HEALTH NOTE: CASELOAD REDUCTION FOR FAMILY CASE MANAGERS
Department of Child Services (HB 1006)
2019 Indiana General Assembly Session

Primary Sponsor:
Representative Gregory Steuerwald

Bill Provision Examined:[a]
Department of child services. Provides that the caseload of a family case manager may not be more than: (1) 12 active cases relating to initial assessments; (2) 12 families in active cases relating to ongoing in-home services; or (3) 13 children in active cases relating to ongoing services who are in out-of-home placements.

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What is the goal of this health note?

Decisions made in sectors outside of public health and health care, such as in education, housing, and employment, can affect health and well-being. Health notes are intended to provide objective, nonpartisan information to help legislators understand the connections between these various sectors and health. This document provides summaries of evidence analyzed by the Health Impact Project while creating a health note for House Bill (HB) 1006. Health notes are not intended to make definitive or causal predictions about how a proposed bill will affect health and well-being of constituents. Rather, legislators can use a health note as one additional source of information to consider during policy-making. The analysis does not consider the fiscal impacts of this bill.

How and why was this bill selected?

The Health Impact Project chose this bill for a health note to understand the potential health implications of the proposed legislation in Indiana. This bill was identified as one of several important policy issues being considered by the Indiana General Assembly in 2019. The health note screening criteria were used to confirm the bill was appropriate for analysis. (See Methodology on Page 5)

Why was the bill's caseload reduction provision selected?

One of the Health Impact Project's focus areas for health notes is examining the connection between employment and health. The project selected the caseload reduction provision in HB 1006 for analysis because of its potential to affect the employment conditions for family case managers and family case manager supervisors, as well as availability of jobs at the Indiana Department of Child Services. Research has consistently demonstrated a strong link between employment and health, particularly through effects on workers' income, safety, stability, and access to health insurance and other benefits. For example, employment conditions can affect work-related stress and injuries, which in turn may affect people's ability to maintain steady employment, income, and positive health outcomes.[1] This health note explores the evidence base regarding caseload reduction and its effects on workers and the children and families they serve.

SUMMARY OF HEALTH NOTE FINDINGS

In fiscal year 2017, nearly 45 percent of family case managers at the Indiana Department of Child Services (DCS) had a caseload above Indiana's standard of 12 active cases relating to initial assessments and 17 children in active cases relating to ongoing services.[2] In addition, DCS experienced a 30.4 percent turnover of family case managers in a 12-month period.[3] This review found that caseload reduction is associated with improved outcomes for children and families served by case managers, with positive implications for health, and that caseload reduction is one of several factors that can affect work-related stress and burnout among case managers. Below is a summary of the key findings:

- There is a fair amount of evidence[c] that caseload reduction among child welfare workers is associated with improved outcomes for children and families, including protection from abuse and neglect, promotion of stable living situations, and continuity of family relationships and connections.[4]

[a] Summary as described by the Indiana General Assembly, http://iga.in.gov/legislative/2019/bills/house/1006#document-dff65b02.
[b] The Health Impact Project is committed to conducting nonpartisan research and analysis.
[c] See definitions of strength of evidence ratings on Page 7.

- There is a fair amount of evidence that caseload or perception of caseload is one of several factors affecting work-related stress among family case managers.[5]
- There is very strong evidence that stress, including work-related stress, negatively affects health, and is linked to cardiovascular illness and substance use, among other outcomes.[6]
- There is mixed evidence regarding the association between caseload and retention. Two studies examining caseload data did not find a direct relationship; however, caseworkers frequently cite caseload as a reason for leaving their jobs in qualitative studies.[7]
- There is a fair amount of evidence that other factors related to case manager working conditions and organizational structure, such as quality of supervision and compensation, can affect workload, work-related stress, and retention. Given that caseload reduction strategies occur in the context of organizational factors, these other factors could enhance or detract from potential positive health benefits of caseload reduction.[8]
- Research for this analysis did not yield any studies specifically examining the relationship between creating new family case manager and family case manager supervisor positions and health.

WHY DO THESE FINDINGS MATTER FOR INDIANA?

