty-seven inventory services (64%) are Theory Based. This rating indicates that there is insufficient qualifying research to indicate the extent to which a service has an impact on child maltreatment and out-of-home care. Often, Theory Based services have a logic model outlining their predicted influence on outcomes. All Proven Effective services were once Theory Based until rigorous evaluations determined their effectiveness.

A smaller percentage of child welfare services appeared in the national research clearinghouses compared to previous Results First reports, such as criminal justice and adult mental health. This is due, in part, to limited rigorous research in the child welfare field compared to other social services. The California Evidence-Based Clearinghouse for Child Welfare (CEBC) is the primary clearinghouse for child welfare research, and it lists 405 services related to child welfare, though they may not specifically target a family currently involved in the child protection system. We worked with county partners to develop the Minnesota inventory independently from CEBC to reflect how practitioners in the state conceived of and structure their work. Only 17 of the 74 Minnesota services overlapped with CEBC's list. We matched several other services to those identified in other national clearinghouses.

As a consequence of the overall lack of rigorous research in the child welfare field, only 11 services in the Results First inventory (15%) are Proven Effective, meaning they had adequate research supporting their favorable impact on maltreatment and out-of-home care outcomes. A further 10 services are Promising based on the limited research conducted on those services. The limited number of evidence-based services in Minnesota mirrors the overall lack of evidence-based services in the broader child welfare field – CEBC rated only 67 of its 405 services (or 16%) as "supported" or "well-supported" by research evidence. Two other states (Colorado and Rhode Island) completed similar reports on child welfare. The Minnesota inventory includes more services than were identified in those states. Like Colorado and Rhode Island, Minnesota has a small number of services for which there is enough data to conduct a benefit-cost analysis (see Section 5B for the results of this analysis).

#### There are limited services designed specifically for families of color

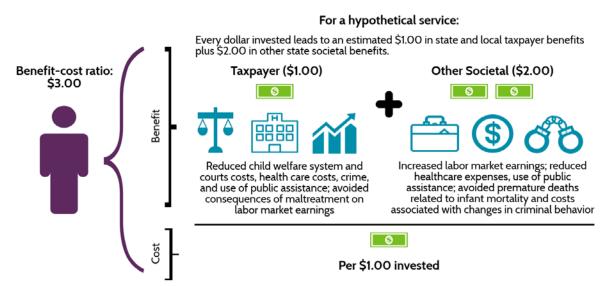
There are a limited number of services in Minnesota designed specifically to provide culturally-appropriate services to children and families of color and American Indian children even though they are disproportionately involved in the child welfare system. For the most part, the counties consulted for this report provide a culturally generic set of services. Similarly, there is limited research into how more generalized services impact specific communities.

Some counties and nonprofits are exploring innovative services that recognize and address families' multifaceted experiences and challenges. In 2015, the legislature allocated \$1.5 million annually for grants to address disparities in child welfare. During the first year of the grant, administered by Department of Human Services, seven grantees served 255 families through a variety of culturally appropriate services. Grantees include counties, nonprofits and tribal nations (ACET Inc. 2017). Additionally, federal home visiting funding supports the Family Spirit model to deliver home visiting to American Indian families through culturally-appropriate services.

Tribes provide services and support to American Indian children and their families that are responsive to the unique needs of their community. The federal 1978 Indian Child Welfare Act (ICWA) and Minnesota's 1985 Minnesota Indian Family Preservation Act (MIFPA) formalized the role that tribes play in directing state and county resources and recognized that maintaining family connections are critical to both fostering children's tribal identity as well as ensuring tribes' longevity. To that end, ICWA mandates a higher degree of involvement from case workers in ensuring that American Indian families get connected to needed services and supports. Personnel from the Minnesota court system work with counties to train county child welfare staff on the history of and need for these laws and ensure they are implemented effectively in local communities.

# **B. Benefit-cost analysis**

This section presents findings from the benefit-cost analyses. Of the 74 services included in the program inventory, qualifying research allowed a full benefit-cost analysis on five (see Appendix B for methodology). For each of these five services, we present the estimated impact on outcomes, benefit-cost ratio, and a breakdown of the benefits to taxpayers and other societal benefits. Four of the child welfare services in the benefit-cost analysis have estimated benefits that exceed their costs. Estimated benefits per dollar invested range from \$1.20 to \$0.70. Two services are less expensive than the alternative intervention and therefore do not have an associated benefit-cost ratio. Both of these services also generate benefits that exceed their costs. The benefit-cost ratio means "for every dollar invested in this service, there are X dollars in benefits".



#### Figure 15: Explanation of a benefit-cost ratio

#### Treatment versus control

These findings rely on studies that examine the difference between a treatment group that receives the studied treatment and a control group that receives service as usual. Results compare the change in outcomes for the treatment group and the control group. This research design recognizes it would be unethical to offer no treatment to individuals in need, in this way, typical services are never withheld from families. Each profile reports the comparison group. The analysis assumes services are implemented in the same way as the services evaluated in the research used to estimate impacts

#### Matching client need to the services they receive

The services listed are not necessarily interchangeable, and are appropriate in different situations, ranging from prevention to permanent placement. Practitioners use assessments and professional expertise to determine the proper level of intervention with each family in order to meet their specific strengths and needs.

#### Estimating the marginal cost of services

The analysis uses Minnesota-specific data to calculate a marginal cost per participant for each child welfare service. MMB bases estimates on aggregate, statewide data or self-reported data from individual counties aggregated in a sample average estimate. Cost estimates reflect the experiences of these partners and may vary across the state. For a detailed explanation of methodology, see Appendix B.

#### Family Assessment (Alternative Response)

Family Assessment (also called Alternative Response) is a system of responding to referrals to Child Protective Services that is an alternative to a traditional investigation. If there are no imminent concerns about a child's safety, the family assessment method assesses the family situation, with the goal of engaging a family to determine their strengths and needs and to plan for the future. Family Assessment does not make a formal determination about whether maltreatment has occurred, though case workers do assess child safety, whether the child is at risk of future maltreatment and whether additional services are needed. Some practitioners perceive this approach as less intrusive and less confrontational than a traditional investigation.

Impact on outcomes	Source of evidence	Funding Source
Promising	California Evidence-Based Clearinghouse for Child Welfare	Counties, DHS, Federal

#### Benefit-cost analysis (compared to family investigation):

State ratio	Туре	Minnesota total	State and local taxpayer	Other Minnesota societal	Federal
	Benefits	\$780	\$130	\$650	\$90
n/a	Net costs	(\$110)	(	(\$110)	(\$40)
	B/C ratio	n/a	n/a	n/a	n/a

**Cost and effectiveness:** MMB estimated costs using information on staff time associated with family assessments, travel costs, and average drug testing costs. Staff time is based on time study data and full-time-equivalent staff allocations from multiple counties, and it includes the primary case worker, case aids, and supervisors. Travel time is a weighted average of metro and Greater Minnesota travel data. A committee of 14 counties validated the cost estimates.

**Comparison group, years of benefits, and monetized outcomes:** The comparison group is a family investigation which costs more, on average than family assessment. The family investigation cost is based on staff time associated with the investigation, travel costs and average drug testing costs. The estimate assumes the same drug testing costs in both investigations and alternative response.

Benefits are the net present value of lifetime benefits. The analysis monetized anticipated reductions in child maltreatment and the associated crime, earnings, healthcare, and property costs they generate. Because family assessment saves money compared to a family investigation, we find a negative cost. Therefore, the total net benefits to Minnesotans are \$890 (\$780 in total Minnesota benefits + \$110 in taxpayer cost savings). Given a negative denominator, there is no way to estimate a benefit-cost ratio.

**Implementation and demand:** Family assessment is used widely across the state. In 2016, 60 percent of screened-in reports were assigned to a family assessment (Minnesota Department of Human Services 2017b).

#### **Healthy Families America**

Healthy Families America (HFA) is a network of home visiting programs aimed at reducing child maltreatment and promoting positive parent-child relationships. The program involves weekly home visits by trained paraprofessionals who provide information on parenting and child development, parent support groups, and other services developed to meet the needs of specific communities and target populations. Home visits typically begin prenatally or shortly after a child's birth and can continue until children are between three and five years old.

Impact on outcomes	Source of evidence	Funding Source
Proven effective	California Evidence-Based Clearinghouse for Child Welfare	Counties, state and federal grants

#### Benefit-cost analysis (compared to treatment as usual):

State ratio	Туре	Minnesota total	State and local taxpayer	Other Minnesota societal	Federal
	Benefits	\$8,630	\$0	\$8,630	\$0
n/a	Net costs	\$7,430	\$	7,430	\$0
	B/C ratio	\$1.20	\$0	\$1.20	n/a

**Cost and effectiveness:** MMB estimated costs using self-reported marginal cost information from three counties. Each county estimated the average cost per family served for one year in the program. Duration of involvement in the program varied across counties, so the analysis assumes 1.4 years of participation consistent with WSIPP's research-based assumption. We assume additional state investments would not result in additional federal resources.

**Comparison group, years of benefits, and monetized outcomes:** The comparison group is services and supports as usual. Benefits are the net present value of lifetime benefits. The analysis monetizes declines in infant mortality as a result of reduced low birthweight births. These benefits accrue to society indirectly and do not provide benefits to taxpayers directly. Meta-analysis findings pertaining to other outcomes that could be monetized, such as reductions in child maltreatment and drug disorders, did not achieve statistical significance and are not included (see Appendix B, section B for details).