Compared to other states, several of Indiana's caseload-related measures, such as time to reunification and percent re-entering the foster care system, are near the national averages.[9] However, at the end of fiscal year 2017, DCS reported 20,394 children in out-of-home care. This corresponds to a rate of 13 children for every 1,000 in the state, which is over twice the national average.[10] Indiana DCS is strained by the shortage of family case managers, high employee turnover, and large caseloads. Current Indiana law limits the caseload for DCS family case managers to 12 active cases relating to initial assessments and 17 children monitored and supervised in active cases relating to ongoing services. This is consistent with a nationally recognized caseload suggestion by the Child Welfare League of America.[11] However, in fiscal year 2017, only two of the 19 service regions within DCS were able to meet the set caseload standard.[12] Nearly 45 percent of family case managers have a caseload above Indiana's standard.[13] An independent evaluation of Indiana DCS found, using data from a single day in May 2018, wide variation in caseloads: 15 percent of family case managers had caseloads of 10 or less; 38 percent had caseloads of 21 to 31 or more; and 47 percent had caseloads of 11 to 20, with the majority of those workers having 16 to 20 cases.[14] In addition, DCS experienced a 30.4 percent turnover of family case managers in a 12-month period. Further decreasing the caseload would require extensive implementation efforts to ensure the standard is met. At the close of fiscal year 2017, DCS had 2,120 family case manager staff carrying a caseload, and 123 family case managers in training.[15] To meet the current standard an additional 180 caseload carrying family case managers would have to be hired across the state.[16]

The Children's Bureau, housed within the U.S. Department of Health and Human Services Administration for Children and Families, conducts performance assessments of state child welfare agencies based on seven established national outcomes around safety, permanency, and well-being. The Children's Bureau cited high caseloads, high turnover, and lack of qualified providers as challenges facing state child welfare workers. Indiana DCS was rated as not substantially conforming to the seven outcomes in the most recent review in 2016.[17]

Methods Summary: To complete this health note, Health Impact Project staff conducted an expedited literature review using a systematic approach to minimize bias and identify studies to answer each of the identified research questions. In this note, "health impacts" refer to effects on determinants of health, such as education, employment, and housing, as well as effects on health outcomes, such as injury, asthma, chronic disease, and mental health. The strength of the evidence is qualitatively described and categorized as: not well researched, a fair amount of evidence, strong evidence, or very strong evidence. It was beyond the scope of analysis to consider the fiscal impacts of this bill or the effects any funds dedicated to implementing the bill may have on other programs or initiatives in the state. To the extent that this bill requires funds to be shifted away from other purposes or would result in other initiatives not being funded, policymakers may want to consider additional research to understand the relative effect of devoting funds for this bill relative to another purpose. A detailed description of the methods is provided in Methodology on Page 5.

WHAT ARE THE POTENTIAL HEALTH IMPACTS OF HB 1006?

Potential Effects of Caseload Reduction on Families and Children Served by the Indiana Department of Child Services

- High family case manager staff turnover can damage relationships with clients and negatively affect client outcomes. Several studies have linked staff turnover to worse client outcomes, including maltreatment, more time spent under child services care, fewer instances of family reunification, and fewer clients placed in permanent living situations.[18] However, one study found that decreased turnover was linked to improved outcomes for youth if the child welfare system was proficient, but that turnover did not have a strong correlation with youth outcomes in low proficiency child welfare systems.[19] Proficiency is measured according to agency standards for caseworker competence, ongoing professional development, and prioritization of client well-being.[20]
- The consistency of one case manager can also affect outcomes for children and families. For children placed in out-of-home care, staff turnover among child welfare caseworkers can affect the length of a child's stay in foster care and the likelihood of children being reunified with their parents.[21] One study that compared 48 families receiving traditional child welfare services with 48 families receiving an intervention model that included a dedicated caseworker for the life of the case and reduced caseload size, among other components, found that families who worked with multiple caseworkers took longer to reunify than families with one worker.[22] The study also found that the time to reunify decreased by 22 percent for families whose caseworkers had a reduced caseload.
- Case manager workloads and caseloads are also correlated with client safety and permanency outcomes.[23] Safety outcomes are achieved when (1) children are protected from abuse and neglect and (2) can remain safely in their homes whenever possible and appropriate.[24] In Indiana in 2016, only 31 percent of cases reviewed achieved the first goal (protection from abuse and neglect), and 71 percent of cases reviewed achieved the second goal (ability to remain safely in homes whenever possible and appropriate).[25] Permanency outcomes mean that (1) children have stable living situations and (2) retain continuity of their family relationships and connections.[26] Thirty percent of applicable cases in Indiana reviewed in 2016 achieved the first goal (stable living situations), whereas 70 percent of applicable cases reviewed achieved the second goal (continuity of family relationships).[27]
- High caseloads for caseworkers can limit the time they can devote to developing trusting relationships with families, with implications for the quality of service delivery and outcomes for children and families.[28] Research also suggests that large caseloads can put pressure on caseworkers to process cases quickly.[29] A qualitative study examining perspectives of caseworkers involved in a pilot program with maximum caseloads of 15 found that reduced caseloads were perceived by caseworkers as essential to effectively serving families and building relationships.[30] An analysis of open-ended questions from an online survey of 284 caseworkers found that some respondents reported that a reduced caseload would allow for enhanced communication with families to promote successful reunification.[31] Another study found that workload stress—defined by filling in for another caseworker; answering phone calls at night; managing crisis calls; and working overtime—predicted decreased satisfaction with client relationships among workers within the child welfare system.[32]