**Implementation and demand:** HFA is available in counties across the state, primarily in the Twin Cities and Northern Minnesota. The existence of waitlists for participation varies across counties.

#### **Nurse-Family Partnership**

The Nurse Family Partnership (NFP) program provides intensive home visiting by public health nurses beginning in a woman's pregnancy and continuing through the first two years after birth. The program is designed to serve low-income, at-risk pregnant women expecting their first child. The program aims to improve prenatal health and outcomes, child health and development, and family economic self-sufficiency in part to prevent child maltreatment.

Impact on outcomes	Source of evidence	Funding Source
Proven effective	California Evidence-Based Clearinghouse for Child Welfare	Counties, state and federal grants

#### Benefit-cost analysis (compared to treatment as usual):

State ratio	Туре	Minnesota total	State and local taxpayer	Other Minnesota societal	Federal
	Benefits	\$8,540	\$2,620	\$5,920	\$1,210
\$0.70	Net costs	\$11,310	\$11,310		\$0
	B/C ratio	\$0.70	\$0.20	\$0.50	n/a

**Cost and effectiveness:** MMB estimated costs using a county service partner's self-reported information on average marginal cost, number, and duration of sessions per family per year. The service partner covers 20 counties across West Central and Southwest Minnesota. Duration of involvement in the program varied across counties, so the analysis assumes two years of participation consistent with WSIPP's research-based assumption. We assume additional state investments would not result in additional federal resources.

**Comparison group, years of benefits, and monetized outcomes:** The comparison group is services and supports as usual. Benefits are the net present value of lifetime benefits. The analysis monetizes the costs associated with crime, earnings, health care, property loss and public assistance as a result of declines in child maltreatment, future crime, disruptive behavior and internalizing symptoms, use of public assistance and increases in employment for the parent. These benefits accrue directly and indirectly to taxpayers, program participants and society at large. Meta-analysis findings pertaining to other outcomes, such as education and substance use disorder, which could be monetized did not achieve statistical significance and are not included (see Appendix B, section B for details).

**Implementation and demand:** NFP is available in counties across the state, primarily in Western and Central Minnesota. The existence of waitlists for participation in the program varies across counties due to differences in available resources to serve children and families.

### Other long-term home visiting services

This grouping of services includes family home visiting services that are comprehensive in scope and intended to achieve long-term outcomes but do not follow one of the specific models featured elsewhere in this inventory. Programs target at-risk families who are enrolled in long-term services (longer than six months and up to two years). These ongoing services vary based on assessment of the family's need but generally include instruction in child development and health, referrals for service, or social and emotional support. Service providers vary and could include public health nurses, community health workers, or social workers.

Impact on outcomes	Source of evidence	Funding Source
Proven effective	Washington State Institute of Public Policy	Counties, state and federal grants

#### Benefit-cost analysis (compared to treatment as usual):

State ratio	Туре	Minnesota total	State and local taxpayer	Other Minnesota societal	Federal
	Benefits	\$2,810	\$520 \$2,290		\$550
\$1.10	Net costs	\$2,440	\$	2,440	\$0
	B/C ratio	\$1.10	\$0.20	\$0.90	n/a

**Cost and effectiveness:** MMB estimated costs using self-reported marginal cost information from three counties. Each county estimated the average cost per family served for one year in the program. Duration of involvement in the program varied across counties, so the analysis assumes one full year of participation. We assume additional state investments would not result in additional federal resources.

In the 2018 request for proposal grant requirements, the Minnesota Department of Health will require evidence-based home visiting grantees to submit additional program cost data. When statewide marginal cost data is available, this analysis will be updated to reflect a statewide marginal cost estimate.

**Comparison group, years of benefits, and monetized outcomes:** The comparison group is services and supports as usual. Benefits are the net present value of lifetime benefits. The analysis monetized anticipated reductions in future child maltreatment and the associated crime, earnings, healthcare, and property costs associated with these reductions. These benefits accrue directly and indirectly to taxpayers, program participants and society at large. Meta-analysis findings pertaining to other outcomes that could be monetized did not achieve statistical significance and are not included (see Appendix B, section B for details).

**Implementation and demand:** Long-term home visiting is available in counties across the state, and these services can target specific populations who may not be eligible for services from other home visiting models. The existence of waitlists for participation varies across counties.

### Northstar Kinship Assistance (Subsidized Guardianship)

Northstar Kinship Assistance, sometimes called subsidized guardianship, is a permanent placement alternative that does not require termination of parental rights and adoption. A licensed relative foster parent may become the child's legal guardian through a Transfer of Permanent and Legal Physical Custody and continue to receive assistance payments.

Impact on outcomes	pact on outcomes Source of evidence			
Promising	Washington State Institute of Public Policy	State and federal		

Benefit-cost analysis (compared to guardianship of the commissioner):

State ratio	Туре	Minnesota total	State and local taxpayer	Other Minnesota societal	Federal
	Benefits	\$800	\$280	\$520	\$90
n/a	Net costs (\$5,920)		(\$	\$5,920)	(\$3,510)
	B/C ratio	n/a	n/a	n/a	n/a

**Cost and effectiveness:** MMB estimated costs using a weighted average for a year of Northstar Kinship Assistance payments. No additional case worker costs were added because monitoring ceases after the transfer of permanent and legal physical custody is complete. The payments account for age and include the base payment plus any supplemental payments for specific needs.

**Comparison group, years of benefits, and monetized outcomes:** The comparison group is one year of care under guardianship of the commissioner. MMB estimated the costs associated with one year of family foster care payments, plus caseworker and supervisor time associated with cases following a termination of parental rights and prior to adoption.

Benefits are the net present value of lifetime benefits. The analysis monetized changes associated with reducing the number of out-of-home placements for a child. However, because subsidized guardianship also saves money compared to its alternative, guardianship under the commissioner, we find a negative cost. Therefore, the total benefits are \$6,720 (\$800 in benefits to Minnesotans + \$5,920 in state and local taxpayer cost savings). Given a negative denominator, there is no way to estimate a benefit-cost ratio.

**Implementation and demand:** The use of Northstar Kinship Assistance has continued to increase since its inception in 2015 when it replaced relative custody assistance.

# Appendix A: Child welfare inventory of services

The Minnesota Results First Initiative worked with representatives across the state to develop the inventory of child welfare services. The inventory focuses on services with a stated goal to prevent or reduce maltreatment and out-of-home care. See Appendix B for a detailed description of the methodology.

#### **Inventory terms**

Number of services	Rating	Definitions
11	Proven Effective	A Proven Effective service or practice offers a high level of research on effectiveness for at least one outcome of interest. This is determined through multiple qualifying evaluations outside of Minnesota or one or more qualifying local evaluation. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.
10	Promising	A Promising service or practice has some research demonstrating effectiveness for at least one outcome of interest. This may be a single qualifying evaluation that is not contradicted by other such studies but does not meet the full criteria for the proven effective designation. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.
47	Theory Based	A Theory Based service or practice has no research on effectiveness or research designs that do not meet the above standards. These services and practices may have a well-constructed logic model or theory of change. This ranking is neutral. Services may move up to Promising or Proven Effective after research reveals their causal impact on measured outcomes.
0	Mixed effects	A Mixed Effects service or practice offers a high level of research on the effectiveness of multiple outcomes. However, the outcomes have contradictory effects, and there is no additional analysis to quantify the overall favorable or unfavorable impact of the service. This is determined through multiple qualifying studies outside of Minnesota or one or more qualifying location evaluation. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.
0	No effect	A service or practice with no effects has no impact on the measured outcome. It does not include the service's potential effect on other outcomes. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.
0	Proven harmful	A Proven Harmful service or practice offers a high level of research that shows program participation adversely affects outcomes of interest. This is determined through multiple qualifying evaluations outside of Minnesota or one or more qualifying local evaluation. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

5	Category of Services	These services represent a category of services that a client may receive, dependent on need. Some of these services may be evidenced-based, but the services have not been studied holistically. As services can vary from client to client, we cannot assess their effectiveness.
1	Pending	A service or practice with a high level of research on the effectiveness of multiple outcomes in which a meta-analytic review is currently underway.

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Child Protection Team	Description: A team of multidisciplinary professionals from a variety of agencies that provide education, prevention and intervention resources, treatment and consultation to child welfare agencies. Duration/intensity of service: Monthly for 1.5 hours Target population: Child welfare professionals	Administrative approaches	Theory Based	*	*	*		Multidisciplinary teams vary in configuration, function and training, making them difficult to research, though county partners noted they are invaluable.
Child Welfare Trauma Training Toolkit	Description: Teaches knowledge, skills, and values about working with children in the child welfare system who have experienced trauma, including strategies professionals can use to address trauma and enhance child, family, and provider resilience. Duration/intensity of service: Varies Target population: Child welfare professionals	Administrative approaches	Theory Based	*	*	*		
Children's Justice Initiative	Description: A collaboration between the Minnesota Judicial Branch and the Minnesota Department of Human Services to promote timeliness to safe, stable, permanent homes for abused and neglected children. The initiative provides training and facilitation, a judge's benchbook, checklists and other tools to facilitate timely collaboration among actors. Duration/intensity of service: Minimum of quarterly meetings Target population: Child welfare professionals	Administrative approaches	Theory Based	*	*	*		Many states have multidisciplinary, judge- led teams focused on child protection at the county level, but the role of these teams can vary.
Family Dependency Treatment Court	Description: A specialized court focused on cases of child abuse and neglect that involve substance abuse by the child's parents or other caregivers. An interdisciplinary team assesses the family's situation and creates a comprehensive case plan to address the needs of both children and their parents, including substance abuse treatment, intensive case management, frequent status hearings, and regular drug testing. Duration/intensity of service: Approx. 1 year with court hearings every two weeks, becoming less frequent with success Target population: Parents with substance abuse that has led to removal of their children, at least one under age eight	Administrative approaches	Proven Effective	Neutral	Favorable	Favorable (Crime)	<u>WSIPP</u>	
Indian Child Welfare Act Courts	Description: Courts designed to ensure implementation of the requirements of the Indian Child Welfare Act in order to reduce unnecessary removal of Indian children from their homes, reunify children with their families as soon as possible, and reduce foster care re-entry. Duration/intensity of service: Ongoing Target population: American Indian children	Administrative approaches	Theory Based	*	*	*		Minnesota (along with Colorado and Montana) has been asked to participate in a federal baseline measures project around their Indian Child Welfare Act initiatives.
Indian Child Welfare Act Advocacy Center	Description: An integrative model to provide legal and social work services. An attorney provides civil legal services, and parent mentors and Indian advocates assist families with meeting basic needs by providing support with housing, transportation, and scheduling services. Duration/intensity of service: Varies Target population: American Indian families	Administrative approaches	Theory Based	*	*	*		

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Indian Child Welfare Act Training	Description: A training designed to provide foundational information necessary to comply with both the letter and spirit of the Indian Child Welfare Act, as well as the substantive law and practice skills necessary to improve outcomes for Indian children and their families. Duration/intensity of service: Ongoing Target population: American Indian children	Administrative approaches	Theory Based	*	*	*		Minnesota (along with Colorado and Montana) has been asked to participate in a federal baseline measures project around their Indian Child Welfare Act initiatives.
Permanency Technical Workshop	Description: A day-long workshop offered by the Children's Justice Initiative focused on improving time to permanency for children in out-of-home placement. Provides education on permanency processes and timelines, examines a county's permanency data and develops a timeline and action plan for resolving long- standing cases. Duration/intensity of service: One day workshop with follow-up as needed Target population: Child welfare professionals	Administrative approaches	Theory Based	*	*	*		The use of this specific methodology for reviewing and improving time to permanency is likely unique to MN.
Safety Organized Practice	<b>Description:</b> A practice model that focuses on safety for children while creating partnerships between social workers, families, the family's support network, and community resources. It combines concepts from the Signs of Safety and Structured Decision Making processes. <b>Duration/intensity of service:</b> Ongoing <b>Target population:</b> Parents and children	Administrative approaches	Theory Based	*	*	*		
Signs of Safety	<b>Description:</b> A relationship-grounded, safety-organized child protection framework that expands the investigation of risk to encompass strengths and signs of safety that can be built upon to stabilize and strengthen a child's situation. Central to this approach is meaningful family engagement and capturing the voice of the child. <b>Duration/intensity of service:</b> Minimum of once per month <b>Target population:</b> Parents and children	Administrative approaches	Theory Based	*	*	*		Research to date has focused on the effectiveness of implementation.
Solution-Based Casework	Description: A case management approach that helps families identify their strengths, focus on everyday life events, and build the skills necessary to manage difficult situations. The model combines features from problem-focused relapse prevention practices with solution-focused models that evolved from family systems casework and therapy. Duration/intensity of service: 1-6 times per month depending on risk level Target population: Parents and children	Administrative approaches	Promising	Favorable	Favorable	Favorable (Various child- wellbeing metrics)	<u>CEBC</u>	
Structured Decision Making Risk Assessment	<b>Description:</b> A system of assessment tools used at various decision points in the child welfare system to classify families based on their risk of further child maltreatment. <b>Duration/intensity of service:</b> Ongoing <b>Target population:</b> Child welfare professionals	Administrative approaches	Promising	*	Favorable	*	<u>CEBC</u>	
Child Assessment Tools	<b>Description:</b> A set of scientifically validated tools (such as adverse childhood experiences (ACE) screenings, 35-day evaluations, and the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood) to help practitioners understand if children are meeting developmental milestones and, if not, the appropriate course of treatment or referral services for the child and family. <b>Duration/intensity of service:</b> Varies <b>Target population:</b> Child welfare professionals	Assessment services	Category of Services	*	*	*		Evaluations help practitioners understand if children are meeting developmental milestones and, if not, the appropriate course of treatment to prescribe.

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Family Assessment Tools	<b>Description:</b> A set of scientifically validated tools, such as a parent-child interaction assessment, to help practitioners understand how well parents and children function as a family and what interventions or services could support family functioning. <b>Duration/intensity of service:</b> Varies <b>Target population:</b> Child welfare professionals	Assessment services	Category of Services	*	*	*		Evaluations help practitioners understand how well parents and children function as a family and, if they are struggling, the appropriate course of treatment to prescribe.
Motivational Interviewing	<b>Description:</b> A client-centered directive method focused on exploring and resolving a client's ambivalence by increasing their intrinsic motivation to change. It can be used by itself or in combination with other treatments <b>Duration/intensity of service</b> : Varies <b>Target population:</b> Parents and children	Assessment services	Proven Effective	*	*	Favorable (Underage alcohol use, substance misuse)	<u>CEBC</u>	Most research into motivational interviewing relates to substance use rather than child welfare. CEBC still rates the program favorably on child safety measures.
Parent Assessment Tools	<b>Description:</b> A set of scientifically validated tools to help practitioners understand how well parents are able to care for their children and what services could enhance parenting skills and resources. Includes: drug testing, parent psychological evaluations, and parenting capacity assessments. <b>Duration/intensity of service:</b> Varies <b>Target population:</b> Child welfare professionals	Assessment services	Category of Services	*	*	*		Evaluations help practitioners understand how well parents are able to care for their children and, if not, the appropriate course of treatment to prescribe.
Case Management	<b>Description:</b> A set of services that includes developing an individual service plan, assisting a child and their family in obtaining needed services through coordination with other agencies, and assuring continuity of care. It can be tailored to meet the needs of a specific population and is a qualified Medicaid service. <b>Duration/intensity of service:</b> Ongoing <b>Target population:</b> Parents and children	Core county social services	Theory Based	*	*	*		
Child Protection Investigation	Duration/intensity of service: Approx. 45 days Target population: Parents and children	Core county social services	Theory Based	*	*	*		
Child Welfare Assessment	Description: A proactive assessment of a child's safety and well-being with the goal of preventing a maltreatment report (ex: when a child runs away). The assessment involves interviews and connecting the child to community programming that can address their needs. Duration/intensity of service: Varies Target population: High-risk children	Core county social services	Theory Based	*	*	*		

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Domestic Violence Response Team	Description: A specific pathway in child protection services that responds to incidents where children have been in sight or sound of domestic violence between caregivers. The focus is to continually assess the risk posed to children by the presence of domestic violence and by the perpetrator of this violence. Duration/intensity of service: Ongoing Target population: Children exposed to domestic violence	Core county social services	Theory Based	*	*	*		
Family Assessment	Description: A less invasive, more collaborative alternative to a traditional family investigation when a maltreatment report is screened in for follow up. Unlike an investigation, alternative response (also called Alternative Response or Differential Response) does not make a formal determination about whether maltreatment occurred. Duration/intensity of service: Approx. 45 days Target population: Parents and children	Core county social services	Promising	Favorable	*	*	<u>CEBC</u>	
Minor Parent Services	Description: Case management and home visiting to assist young mothers in educational and/or vocational planning and link mother and baby to needed services, such as mental health services, parenting supports, educational supports, and developmental screenings/assessment for the baby. Duration/intensity of service: Minimum of once per month depending on need, typically for six months following birth Target population: Pregnant minors	Core county social services	Theory Based	*	*	*		
Brief Counseling	Description: A short-term, solution-focused therapy provided in a family's home focusing on specific issues the family faces and helping them identify solutions. Counseling establishes a family's goals for improvement on their key issues and defines what improvement might look like. Duration/intensity of service: Up to 10 weeks Target population: Parents and children	Counseling / Therapy	Theory Based	*	*	*		
Children's Therapeutic Supports Services	Description: A flexible package of mental health services for children who require varying levels of therapeutic and rehabilitative intervention. It typically includes psychotherapy, skills training, crisis assistance, and mental health service plan development, and it can be provided in different settings such as at home or at school. Duration/intensity of service: Varies Target population: Children with SED diagnosis	Counseling / Therapy	Category of Services	*	*	*		Many of the services offered are evidence- based, and they are administered based on children's individual needs.
Collaborative Intensive Bridging Services	Description: An intensive 6-9 month treatment program for children ages 6-17 who have problems with aggression or fighting, self-injurious behavior, depression, truancy, acting out in home or school, and other behavioral problems. It combines intensive in-home therapy with a brief, intensive placement in a residential treatment center. Duration/intensity of service: 4-8 times per month for 6-9 months Target population: High-risk youth	Counseling / Therapy	Theory Based	*	*	*		This model is based on research that indicates children are best treated with their family in the environments in which they live and interact.
Functional Family Therapy	Description: A structured family-based intervention that seeks to enhance protective factors and reduce risk. The model includes engagement, motivation, behavior change, and positive role models. Duration/intensity of service: Varies Target population: Parents and children	Counseling / Therapy	Proven Effective	*	*	Favorable (Crime, risky behavior)	<u>Crime</u> Solutions	