Potential Effects of Caseload Reduction on Worker Health

- Perception of caseload is associated with higher levels of work-related stress among child welfare workers.[33] Multiple studies have demonstrated that stress is linked to cardiovascular illness and disease in adults.[34] Stress is also associated with harmful health behaviors such as smoking, excessive alcohol use, or substance use and dependence.[35]
- Burnout from work-related experiences can reduce job satisfaction, with consequences for employee performance and retention.[36] Past research has identified job satisfaction, work-related stress, and burnout as the most reliable predictors of public child welfare worker turnover.[37] Using longitudinal data from a sample of public child welfare workers in California, one study also found

that emotional exhaustion among the workers was negatively related to their job satisfaction and associated with higher levels of "depersonalization," a term used to describe detachment from one's work and disconnection from clients and co-workers.[38] Emotional exhaustion and depersonalization—two dimensions of burnout—are closely correlated with turnover among family case managers.[39]

- One meta-analysis found that overall stress was strongly correlated with child welfare worker intent to resign, a commonly used proxy for turnover in child welfare studies given limited research using actual turnover.[40] There is mixed evidence regarding the association between caseload and retention. Two studies found that actual caseload is not a significant predictor of turnover. Perception of caseload size has a slightly stronger, but still negligible, correlation. Study authors suggest that this can be explained by factors mediated by caseload such as stress and burnout.[41] Caseworkers frequently cite caseload as a reason for leaving their jobs in qualitative studies.[42]
- In fiscal year 2017, the negative turnover rate among family case managers at Indiana DCS, meaning the proportion that departed DCS entirely, was 29 percent.[43] This analysis did not yield studies examining the career trajectory of case managers who depart their positions. However, to the extent that turnover results in instability in employment or a decrease in income, it could affect worker health since job stability and security can contribute to improved health and well-being.[44] High family case manager staff turnover can also increase workload stress for fellow case managers. Evidence shows that case manager turnover often increases the caseloads of already overburdened family case managers, thereby contributing to staff stress and perpetuating the turnover cycle.[45]
- One study found a significant association between higher caseload size and risk of secondary traumatic stress among child welfare workers; however, previous research on the relationship between caseload size and secondary trauma has been mixed.[46] Case managers may develop secondary traumatic stress when working with clients who have experienced trauma. Secondary trauma has negative repercussions for workers' health and the quality of services they provide.[47] Individuals with secondary trauma can present several symptoms that are associated with posttraumatic stress disorder, such as emotional numbing, reliving clients' traumatic experiences, feeling panic-like symptoms when thinking about their clients, dreaming about clients' traumatic experiences, becoming increasingly irritable, and struggling to concentrate.[48]
- Other aspects of case manager working conditions and organizational structure could enhance or detract from potential positive health benefits of caseload reduction.[49] For example, case managers' and supervisors' time can also be affected by additional reporting or paperwork requirements that can influence workloads and time available to spend with clients.[50] Additionally, studies have found an association between symptoms of secondary traumatic stress and caseworkers' relationships with their supervisors. Child welfare workers perceive supervisory support as a factor mitigating the negative effects of job stress and promoting retention.[51] Compensation is also a factor. Perceived fairness in compensation and opportunities for advancement have a strong negative correlation with turnover intention among child welfare workers, though actual salary is not a significant predictor of turnover.[52] Workers with annual salaries of $35,000 or greater are less likely to exhibit symptoms of secondary traumatic stress than those earning less than $35,000 per year, and caseworkers' perceptions of a positive relationship with their supervisor decreases the likelihood of symptoms.[53] Given that caseload reduction strategies occur in the context of organizational factors, these findings have implications for implementation of any caseload reduction strategies.
- Research for this analysis did not yield any studies specifically examining the relationship between the creation of new family case manager and family case manager supervisor positions and health. The fiscal impact statement for HB 1006 estimates that the caseload requirements proposed in the bill would add between 110 and 656 family case manager positions and between 18 and 107 family case manager supervisor positions.[54] It is unclear the extent to which those positions would be filled by currently employed individuals or result in a change in income for those who fill these roles. There is a strong body of evidence demonstrating the connection between advantages of employment, such as income, stability, and access to health insurance and positive health