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Intensive Family Therapy	<b>Description:</b> A form of therapy (also called systemic family therapy or in-home family therapy) intended to increase stability at home and in the community for family members experiencing emotional and behavioral difficulties. Typically, medical necessity for in-home family therapy must be identified through diagnostic assessment. <b>Duration/intensity of service:</b> 2-4 times per month for up to 6 months <b>Target population:</b> Parents and children	Counseling / Therapy	Promising	Favorable	Favorable	Favorable (Child and parent behavior and mental health)	<u>CEBC</u>	
Other Preventative Therapeutic Work	Description: Services focused on children and family with the goal of improving family and child functioning and the odds of a child remaining in their primary home, out-of-home care setting, or adopted home. Duration/intensity of service: Varies Target population: Parents and children	Counseling / Therapy	Category of Services	*	*	*		
Parent Child Interaction Therapy	Description: A behavioral intervention that includes live coaching sessions for children and their parents or caregivers focused on decreasing externalizing child behavior problems (e.g., defiance, aggression), increasing child social skills and cooperation, and improving the parent-child attachment relationship. Duration/intensity of service: Varies Target population: Parents and children	Counseling / Therapy	Proven Effective	Favorable	*	Favorable (Child behavior and parent- child interactions)		CEBC-cited research indicates that PCIT does not produce an overall effect on outcomes, but it is effective for specific populations such as highly irritable children.
Therapeutic Supervised Parenting	<b>Description:</b> A supervised visitation model in which children and their parents engage in supervised parenting with a clinical social worker followed by individual therapy based on case management plans and identified family needs. <b>Duration/intensity of service:</b> Weekly 30-minute visitation followed by therapy <b>Target population:</b> Parents and children	Counseling / Therapy	Theory Based	*	*	*		
Trauma-Focused Cognitive Behavioral Therapy	Description: A child and parent psychotherapy model for children who are experiencing significant emotional and behavioral difficulties related to traumatic life events. It is a hybrid treatment model that incorporates trauma-sensitive interventions with cognitive behavioral, family, and humanistic principles. (Benefit- cost analysis is included in Result's First juvenile justice report.) Duration/intensity of service: Varies Target population: Parents and children	Counseling / Therapy	Proven Effective	*	*	Favorable (Child behavior and mental health, parenting skills)	<u>CEBC</u>	
Trauma- Informed Child- Parent Psychotherapy	Description: A treatment for trauma-exposed children aged 0-5 and their primary caregiver that examines how the trauma and the caregivers' relational history affect the caregiver-child relationship and the child's developmental trajectory. Duration/intensity of service: Varies Target population: Parents and children	Counseling / Therapy	Promising	*	*	Favorable (Child and parent behavior and mental health)	<u>CEBC</u>	

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Attachment Biobehavioral Catch-up	<b>Description:</b> A multi-component intervention aimed a helping caregivers interpret their children's behavioral signals, provide responsive and predictable environments, and decrease behaviors that could overwhelm or frighten a young child. <b>Duration/intensity of service</b> : Varies <b>Target population</b> : Parents and children	Parenting education and support	Proven Effective	*	*	Favorable (Parenting skills, child behavior and mental health)	<u>CEBC</u>	Attachment Biobehavioral Catchup is typically billed to county mental health services rather than child welfare. Consequently, Results First will conduct a benefit-cost analysis in our future Children's Mental Health report.
The Beloved Child	Description: An intensive case management model utilizing culturally-specific techniques that is combined with the Family Spirit home visiting program. Duration/intensity of service: Weekly to monthly depending on age of child Target population: American Indian families	Parenting education and support	Theory Based	*	*	*		
Bright Beginnings	Description: An intensive case management model for American Indian mothers in need of chemical dependency treatment or recovery support. Case management services include the development of a Child Protection Case Plan, assistance with treatment planning, child care, assessments for treatment, transportation, and other support services. The program also includes a weekly support group focused on exploring cultural identity and important factors for maintaining sobriety. Duration/intensity of service: Weekly Target population: American Indian women	Parenting education and support	Theory Based	*	*	*		
Circle of Parents	Description: A support group that provides high-risk families with a place to discuss parenting successes and struggles while developing a network of support. Child care is provided by trained early childhood staff. Duration/intensity of service: Weekly during the school year and twice in the summer Target population: High-risk parents	Parenting education and support	Theory Based	*	*	*		
Circles of Security	Description: A home-based intervention intended to teach caregivers about attachment theory that explores various parenting models and how they can influence children's cognitive, affective, and behavioral responses. Duration/intensity of service: 1-2 visits for two months Target population: High-risk caregivers especially with a history of substance abuse and/or mental illness; some programs target adolescent parents	Parenting education and support	Promising	*	*	Favorable (Parent-child interactions)	<u>CEBC</u>	
Crisis Nursery	<b>Description:</b> A family support program that provides temporary, short-term care for children while families address a crisis situation. Care may be arranged for daytime hours or overnight and includes services such as crisis counseling, parent education, in-home family counseling, referral to community resources, and kinship services. <b>Duration/intensity of service:</b> Daily and overnight care varies <b>Target population:</b> Eligible parents and children	Parenting education and support	Promising	*	Favorable	*	Minnesota Management & Budget literature review	

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
	Description: A comprehensive home visiting model for enhancing children's development and strengthening their families through weekly home visits and bimonthly group socializations activities for parents and children. Duration/intensity of service: Weekly 90 minute visits and 2 center socializations monthly for a year Target population: Eligible parents and children	Parenting education and support	Pending	*	*	*	<u>HomVEE</u>	Currently under further review; recognized by Department of Health and Human Services as an evidence-based model
Families First	Description: A program to empower parents to intervene effectively with their children, manage the family's basic needs, promote prosocial skills for all family members, and reduce risk factors/increase protective factors. Duration/intensity of service: 2-3 visits for 4-8 hours per week over 10-12 weeks Target population: Parents and children not in out-of-home care	Parenting education and support	Theory Based	*	*	*		
Healthy Families America	Description: A network of programs aimed at reducing child maltreatment and promoting positive parent-child relationships. Includes weekly home visiting, parent support groups, and other services during a child's first months and years of life. Duration/intensity of service: 1-hour visits weekly depending on child's age and need; up to age 5 Target population: High-risk and eligible parents	Parenting education and support	Proven Effective	Neutral	Neutral	Favorable (Emergency room visits, K- 12 special education, and child development)	<u>WSIPP</u>	
Hope, Opportunity, Pride, and Empowerment	Description: A program for parents and their children designed to empower families in the community and provide a new pathway to achieving economic self- sufficiency. Includes comprehensive case management, child welfare prevention services, access to stabilizing federal economic programs, workforce development, and early childhood supports. Duration/intensity of service: Varies Target population: Parents and children	Parenting education and support	Theory Based	*	*	*		
Indian Child Welfare "Gizhawaaso" Program (White Earth Nation)	Description: A program for families living in poverty with parents struggling with substance abuse and addiction. Families are referred to services and provided culturally-specific services to facilitate traditional and holistic healing including culturally competent case management and a variety of cultural ceremonies. Duration/intensity of service: Weekly meetings Target population: American Indian parents and children at high risk for reentry into child protection services	Parenting education and support	Theory Based	*	*	*		
Mothers and Babies	<b>Description:</b> A voluntary prenatal and post partum depression prevention program that promotes healthy mood, bonding with one's baby, and strategies for pregnant women and new moms to cope with stress. It can be implemented in either a group setting or in one-on-one home visiting. <b>Duration/intensity of service</b> : Weekly group meeting for 9 weeks <b>Target population:</b> Prenatal/post-partum mothers	Parenting education and support	Promising	*	*	Favorable (Mother's mental health)	<u>NREPP</u>	Mothers and Babies can be delivered either in a group setting or as home visiting. St. Louis County is participating in a research trial with Northwestern University.

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Non-Model Long-Term Home Visiting	<ul> <li>Description: A group of long-term (longer than six months) home visiting programs that do not follow one of the specific models featured elsewhere in this inventory.</li> <li>Some programs use the same curricula as model home visiting programs, but have not completed the steps needed for accreditation by the model developers.</li> <li>Duration/intensity of service: Frequency of visits varies, typically from infancy through toddler years</li> <li>Target population: Varies by local program, typically children 0-3</li> </ul>	Parenting education and support	Proven Effective	Favorable	Neutral	*	<u>WSIPP</u>	
Non-Model Parent Coaching	Description: Programs aimed at improving or enhancing parenting capacity, skills, and competence that do not follow one of the specific models featured elsewhere in this inventory. Duration/intensity of service: Weekly sessions, typically for 6 months Target population: Parents	Parenting education and support	Theory Based	*	*	*		
Non-Model Short-Term Home Visiting	Description: A group of home visiting programs that do not follow one of the specific models featured elsewhere in this inventory and are typically limited in scope to one or a few areas of intervention. Short-term home visiting can be a referral pathway to a long-term home visiting program. Duration/intensity of service: Frequency of visits varices, typically less than six months Target population: Varies by local program	Parenting education and support	Theory Based	*	*	*		
Nurse-Family Partnership	<b>Description:</b> A program providing intensive home visiting by public health nurses during a woman's pregnancy and the first two years after birth. The program is designed to serve low-income, at-risk pregnant women expecting their first child. The program aims to improve prenatal health and outcomes, child health and development, and family economic self-sufficiency. <b>Duration/intensity of service:</b> Approx. 1 hour visits weekly or every other week depending on child age and need, from pregnancy until child is aged two <b>Target population:</b> First-time, low-income mothers and their children	Parenting education and support	Proven Effective	Favorable	*	Favorable (Crime, disruptive behavior disorder symptoms, very pre-term birth, and public assistance)	<u>WSIPP</u>	
Parent Mentoring	Description: A program that matches parent mentors, who themselves have a past involvement with the child welfare system, with parents who are currently working with child welfare in order to support them and help them understand and navigate both systems. Duration/intensity of service: Varies Target population: Parents	Parenting education and support	Theory Based	*	*	*		
Parent Support Outreach Program	Description: A program that provides early intervention, outreach, and supportive services to families that had a maltreatment report that was screened out from formal follow up because the reported incident did not reach the legal standard of abuse or neglect. These families may still have risk factors, and the program aims to prevent future incidents of child maltreatment. Duration/intensity of service: Varies Target population: Parents and children with a screened-out maltreatment report	Parenting education and support	Theory Based	*	*	*		A 2009 study conducted for the MN Dept. of Human Services indicated that most families found PSOP helpful and that social workers felt that PSOP improved most families' functioning.

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Parents and Children Excel	Description: A program aimed at empowering families of color by engaging them in partnerships that build safety and well-being for children. The program works with youth who have attendance issues or behavior problems to keep them engaged in school and coordinates a positive teen-peer mentorship program for the younger children in the program. Duration/intensity of service: Varies Target population: Parents and children of color	Parenting education and support	Theory Based	*	*	*		
Prenatal Exposure Outreach	<b>Description:</b> A voluntary intervention serving women who are pregnant and believed to be using alcohol or other drugs aimed at ending chemical abuse during pregnancy. Includes case management to access chemical health assessments and treatment, pregnancy and parenting support, prenatal care and basic health and safety assessments. <b>Duration/intensity of service:</b> Visits 3 times per month, up to two years <b>Target population:</b> Pregnant women suspected of using alcohol or other drugs	Parenting education and support	Theory Based	*	*	*		Though research is nascent, these types of outreach programs may become increasingly important interventions for combatting consequences of the opioid crisis.
Respite	Description: A short-term care service provided due to the absence or need for relief of the primary caregiver in order to support the continued residence of a child with their family. It is typically planned or scheduled, and may occur in the family's home, in a foster home, or in a licensed facility. Duration/intensity of service: Up to 21 days in one year Target population: Parents experiencing high stress in their caregiver role due to child needs or parent circumstances	Parenting education and support	Theory Based	*	*	*		
The Incredible Years	Description: A series of three separate, multifaceted, and developmentally based curricula for parents, teachers, and children designed to promote emotional and social competence and to prevent, reduce, and treat behavior and emotional problems in young children. Duration/intensity of service: Varies Target population: Parents and children	Parenting education and support	Proven Effective	*	*	Favorable (Parenting skills and child behavior)	<u>CEBC</u>	
Concurrent Permanency Planning Training	Description: A program to provide education and skills training to foster parents while simultaneously preparing them to adopt their foster children in the event that reunification with the children's biological family is not possible. Duration/intensity of service: 2 three-hour sessions over one month Target population: Foster parents willing to support birth families and committed to adopt children who cannot return home	Placement and permanency services	Theory Based	*	*	*		
Northstar Care for Children (subsidized guardianship)	Description: A program that consolidates and simplifies benefits and processes for three child welfare programs: family foster care, kinship assistance, and adoption assistance to support families caring for children who were removed from their homes due to safety issues, delinquency, or disability. Duration/intensity of service: Varies based on child age when entering care and assistance continuing until age 18 Target population: Children in out-of-home care	Placement and permanency services	Promising	Neutral	Favorable	*	<u>WSIPP</u>	

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Relative Foster Care	Description: A out-of-home care setting in which a child is placed in the care of family members or important friends with whom the child has resided or has significant contact in lieu of placing the child with licensed foster care providers previously unknown to the child. Duration/intensity of service: Until reunification occurs, typically for six months Target population: Children in out-of-home care	Placement and permanency services	Proven Effective	Favorable (institutional abuse)	Favorable	Favorable (Various child behavioral outcomes)	<u>Campbell</u> Collaboration	
Supervised Visitation	<b>Description:</b> Includes a range of services from formal, supervised parenting time to transportation assistance to/from visitation sessions to locations for the safe exchange of children between parties. <b>Duration/intensity of service:</b> 2-3 times per week depending on duration and progress of case <b>Target population:</b> Families involved in the child protection system with children placed in foster care	Placement and permanency services	Theory Based	*	*	*		
Family Group Decision Making	<b>Description:</b> Also called Family Group Conference, Parallel Protection Process or Rapid Response Case Planning Conference, this is an alternative dispute resolution approach that positions the "family group" as leaders in decision making about their children's safety, permanency, and well-being. A trained coordinator convenes the family group and agency personnel to create and carry out a plan to safeguard children and other family members. <b>Duration/intensity of service:</b> Minimum of one 2-3 hour conference, 1-6 months <b>Target population:</b> Parents and children	Placement prevention services	Theory Based	*	*	*		Most research into Family Group Decision Making involves nonequivalent control groups.
Family Preservation Services	Description: A program to prevent the removal of a child from his or her home (or to promote his or her return home) by improving family functioning. These programs typically have the same goals as intensive family preservation service models such as Homebuilders but lack the rigorous criteria for implementation as defined by the Homebuilders <sup>®</sup> model. Duration/intensity of service: Varies Target population: Parents and children	Placement prevention services	Theory Based	*	*	*	<u>WSIPP</u>	
Family Preservation Supports	Description: A set of supports that addresses short-term material needs in order to mitigate a particular risk or concern that might have otherwise led to children being placed in out-of-home care. Include the provision of household and baby care supplies or use of alternative-to-placement funds to address short-term housing issues. Duration/intensity of service: Amount varies, typically one-time Target population: Parents and children	Placement prevention services	Theory Based	*	*	*		
Family Unification Program	Description: A program to provide income-based housing subsidies to three different populations: children who are at imminent risk of out-of-home placement due primarily to lack of housing; children for whom the delay in discharge from out- of-home placement is due to lack of adequate housing; and youth who are leaving foster care. Duration/intensity of service: Varies Target population: Parents and children	Placement prevention services	Theory Based	*	*	*		
Gage East	Description: A permanent supportive housing program for youth and families in Rochester, Minnesota. Includes supportive services and voluntary case management services to attend to child wellbeing and family stability. Duration/intensity of service: Varies Target population: Chronically homeless families and children and youth age 16-24	Placement prevention services	Theory Based	*	*	*		

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Prevention of Placement	<b>Description:</b> A program to prevent out-of-home placement by assisting families in developing a long-term plan linking them to needed services and addressing issues that resulted in law enforcement being called to their home. Includes a guaranteed appointment time the next business day to meet with a social worker. <b>Duration/intensity of service:</b> Minimum of one meeting <b>Target population:</b> Parents and children	Placement prevention services	Theory Based	*	*	*		
Adoption Support Group	Description: A facilitated but unstructured support group for adoptive parents providing an opportunity to discuss the unique experiences of parenting adopted children while the children meet in a simultaneous recreational group. Duration/intensity of service: Monthly for about 2 hours Target population: Adoptive parents	Post- permanency	Theory Based	*	*	*		
Beyond Consequences	Description: A group training for caregivers aimed at offering techniques to help caregivers regulate the behavior of children with significant trauma histories and/or attachment issues. Follows the model and book by Heather T. Forbes, "Beyond Consequences, Logic and Control." Duration/intensity of service: 8 two-hour sessions over two months Target population: Caregivers with adoptive, kinship, or foster placements	Post- permanency	Theory Based	*	*	*		
	<b>Description:</b> A process to explore the individual needs, circumstances, and history of foster care children, particularly those most at risk of aging out of care, in order to pursue placement with an appropriate family. <b>Duration/intensity of service:</b> Monthly contact with child over several months <b>Target population:</b> Children in out-of-home care expected not to reunify with their parents	Post- permanency	Promising	*	Favorable	*	<u>CEBC</u>	
	<b>Description:</b> Also known as the Dually Involved Youth Program, this program is designed to interrupt a pattern of delinquent/criminal behaviors for youth involved in the child welfare and juvenile justice systems by providing youth and their families with more integrated and trauma-informed mental health, chemical health and parenting support. <b>Duration/intensity of service:</b> Minimum of once per month, typically 6 months <b>Target population:</b> Youth ages 10-15 who are charged with their first criminal offense	Youth Services	Theory Based	*	*	*		An 2016 evaluation from the University of Minnesota (http://bit.ly/2huC5LV) found that the program was associated with a reduction in recidivism compared to a like control group. However, the study had too few participants to meet Results First's threshold for a promising rating.