outcomes.[55] However, due to the dearth of research, this analysis could not examine any potential health effects from the new positions that would be created by this bill. Although creating new staff positions can help to reduce caseloads for workers, this is contingent upon availability of qualified applicants to fill the new positions.[56]

WHICH POPULATIONS ARE MOST LIKELY TO BE AFFECTED BY THIS BILL?

Children and parents involved with state child welfare agencies are already experiencing or are at disproportionate risk of negative health outcomes. For example, approximately 50 percent of youth in foster care have chronic medical problems and they are more likely to face neglect and physical abuse and to engage in risk-taking behaviors than non-foster care youth.[57] In Indiana, neglect is the reason that most children enter foster care, and it is often associated with parental substance abuse. For instance, of the 12,779 child removal cases in fiscal year 2017, 55.6 percent indicated parental drug use and 7.7 percent indicated alcohol use.[58]

Evidence suggests that caseload challenges disproportionately affect African American families. One review, examined as part of this analysis, showed that African American children and families receive fewer and lower quality services, fewer foster parent support services, and fewer contacts by caseworkers when compared to other racial and ethnic groups.[59] As of 2015, African American children made up 20 percent of Indiana's foster care population, but only 11 percent of children under age 18 in the state.[60] Given the evidence that caseload reduction is associated with improved outcomes for children and families, the proposed change in caseload standards may particularly benefit African American families served by DCS.

An independent evaluation of Indiana DCS noted that because of issues like turnover, family case managers do not have adequate time to get to know families well enough to ensure the most positive outcomes.[61] Reduced caseloads could allow case managers to spend more time identifying appropriately tailored services to assist DCS-served families and be more responsive to the needs of parents and foster families. Family case managers offer parents several services including home-based treatment, domestic violence support, drug testing, and referrals for treating substance use disorders. Case managers spend significant time developing rapport with and supporting drug-involved parents in need of treatment to support family reunification, when possible.[62] It is possible that a reduced caseload could allow case managers to devote more time to supporting parents and foster families, as well as children.

HOW LARGE MIGHT THE IMPACT BE?

Where possible, the Health Impact Project describes how large the impact may be based on the bill language and literature, such as describing the size, extent, and population distribution of an effect. At the close of fiscal year 2017, DCS had 2,120 family case manager staff carrying a caseload and 123 were in training. The proposed bill would add between 110 and 656 family case managers to meet the new caseload limits. Thus, the maximum number of people affected by the potential health benefits for workers described in this health note would be approximately 2,350-2,900 family case manager staff. Given the limitations of data, the Health Impact Project was not able to determine the potential magnitude of impact this bill might have on child welfare workers in Indiana and the families they serve.

It was beyond the scope of this analysis to consider the fiscal impacts of this bill or the effects any funds dedicated to implementing the bill may have on other programs or initiatives in the state. To the extent that this bill requires funds to be shifted away from other purposes or would result in other initiatives not being funded, policymakers may want to consider additional research to understand the relative effect of devoting funds for this bill relative to another purpose.