Service	Program details	Category	Impact on outcomes	Maltreatment	Placement / Permanency	Other outcomes	Source of evidence	Other evidence or expert opinion
Extended Foster	Description: While children typically "age out" of foster care at age 18, Minnesota law allows a child continue in foster care up to age 21 if he or she chooses. In some cases, youth who left foster care at age 18 may be able to return to care. Duration/intensity of service: 0-3 years Target population: Young adults ages 18-21 in foster care	Youth Services	Theory Based	*	*	*		There is a large body of research from the University of Chicago around extended foster care outcomes in Midwest states, but the methodology is unclear as to how control groups were established.
Independent Living Skills	Description: Programming is focused on providing youth, who are nearing independence or lack exposure to independent life skills, with information on budgeting, housing, employment, and other life skills. Content is delivered in a group setting. Instructors provide resources and know-how, and occasionally coordinate services. Duration/intensity of service: Varies Target population: Youth in foster care	Youth Services	Theory Based	*	*	*		
LINK	Description: A program that provides case management; life-skills and peer support groups; assistance with food, clothing, housing and employment; a transitional housing program; and activities, retreats and recreational outings for youth who are at-risk, homeless or have run away. Duration/intensity of service: Varies Target population: High-risk youth		Theory Based	*	*	*		
SELE	<b>Description:</b> A program offering services to older children currently or previously in foster care to help them prepare for a successful transition to adulthood. <b>Duration/intensity of service:</b> At least monthly for 6-12 months <b>Target population:</b> Youth in foster care	Youth Services	Theory Based	*	*	*		
Someplace Safe	Description: A set of services to assist victims of domestic violence, sexual assault, sexual exploitation, sex trafficking, labor trafficking, and other crimes navigate the social, emotional, and economic impacts they face as victims on the path to becoming survivors. Services include victim advocacy, supervised visitation, and exchange centers, and safe harbor case management. Duration/intensity of service: As needed over 6 months Target population: High-risk youth	Youth Services	Theory Based	*	*	*		
Youth Activities Program	Description: Funding for extra-curricular activities to allow children involved in the child welfare system to participate in extracurricular activities they may not otherwise have access to. Duration/intensity of service: Varies Target population: Youth in foster care	Youth Services	Theory Based	*	*	*		

### A. Inventory of services

We worked with the Department of Human Services, the Minnesota Courts, and representatives from eight counties (Beltrami, Dakota, Grant, Hennepin, Olmsted, Ramsey, Scott, and St. Louis) to develop an inventory of child welfare-focused services available in the state. The inventory and the benefit-cost analysis reflect the experiences of these partners. Additionally, the inventory includes the appropriate services that are part of the Child Welfare Disparities grants administered by the Department of Human Services, Child Safety and Permanency Division.

The inventory focuses on services with a stated goal to prevent or reduce maltreatment and out-of-home care. It excludes services aimed exclusively at adults and the juvenile justice population, school-based programs, and non-targeted children's mental health services. The inventory provides information about the service description and the supporting evidence that it reduces child maltreatment, out-of-home care, and other child and family wellbeing outcomes.

The inventory also includes information on the extent to which there is evidence of effectiveness for each service listed. Based on program design elements, we matched inventory services to those studied in academic research and consulted respected research clearinghouses for meta-analyses of current research to inform program ratings. The California Evidence-Based Clearinghouse for Child Welfare (CEBC) is the primary clearinghouse for child welfare research and includes services specifically targeting child welfare involved populations as well as those at-risk. CEBC's research standards for services it rated as a 1 or 2 reflect MMB's research standards of experimental (treatment and control group) or quasi-experimental design, and so the rating for matching inventory services was taken directly from CEBC. MMB also referenced other clearinghouses such as Crime Solutions, Home Visiting Evidence of Effectiveness (HomVEE), and the National Registry of Evidence-based Programs and Practices (NREPP).

For Theory Based services, we did not identify outcome evaluations with an experimental or quasi-experimental design. That does not mean that those services are ineffective or have not been evaluated. It simply means we did not find evaluations that met the definitions in Figure 15. At some point, all services on the inventory were Theory Based.

Services that include the term Category of Service highlight that this group can include many different models, some of which may be evidence-based, but the overall category typically has not been studied holistically. For example, there are many services included in the package of Children's Therapeutic Support Services—some of which follow evidence-based models—but there is no overall study as to the effectiveness of the package of services as a whole.

### **Data quality**

The child welfare system is complex and provides a wide array of services for children and their families. The inventory only includes services that are funded fully or partially through the state or county budget and that have reducing maltreatment or out-of-home care as a stated goal.

We worked with data collection partners to understand if the service delivered in each jurisdiction matched the services reflected in one or more the research clearinghouses. Relevant factors include similar treatment population, service structure, and adequately trained staff. In cases where services did not meet these

requirements or staff articulated a concern for fidelity, the service was not included in the benefit-cost analysis. We did not conduct fieldwork to ensure fidelity of implementation. Rather, we review the extent to which services have attributes that are similar to those that have been rigorously evaluated. If fidelity is absent, Minnesota may not experience the anticipated benefits seen elsewhere.

### **B. Benefit-cost analysis**

Benefit-cost analysis is a tool for comparing policy alternatives based on net benefits generated over time for each dollar invested. The results provide important information about cost-effectiveness, but do not address other important factors, such as equity or innovation. An advantage of using benefit-cost analysis within the same policy area is the ability to measure costs and outcomes in the same way across different services.

The Results First model uses an integrated set of calculations in a statistical model to produce a benefit-cost ratio. This ratio indicates how many dollars in benefits to taxpayers and society the state can expect to occur over time, for every public dollar spent to fund the service. The model uses estimates of the impact of a service that have been calculated in a meta-analysis conducted by the Washington State Institute for Public Policy (WSIPP). As described in the following section, MMB applies this impact to Minnesota's baseline rate for the relevant metric. The difference between the baseline and the new estimated rate is monetized as benefits. The service's marginal cost (the cost to add one additional participant) is the denominator of the ratio. We report the ratio as the monetary value of benefits for each \$1 invested to add one more person to the program.

### Available for a benefit-cost analysis

After the inventory is complete, and each service has a level of evidence, we determined which services qualified for benefit-cost analysis. To qualify for further analysis, the service needed to meet three criteria:

- The service had a meta-analysis completed by the Washington State Institute for Public Policy or a rigorous local evaluation.
- The service, as operated in Minnesota, had a similar treatment, duration, frequency, and participant profiles as the empirical research.
- MMB and our partners could estimate a statewide cost per participant.<sup>31</sup>

### Limitations

Many public services are composed of a combination of services provided in concert. This analysis, however, uses individual pieces of research on practices. Because of this, the model cannot estimate the impact of two separate services provided together unless existing research has evaluated them in combination. For example, the analysis does not attempt to estimate the impact of simultaneously delivering family preservation supports and cognitive behavioral therapy to the same individual.

Further, MMB cannot break down results by demographic or socioeconomic characteristics. Since the WSIPP benefit-cost model uses an aggregate measure of effect from multiple evaluations of the same program, MMB can only generalize results by the populations studied in those evaluations. To calculate results by demographic or socioeconomic status, MMB would need to have studies which produced measures of impact for those

<sup>&</sup>lt;sup>31</sup> The cost to add one more person to a program can vary from jurisdiction to jurisdiction. This affects the applicability of a benefit-cost ratio from county to county.

groups. The model is flexible enough to allow for it, but at the time of publication, those specific evaluations did not exist.

There are limits to using a statewide benefit-cost ratio since Minnesota experiences many differences among regions and counties, including differences in availability of services and providers' capacity to follow evidencebased practices. A generalized state-level ratio averages the cost of services across different situations and may not be an accurate representation of the cost experienced by a given jurisdiction.

#### Terminology

#### Figure 16: Benefit-cost analysis terms

Term	Definition
Benefits	Services shown to reduce maltreatment and out-of-home care produce benefits to taxpayers and members of society (including the participant). Total benefits are the sum of taxpayer benefits, such as avoided use of health care services, plus other benefits to society, such as increased labor market earnings. Estimates are rounded to the nearest ten dollars.
Benefit-cost analysis	A systematic approach to estimate the cost effectiveness of alternative services or policies by comparing expected benefits to expected costs.
Benefit-cost ratio	The net present value of anticipated service benefits to state residents for every dollar in program costs. Ratios are rounded to the nearest ten cents.
Evidence-based	A service or practice whose effectiveness has been rigorously evaluated using studies with treatment and control group designs.
Funding source	Entities involved in funding the intervention (including monitoring, evaluation, administration, and technical assistance).
Impact on outcomes	Impact on outcomes reflects the degree to which there is evidence of effectiveness for a given service, as reflected in one or more of eight national clearinghouses or MMB literature review. The categories mirror the levels of evidence defined by <u>The Pew Charitable Trusts and MacArthur Foundation</u> . See Figure 15 for definitions of each outcome category.
Net (marginal) costs	The incremental cost of providing the service to one individual minus the cost of the likely alternative. Estimates are rounded to the nearest ten dollars.
Net present value	The difference between the present value of cash inflows and the present value of cash outflows.
Other societal benefits	Benefits that accumulate to society are increased labor market earnings, health care costs, reductions in crime, and the value of statistical life (associated with premature death). Estimates are rounded to the nearest ten dollars.
Service	A state- or county-implemented intervention that attempts to affect one or more outcomes, such as reducing child maltreatment.