METHODOLOGY

Once the bill was selected, a research team from the Health Impact Project hypothesized a pathway between the bill, heath determinants, and health outcomes. The hypothesized pathway was developed using research team expertise and a preliminary review of the literature. The bill component was mapped to steps on this

pathway and the team developed research questions and a list of keywords to search. The research team reached consensus on the final conceptual model, research questions, contextual background questions, keywords, and keyword combinations. The conceptual model, research questions, search terms, and list of literature sources were peer-reviewed by an external subject matter expert. An external public health expert also reviewed a draft of the note. A copy of the conceptual model is available upon request.

The Health Impact Project developed and prioritized 7 research questions related to the bill component examined:

- To what extent does a reduction in caseload affect the quality of services delivered to children and families by family case managers/supervisors?
- To what extent does a reduction in caseload affect family case managers/supervisor job performance ratings?
- To what extent does a reduction in caseload affect family case managers/supervisor burnout and turnover?
- To what extent does a reduction in caseload affect secondary traumatic stress among family case managers?
- To what extent does a reduction in caseload affect family case manager/supervisor mental, physical, and behavioral health?
- To what extent does a reduction in caseload affect the following outcomes for children and families served by DCS: mental, physical, and behavioral health; housing stability; and social support?
- To what extent does a reduction in case manager turnover affect the following outcomes for children and families served by DCS: mental, physical, and behavioral health; housing stability; and social support?

Next the research team conducted an expedited literature review using a systematic approach to minimize bias and answer each of the identified research questions.[d] The team limited the search to systematic reviews and meta-analyses of studies first, since they provide analyses of multiple studies or address multiple research questions. If no appropriate systematic reviews or meta-analyses were found for a specific question, the team searched for nonsystematic research reviews, original articles, and research reports from U.S. agencies and nonpartisan organizations. The team limited the search to electronically available sources published between January 2013 and January 2019.

The research team searched the Cochrane and Campbell databases along with the following leading journals in public health and social work research to explore each research question: the American Journal of Public Health, Social Science & Medicine, Bulletin of The World Health Organization, BMC Public Health, Annual Review of Public Health, Public Health Reports, Epidemiologic Reviews, Journal of Social Work, Child and Family Social Work, and Children and Youth Services Review.[e] The team also searched the U.S. Department of Health and Human Services Child Welfare Information Gateway, a leading governmental source of child welfare research and resources. For all searches, the team used the following keywords: caseload reduction, case manager, quality of services, job performance rating, burnout, turnover, secondary traumatic stress, mental health, physical health, behavioral health, permanency outcomes, housing stability, social support, behavioral health, turnover, and safety outcomes. Based on expert reviewer feedback, the team conducted additional searches using the following keywords: work environment, supervision, flex schedules, and caseload defined.

[d] Expedited reviews streamline traditional literature review methods to synthesize evidence within a shortened timeframe. Prior research has demonstrated that conclusions of a rapid review versus a full systematic review did not vary greatly. Cameron A. et al., "Rapid versus full systematic reviews: an inventory of current methods and practice in Health Technology Assessment," (Australia: ASERNIP–S, 2007): 1–105, https://www.surgeons.org/media/297941/rapidvsfull2007_systematicreview.pdf .

[e] These journals were selected using results from a statistical analysis completed to determine the leading health research journals between 1990 and 2014. José M. Merigó and Alicia Núñez, "Influential Journals in Health Research: A Bibliometric Study," *Globalization and Health* 12, no. 1 (2016), accessed Jan. 11, 2018, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4994291/.

After following the above protocol, the team screened 1,538 titles and abstracts,[f] identified 22 abstracts for potential inclusion and reviewed the full text corresponding to each of these abstracts. After applying the inclusion criteria, four articles were excluded. A final sample of 18 articles was used to create the health note. In addition, the team used 11 references to provide contextual information and five references identified through the additional keyword searches recommended by expert reviewers.

Of the studies included, the strength of the evidence was qualitatively described and categorized as: not well researched, a fair amount of evidence, strong evidence, or very strong evidence. The evidence categories were adopted from a similar approach from another state.[63]

Very strong evidence: the literature review yielded robust evidence supporting a causal relationship with few if any contradictory findings. The evidence indicates that the scientific community largely accepts the existence of the relationship.
Strong evidence: the literature review yielded a large body of evidence on the association, but the body of evidence contained some contradictory findings or studies that did not incorporate the most robust study designs or execution or had a higher than average risk of bias; or some combination of those factors.
A fair amount of evidence: the literature review yielded several studies supporting the association, but a large body of evidence was not established; or the review yielded a large body of evidence but findings were inconsistent with only a slightly larger percent of the studies supporting the association; or the research did not incorporate the most robust study designs or execution or had a higher than average risk of bias.
Not well researched: the literature review yielded few if any studies or yielded studies that were poorly designed or executed or had high risk of bias.

EXPERT REVIEWERS

This document benefited from the insights and expertise of Carey Haley Wong, Chief Counsel at Child Advocates, Inc. and Adjunct Professor at Indiana University McKinney Law School's Child Advocacy Clinic, and Cynthia Stone, Professor at the Indiana University Richard M. Fairbanks School of Public Health. Although they have reviewed the note and found the approach to be sound, neither they nor their organizations necessarily endorse its findings or conclusions.

[1] Robert Wood Johnson Foundation, "Exploring the Social Determinants of Health: Work, Workplaces and Health," (2011), https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70459.
[2] The Child Welfare Policy and Practice Group, "Evaluation of the Indiana Department of Child Services," (2018), https://www.in.gov/dcs/files/IndianaEvaluationReportCWGFinal.pdf.
[3] Ibid.
[4] Child Welfare Information Gateway, "Caseload and Workload Management," (Washington, DC: U.S. Department of Health and Human Services, Children's Bureau, 2016), https://www.childwelfare.gov/pubpdfs/case_work_management.pdf.
[5] Wendy Whiting Blome and Sue D. Steib, "The organizational structure of child welfare: Staff are working hard, but it is hardly working," *Children and Youth Services Review* 44 (2014): 183, https://doi.org/10.1016/j.childyouth.2014.06.018; Child Welfare Information Gateway, "Caseload and Workload Management," 3; Wendy Haight et al., "Everyday coping with moral injury: The perspectives of professionals and parents involved with child protection services," *Children and Youth Services Review* 82 (2017): 109, https://doi.org/10.1016/j.childyouth.2017.09.025.
[6] Robert Wood Johnson Foundation, "Stress and Health," (March 2011): 2, https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70441.
[7] Hyosu Kim and Dennis Kao, "A meta-analysis of turnover intention predictors among U.S. child welfare workers," *Children and Youth Services Review* 47 (2014): 218, https://doi.org/10.1016/j.childyouth.2014.09.015; Susan E. Jacquet et al., "The Role of Supervision in the Retention of Public Child Welfare Workers," *Journal of Public Child Welfare* 1, no. 3 (2007): 30–31, https://doi.org/10.1300/J479v01n03_03; Child Welfare Information Gateway, "Caseload and Workload Management."

[f] Many of the searches produced duplicate articles. The number of sources screened does not account for duplication across searches in different databases.