Term	Definition
Source of evidence	The source of evidence is the entity whose research synthesis was used to determine each service's effectiveness.
Taxpayer benefits	Potential taxpayer benefits accrue from health care, criminal justice, and taxes (from increased earnings) related to changes in maltreatment and out-of-home care. Estimates are rounded to the nearest ten dollars.
Time frame	The length of time the benefits accrue from participation in the service. We rely on existing research to determine persistence of benefits.

### C. Meta-analysis and effect sizes

In the inventory of services, MMB matched state services to similar ones in existing research. These studies contain a statistical measurement of impact. The Results First Initiative uses a benefit-cost model from the Washington State Institute of Public Policy (WSIPP). In order to estimate the impact of each service, WSIPP conducts a meta-analysis.

### **WSIPP meta-analysis**

A meta-analysis collects all existing evaluations on the service and uses the findings from qualifying studies to calculate an average effect size on each relevant outcome. An effect size shows the direction and magnitude to which a service changes an outcome for participants relative to a comparison group (Lipsey and Wilson 2001). For example, if the effect size on the child maltreatment outcome is negative, the service decreases maltreatment. The size of the effect represents how much the service decreases the outcome, while the associated standard error helps determine how reliable the estimate is. We only monetize benefits from the effect sizes that are statistically significant at the 90 percent confidence level.

WSIPP uses three main steps to systematically review evaluation evidence for a given service: 1) define a topic or topics of interest (*e.g.,* reduce child maltreatment), 2) gather all the credible evaluations on the topic, and 3) use statistical procedures to draw a conclusion (Washington State Institute of Public Policy 2017). <sup>32</sup>

The quality of a meta-analysis depends on the breadth of study selection and coding criteria. WSIPP includes studies from peer-reviewed academic journals and reports obtained from government agencies or independent evaluations. WSIPP researchers use studies that include random assignment to assign subjects into a treatment and control group, as well as quasi-experimental studies which also uses a treatment and control group, but not necessarily random assignment. WSIPP only includes quasi-experimental studies if the study provided enough information to demonstrate comparability between the treatment and comparison groups. Each study must also provide an effect size and standard error for the meta-analysis. Chapter 2.2 of the <u>WSIPP Benefit-Cost Technical</u> <u>Documentation</u> describes the process and formulas used in the meta-analysis. The resulting effect size is a weighted mean effect size of a service on the specific outcome.

<sup>&</sup>lt;sup>32</sup> In general, WSIPP follows the meta-analytic methods described in: Lipsey, M.W. & Wilson, D. (2001). *Practical meta-analysis*. Thousand Oaks, CA: Sage Publications.

#### Using effect sizes for benefit-cost analysis

Application of the average effect size in the WSIPP benefit-cost model requires converting the average effect size to a unit change percentage and applying it to the base rate of an outcome. For example, if the metaanalysis shows Nurse Family Partnership will reduce maltreatment, the benefit-cost model applies that decrease to the baseline maltreatment rate in Minnesota and estimates the monetary value of that reduction. By reducing maltreatment, the state uses fewer resources to investigate and intervene with children and their families, and there is the potential to avoid victim costs. These avoided and decreased costs are included in the monetized benefits in the benefit-cost ratio.

### **D.** Calculating benefits

The estimated benefits are grouped into two broader categories – taxpayer benefits and societal benefits. Taxpayer benefits generally reflect reduced taxpayer costs by avoiding additional maltreatment and out-ofhome-placements. Societal benefits include tangible and intangible avoided victim costs.

For each service that we calculate benefits, we only monetize the outcomes that are statistically significant at the 90 percent confidence level for that service. Additionally, in WSIPP's statistical model, there must be existing research to link the change in outcome with a dollar value. There may be services for which a change in a monetizable outcome is not statistically significant, and therefore, we do not include in our benefit calculation even though it could be statistically significant for a different service.

#### Taxpayer benefits for child welfare

There are five types of taxpayer benefits in the Washington State Institute for Public Policy (WSIPP) benefit-cost model for child welfare related outcomes: reduced child welfare system and court costs; reduced medical, mental health, and quality of life costs; reduced crime; reduced use of public assistance; and avoiding expected lifetime consequences of maltreatment on labor market earnings and human capital. These are the direct benefits derived by calculating the costs that are avoided from substantiated (determined) maltreatment and out-of-home-placements. These benefits accrue to state and local governments as well as to the federal government. The analysis separates out the benefits accruing to the federal government.

Labor income, minus income tax, accrues to participants. For income tax from labor, we deviate from WSIPP, which assumes a total effective tax rate of 31 percent. Instead we use an effective tax rate of 20.3 percent. WSIPP's figure reflects the median effective tax rate, which is likely too high for the disadvantaged population in this report. We used estimates from Minnesota's Department of Revenue's 2017 (table 1-5) tax incidence study for state (7.6%) and local taxes (4.7%).<sup>33</sup> For federal taxes, we use estimates from the Peter G. Peterson Foundation of total effective tax rates from income, payroll, corporate, and estate taxes combined for the second quintile (8.0%). This assumption may overstate or understate the proportion of the estimated benefits that would accrue to taxpayers versus society more broadly. However, this could be offset by other changes associated with additional earned income, including use of public services such as health coverage and cash assistance that MMB did not assume had occurred for purpose of this analysis. Benefits also only consider the participant, not ramifications on friends or family.

<sup>&</sup>lt;sup>33</sup> Average of 2-5<sup>th</sup> decile for 2014 in table 1-5.

If a recipient of a program leaves the state, Minnesota will not see those benefits. To account for this, MMB uses net migration rates by age to estimate the cumulative departure rate and deduct a proportional percentage of the total benefits.

Finally, the WSIPP benefit-cost model assumes that not all labor earnings are net new, because some portion of additional earnings by participants likely displaces earnings from other Minnesotans. Bartik (2011) estimated that interventions in early education that create new workers displaces about thirty-four percent of wages for workers already in the workforce. Applying this to the child welfare benefit-cost analysis, we assumed that 66 percent (i.e., 100% minus 34%) of additional earnings estimated to result from services are net new.

### Societal benefits for child welfare

The WSIPP benefit-cost model monetizes tangible and intangible avoided victim costs as societal benefits. These benefits accrue both to the individual experiencing maltreatment as well as others in society. Tangible victim costs are changes in medical care and use of public mental health services.

Intangible victim costs are indirect losses suffered by maltreatment victims, such as reduced infant mortality. They include changes in the quality of life costs over a total life cycle.

Finally, research indicates a causal link between substantiated maltreatment and future criminal behavior of the victimized youth. Consequently, the model accounts for the tangible and intangible victim costs associated with changes in criminal behavior due to avoiding maltreatment.

### E. Calculating marginal cost per participant

Minnesota Management and Budget worked with state and county partners to collect Minnesota-specific data to calculate a marginal cost per participant for each child welfare service or practice included in the benefit-cost analysis. When possible estimates are based on aggregate, statewide data. When that is not possible, we use self-reported data from individual counties or providers to create a sample average estimate. Cost estimates reflect the experiences of these partners and may vary across the state. The estimates assume the service is implemented with fidelity to the models in existing research and meta-analysis.

Marginal costs represent the direct expense of providing services to one additional participant (child or family). The cost is based on all participants served rather than only individuals who complete the program. Marginal cost excludes fixed costs like administrative and operational budget items.

When appropriate, a comparison group cost is also calculated. For example, Northstar Kinship Assistance is used as an alternative to guardianship under the commissioner. The comparison group cost is the average annual marginal cost of a child family foster care plus the casework associated with pre- and post-adoption support. The model deducts this cost from the treatment group costs to calculate the net cost of the program. If the cost of the counterfactual is greater than the cost of the treatment, the costs of the program are said to be "negative". We then include this negative cost with benefits. Since costs (the denominator in a benefit-cost analysis) are negative, the benefit-cost ratio is undefined/infinite (we represent as n/a). If there is no comparison scenario for a service (treatment as usual), MMB assumed the comparison cost was zero.

Generally, the WSIPP model assumes all services last one year or less. If the service lasts more than one year, we used the actual duration period when possible or based the duration on existing research.

As part of the analysis, we breakout the federal portion of costs and benefits. The marginal cost estimates assume the cost of providing a service with new funding. In many cases, federal funding represents a sizable

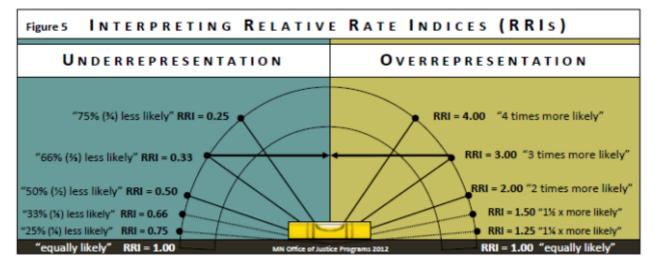
share of the current funding for a service, but additional state investments would generally not produce a commensurate increase in federal funding. In this context, we assume the marginal cost is entirely covered by state and local sources.

# **Appendix C: Relative rate index methodology**

In policy areas such as juvenile justice, researchers use a relative rate index (RRI) to illustrate disproportionate contact that children of color and American Indian children have with the system (Swayze and Buskovick 2012). Minnesota Management and Budget calculated the relative rates of contact to the child welfare system using the same methodology that is commonly used in the juvenile justice field.