[8] Sandhya Rao Hermon and Rose Chahla, "A longitudinal study of stress and satisfaction among child welfare workers," *Journal of Social Work* (2018): 5, https://doi.org/10.1177/1468017318757557; Whiting Blome and Steib, "The organizational structure of child welfare," 182; Jill C. Schreiber, Tamara Fuller, and Megan S. Paceley, "Engagement in child protective services: Parent perceptions of worker skills," *Children and Youth Services Review* 35 (2013): 708, https://doi.org/10.1016/j.childyouth.2013.01.018; Child Welfare Information Gateway, "Caseload and Workload Management," 2.
[9] Frank Edwards and Christopher Wildeman, "Characteristics of the Front-Line Child Welfare Workforce," *Children and Youth Services Review* 89 (2018): 13-26, https://doi.org/10.1016/j.childyouth.2018.04.013.
[10] The Child Welfare Policy and Practice Group, "Evaluation of the Indiana Department of Child Services," 3.
[11] Sean Hughes and Suzanne Lay, "Direct Service Workers' Recommendations for Child Welfare Financing and System Reform," (Child Welfare League of America: 2012), https://www.cwla.org/wp-content/uploads/2014/05/DirectServiceWEB.pdf).
[12] Indiana Department of Child Services, "Annual Staffing and Caseload Report to the State Budget Committee and Legislative Council," (2017), accessed January 15, 2019, https://www.in.gov/dcs/files/DCS%20SFY%202017%20Annual%20Report%20Dec.%202017.pdf.
[13] The Child Welfare Policy and Practice Group, "Evaluation of the Indiana Department of Child Services."
[14] Ibid.
[15] Indiana Department of Child Services, "Annual Staffing and Caseload Report."
[16] Ibid.
[17] Children's Bureau, "Child and Family Services Reviews: Indiana Final Report," (Washington, DC: U.S. Department of Health and Human Services, Children's Bureau, 2016), https://www.in.gov/dcs/files/4185%20IN_CFSR_FinalReport_2016.pdf.
[18] Hermon and Chahla, "A longitudinal study of stress and satisfaction," 2.
[19] Nathaniel J. Williams and Charles Glisson, "Reducing turnover is not enough: The need for proficient organizational cultures to support positive youth outcomes in child welfare," *Children and Youth Services Review* 35, no. 11 (2013): 1871–1877, https://doi.org/10.1016/j.childyouth.2013.09.002.
[20] Ibid, 4.
[21] Ruth M. Chambers et al., "An innovative child welfare pilot initiative: Results and outcomes," *Children and Youth Services Review* 70 (2016): 143–151, https://doi.org/10.1016/j.childyouth.2016.09.004.
[22] Ibid.
[23] Child Welfare Information Gateway, "Caseload and Workload Management," 3.
[24] Children's Bureau, "Child and Family Services Reviews: Indiana Final Report."
[25] Ibid, 5–6.
[26] Ibid.
[27] Ibid, 7.
[28] Ruth M. Chambers et al., "Family reunification in child welfare practice: A pilot study of parent and staff experiences," *Children and Youth Services Review* 91 (2018): 221–231, https://doi.org/10.1016/j.childyouth.2018.06.020; Karmen Toros, Diana Maria DiNitto, and Anne Tiko, "Family Engagement in the Child Welfare System: A Scoping Review," *Children and Youth Services Review* 88 (2018): 598–607, https://doi.org/10.1016/j.childyouth.2018.03.011.
[29] Timothy J. Vogus et al., "Assessing safety culture in child welfare: Evidence from Tennessee," *Children and Youth Services Review* 65 (2016): 94–103, https://doi.org/10.1016/j.childyouth.2016.03.020.
[30] Ruth M. Chambers et al., "Family reunification in child welfare practice."
[31] Merav Jedwab, Anusha Chatterjee, and Terry V. Shaw, "Caseworkers' Insights and Experiences with Successful Reunification," *Children and Youth Services Review* 86 (2018): 56-63, https://doi.org/10.1016/j.childyouth.2018.01.017.
[32] Hermon and Chahla, "A longitudinal study of stress and satisfaction," 14.
[33] Ibid, 3.
[34] RWJF, "Stress and Health," 2.
[35] Ibid.
[36] Erica L. Lizano and Michalle Mor Barak, "Job burnout and affective wellbeing: A longitudinal study of burnout and job satisfaction among public child welfare workers," *Children and Youth Services Review* 55 (2015): 18–28, https://doi.org/10.1016/j.childyouth.2015.05.005.
[37] Hermon and Chahla, "A longitudinal study of stress and satisfaction," 14.
[38] Lizano and Barak, "Job burnout and affective wellbeing."
[39] Kim and Kao, "A meta-analysis of turnover intention predictors," 218.
[40] Ibid.
[41] Ibid, 220.

[42] Hyosu Kim and Dennis Kao, "A meta-analysis of turnover intention predictors among U.S. child welfare workers" *Children and Youth Services Review* 47 (2014): 218, https://doi.org/10.1016/j.childyouth.2014.09.015; Susan E. Jacquet et al., "The Role of Supervision in the Retention of Public Child Welfare Workers," *Journal of Public Child Welfare* 1, no. 3 (2007): 30–31, https://doi.org/10.1300/J479v01n03_03; Child Welfare Information Gateway, "Caseload and Workload Management.

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[48] Ibid, 3.

[49] Hermon and Chahla, "A longitudinal study of stress and satisfaction," 5; Whiting Blome and Steib, "The organizational structure of child welfare," 182; Schreiber, Fuller, and Paceley, "Engagement in child protective services," 708; Child Welfare Information Gateway, "Caseload and Workload Management," 2.

[50] Child Welfare Information Gateway, "Caseload and Workload Management," 2.

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