A relative rate index compares the rates of involvement of one population to that of another. The rates are calculated by dividing the rate of involvement of a given subpopulation (for example, African Americans, American Indians, Asians, Native Hawaiian/Pacific Islanders, and Hispanic or Latinos) by the rate of involvement of another population (for example, whites). For example, the relative rate for American Indian children in out-of-home care is calculated by first dividing the total number of American Indian children in out-of-home care by the total population of American Indian children in Minnesota in a given year. That quotient is then divided by the total number of white children in out-of-home care divided by the total number of white children in Minnesota in the same year.

Visually, a relative rate index does not reflect the comparative intensity of underrepresentation to overrepresentation; for example, a relative rate of 0.25 is interpreted as an underrepresentation of the same magnitude as a 4.0 rate of overrepresentation even if, numerically and visually, the former rate appears to be closer to the baseline. The below graph from the Minnesota Department of Public Safety's 2012 report "On the Level" illustrates the magnitude of relative rates (Swayze and Buskovick 2012).



Source: Minnesota Department of Public Safety (Swayze and Buskovick 2012)

### References

- Adams, Erica J. 2010. "Healing Invisible Wounds: Why Investing in Trauma-Informed Care for Children Makes Sense." Washington, D.C.: Justice Policy Institute.
- American Academy of Child and Adolescent Psychiatry. 2011. "Facts for Families: Posttraumatic Stress Disorder (PTSD)." Washington, D.C.: American Academy of Child and Adolescent Psychiatry.
- Ards, Sheila D., Samuel L. Myers, Patricia Ray, Hyeon-Eui Kim, Kevin Monroe, and Irma Arteaga. 2012. "Racialized Perceptions and Child Neglect." *Children and Youth Services Review* 34 (8): 1480–91. https://doi.org/10.1016/j.childyouth.2012.03.018.
- Atwood, Barbara Ann. 2008. "Indian Children Welfare Manual." Cap. UL Rev. 37: 239.
- Bartik, Timothy J. 2011. *Investing in Kids: Early Childhood Programs and Local Economic Development*. W.E. Upjohn Institute. https://doi.org/10.17848/9780880994002.
- Buffington, Kristine, Carly Dierkhising, and Shawn Marsh. 2010. "Ten Things Every Juvenile Court Judge Should Know About Trauma and Delinquency." National Child Traumatic Stress Network.
- Centers for Disease Control and Prevention. 2016. "Child Abuse and Neglect: Consequences." April 5, 2016. https://www.cdc.gov/violenceprevention/childmaltreatment/consequences.html.
- Child Welfare Information Gateway. 2013. "Long-Term Consequences of Child Abuse and Neglect." U.S. Department of Health and Human Serivces, Children's Bureau.
- Department of Human Services, Financial Operations Division. 2017. "Social Services Expenditure and Grant Reconciliation Report (SEAGR) Statewide Reports for Calendar Year 2016." https://edocs.dhs.state.mn.us/lfserver/Public/DHS-7105-ENG.
- Ford, Julian, John Chapman, Josephine Hawke, and David Albert. 2007. "Trauma Among Youth in the Juvenile Justice System: Critical Issues and New Directions." National Center for Mental Health and Juvenile Justice.
- Geenen, Sarah, Laurie E. Powers, Lee Ann Phillips, May Nelson, Jessica McKenna, Nichole Winges-Yanez, Linda Blanchette, et al. 2015. "Better Futures: A Randomized Field Test of a Model for Supporting Young People in Foster Care with Mental Health Challenges to Participate in Higher Education." *The Journal of Behavioral Health Services & Research* 42 (2): 150–71. https://doi.org/10.1007/s11414-014-9451-6.
- Governor's Task Force on the Protection of Children. 2015. "Governor's Task Force on the Protection of Children Final Report and Recommendations." https://edocs.dhs.state.mn.us/lfserver/Public/DHS-7057A-ENG.
- Hurley Swayze, D., and D. Buskovic. 2015. "Youth in Minnesota Correctional Facilities and Adverse Childhood Experiences: Responses to the 2013 Minnesota Student Survey." Minnesota Department of Public Safety.
- Kovan, Nikki. 2018. "DHS Language about Increase in Reports Filed and Screened In," February 19, 2018. Provided upon request by the Minnesota Department of Human Services.
- LaLiberte, Traci. 2014. "Minnesota's Foster Care Re-Entry Rate Is a Complex Issue." *Center for Advanced Studies in Child Welfare* (blog). February 20, 2014. https://cascw.umn.edu/policy/minnesotas-foster-care-reentry-rate-is-a-complex-issue/.
- Legislative Task Force on Child Protection. 2016. "Implementation of 2015 Child Protection Laws in Minnesota." Report to the Minnesota Legislature. https://www.leg.state.mn.us/docs/2016/mandated/160142.pdf.
- Lipsey, M. W., and D. Wilson. 2001. Practical Meta-Analysis. Thousand Oaks, CA: Sage Publications.

- McQuarter, Ralph. 2015. "Child Welfare Funding." Governor's Task Force on the Protection of Children, January 14.
- Minnesota Department of Human Services. 2017a. "Resource Guide for Mandated Reporters of Child Maltreatment Concerns." https://edocs.dhs.state.mn.us/lfserver/Public/DHS-2917-ENG.
- ———. 2017b. "Minnesota's Child Maltreatment Report, 2016." http://www.southernminnesotanews.com/wpcontent/uploads/2017/12/Child-Maltreatment-in-Minnesota-2016.pdf.
- ———. 2017c. "Minnesota's Out-of-Home Care and Permanency Report, 2016." https://edocs.dhs.state.mn.us/lfserver/Public/DHS-5408Ia-ENG.
- ———. 2017d. "Total Out-of-Home Placement Due to Maltreatment," October 2, 2017. Provided upon request by the Minnesota Department of Human Services.
- ———. 2017e. "Ongoing Child Protection Services," October 13, 2017. Provided upon request by the Minnesota Department of Human Services.
- ———. 2018a. "2017 NCANDS Annual Workforce Survey," January 11, 2018. Provided upon request by the Minnesota Department of Human Services.
- ———. 2018b. "Calendar Year 2016 State Payments to Non-County Organizations," January 19, 2018. Provided upon request by the Minnesota Department of Human Services.
- ———. 2018c. "Length of 2016 Child Protection Assessments," February 2, 2018. Provided upon request by the Minnesota Department of Human Services.
- ———. 2018d. "FTE Survey Data," March 26, 2018. Provided upon request by the Minnesota Department of Human Services.
- ———. n.d. "Examining Child Re-Entry into Out-of-Home Care." Minnesota Child Welfare Continuous Improvement Brief. Accessed February 2, 2018a. https://edocs.dhs.state.mn.us/lfserver/Public/DHS-6637A-ENG.
- ———. n.d. "Northstar Care for Children: Supporting Safe, Permanent Families for Children (Practice Guide)." Accessed March 2, 2018b. https://edocs.dhs.state.mn.us/lfserver/Public/DHS-7024-ENG.
- ———. n.d. "Paths to Permanency: Overview of Legal Issues and Financial Supports about Adoption and Custody Options for Relatives and Foster Families." Accessed January 11, 2018c. https://edocs.dhs.state.mn.us/lfserver/Public/DHS-7024A-ENG.
- National Child Traumatic Stress Network. 2009. "Helping Traumatized Children: Tips for Judges." Justice System Consortium: National Center for Child Traumatic Stress.
- ----. 2017. "Effects of Complex Trauma." U.S. Department of Health and Human Services. 2017.
- Nolan, Dan, and Chris Amico. 2016. "How Bad Is the Opioid Epidemic?" FRONTLINE. February 23, 2016. https://www.pbs.org/wgbh/frontline/article/how-bad-is-the-opioid-epidemic/.
- Sedlak, Andrea J., Jane Mettenburg, Monica Basena, Ian Peta, Karla McPherson, and Angela Greene. 2010. "Fourth National Incidence Study of Child Abuse and Neglect (NIS-4)." Washington, DC: US Department of Health and Human Services. Retrieved on July 9: 2010.
- Semega, Jessica L., Kayla R. Fontenot, and Melissa A. Kollar. 2017. "Income and Poverty in the United States: 2016." *Current Population Reports*, September, 10–11.
- Sudol, Teija. 2009. "Placement Stability Information Packet." National Resource Center for Permanency and Family Connections, Hunter College. http://www.hunter.cuny.edu/socwork/nrcfcpp/info services/Placement Stability Info Pack.htm.

Swayze, Dana, and Danette Buskovick. 2012. "On The Level: DMC in Minnesota's Juvenile Justice System."

U.S. Department of Health and Human Services. 2017. "The AFCARS Report #24 (Preliminary Estimates for Fiscal Year 2016)." November 30, 2017. https://www.acf.hhs.gov/sites/default/files/cb/afcarsreport24.pdf.

Washington State Institute of Public Policy. 2017. "Benefit-Cost Technical Documentation." Olympia, WA.

Winokur, Marc, Amy Holtan, and Keri E. Batchelder. 2014. "Kinship Care for the Safety, Permanency and Well-Being of Children Removed from the Home for Maltreatment." The Campbell Collaboration. https://doi.org/10.4073/csr.2014.2.

# MANAGEMENT AND BUDGET