

# Mechanisms of AIAN Inequality in Child Welfare Across U.S. States.

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12/2020

## Abstract

American Indian and Alaska Native children are separated from their families by state child welfare agencies at exceptionally high rates. This study connects contemporary trends in Native family separation to histories of Indian child removal, and locates places and institutional sites where inequality emerges.

## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Data</b>	<b>2</b>
2.1	Historical child welfare system data . . . . .	2
2.2	Contemporary child welfare system data . . . . .	2
2.3	Population data . . . . .	3
<b>3</b>	<b>Methods</b>	<b>4</b>
3.1	Historical comparisons . . . . .	4
3.2	Age-specific and lifetime risks . . . . .	4
3.3	Case processing and conditional probabilities . . . . .	4
3.4	Missing data and imputation . . . . .	5
<b>4</b>	<b>Findings</b>	<b>5</b>
4.1	Change Since ICWA . . . . .	5
4.2	Contemporary risks of child welfare system contact . . . . .	9
4.3	Case processing and conditional risks . . . . .	15
<b>5</b>	<b>Discussion</b>	<b>24</b>
<b>6</b>	<b>Conclusion</b>	<b>24</b>

# 1 Introduction

clear statement on ongoing crisis of native family separation. aim of report is to 1) evaluate magnitude of change since ICWA, 2) ID geographic variation in inequality, 3) ID sites and places where inequality is accelerated

## 2 Data

This study relies on a number of data sources. First, we compile and digitize statistics collected by the Association for American Indian Affairs during the late 1960s and early to mid 1970s in an effort to document the breadth and depth of the Indian family separation crisis. To capture the contemporary exposure of AIAN children to the child welfare system, we rely on federal data systems collected by the US Children’s Bureau. We use the 2014 - 2018 National Child Abuse and Neglect Data System (NCANDS) child files (CITE), the 2014 - 2018 Adoption and Foster Care Analysis and Reporting System (AFCARS) foster care files (CITE) and the 2010 - 2018 AFCARS adoption files (CITE). We use two data sources for contemporary population estimates: the US Census Bureau’s Population Estimates Program (PEP) (CITE), and the National Institute of Health’s SEER population estimates (CITE).

### 2.1 Historical child welfare system data

The Association on American Indian Affairs submitted a report titled “Indian Child Welfare Statistical Summary, July 1976” in support of the Indian Child Welfare Act (1978) during congressional hearings, included as Appendix G in hearings convened by the Select Committee on Indian Affairs on August 4, 1977. The results presented by AAIA were the result of multiple waves of surveys sent by AAIA to federal, state, local, and private service providers in 19 states with large AIAN populations (Alaska, Arizona, California, Idaho, Maine, Michigan, Minnesota, Montana, Nevada, New Mexico, New York, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, Wisconsin, and Wyoming). AAIA compiled statistics on the characteristics of both Native and non-Native children in foster care, in adoption, or in boarding programs for each of these states.

These data consistently provide point-in-time estimates of the numbers of Native and non-Native children in foster care, adoptions, or in Bureau of Indian Affairs boarding schools. During this period, some states did not collect information on race/ethnicity for children in foster care. When this was the case, AAIA imputed foster care caseload totals for Native and non-Native children by multiplying the total volume of children in foster care by the proportion of the population that was Native and non-Native respectively. This approach (as AAIA) acknowledges, likely produced conservative estimates of AIAN foster care caseloads in these states, as Native children were more likely than non-Native children to enter foster care in these states during this period.

These landmark data provided a first close-to-comprehensive national picture of the scale of Indian family separation by combining federal, state, and local data sources. These data provided much of the quantitative empirical foundation for the landmark reforms implemented in the Indian Child Welfare Act. While AAIA’s imputation methods and geographic scope do not match contemporary data collection procedures, these data provide the most comprehensive historical data available to examine the scope of Indian family separation in the period immediately prior to the passage of the Indian Child Welfare Act.

### 2.2 Contemporary child welfare system data

The federal government maintains a series of data sets documenting the operations of contemporary state and local child welfare systems. The National Child Abuse and Neglect Data System is a voluntary reporting system that documents all cases of alleged child maltreatment reported to a state or local child welfare hotline

that are screened-in and receive an agency response (typically an investigation from a caseworker). Since the early 2010s, all 50 states have submitted these report-level data annually to the US Children’s Bureau.

Here, we use the NCANDS data to measure two events for AIAN (defined as American Indian or Alaska Native alone or in combination with any other racial or ethnic identification) children and white children (defined as non-hispanic white alone). Using within-state unique child identifiers, we document the first time a child was the subject of a screened-in CPS report, and the first time a child was the subject of a confirmed or substantiated CPS report over a five-year period (2014 - 2018). Note that child identifiers for Georgia, Pennsylvania, and Rhode Island were not reliable over time for children with unsubstantiated screened-in cases. These states are excluded from analysis of risk of investigation, but included in all other analyses.

To measure the frequency of family separation into the foster care system across states, we use the Adoption and Foster Care Analysis and Reporting System foster care files for 2014 - 2018. All states are required to submit foster care and adoption data for the AFCARS. The AFCARS provides a single row of data for each child for each year that child was in foster care for a partial or complete year. Details on placement settings are only recorded for the last placement a child was in during a reporting period. We use unique child identifiers in the AFCARS foster care data (that match unique identifiers in the NCANDS data) to identify the first time a child entered the foster care system, and to track characteristics of placements that child was in over time. These placement variables are limited by the scope of AFCARS. If a child was in multiple placement settings during the course of a year, only information about the final placement setting is recorded in the AFCARS foster care file. Thus, statistics on the prevalence of particular placement settings should be interpreted as conservative.

The AFCARS adoption file provides detailed information on all children newly adopted with state or local child welfare agency involvement in the US each year. To provide point-in-time estimates of total numbers of children in adoptive homes, we aggregate data from 2010 - 2019, then evaluate the number of both Native and non-Native children in adoptive homes who would have been 21 years old or younger in 2019. We use the 21-year-old threshold for comparability with data collected by AAIA.

## 2.3 Population data

To obtain valid estimates of the AIAN child population by age for US states between 2014 and 2018, we rely on the US Census Population and Housing Units Estimate Program (CITE STATE BY 5 RACE ALONE OR COMB FILE). Our definition of American Indian and Alaska Native includes any individual who identifies as American Indian or Alaska Native alone or in combination with any other group. The US Census Bureau’s Population and Housing Unit Estimates program uses baseline data from the 2010 Census along with various sources of demographic data to estimate age and race specific population totals for all counties in the US annually. At the state-level, this program provide single-age estimates of the population that identifies as American Indian / Alaska Native alone or in combination with any other group(s). These estimates are imputed by the US Census based on 2010 US Census baseline estimates and various demographic indicators for each locality to project population change.

Unfortunately, we are not able to leverage Census population data directly to make comparisons of the incidence rate of family separation over time expressed as rates per capita. Changes in the enumeration of the AIAN population between 1976 and 2019 make such comparisons impractical. For example, the US Census enumerated approximately 1.4 million American Indians and Alaska Natives in the 1980 decennial count, a 70 percent increase over the 1970 decennial census. Such dramatic shifts are largely explained by the Census changing its methodology for determining race/ethnicity of a subject. Until 1970, the Census worker reported a subject’s race/ethnicity based on worker observations. In 1980, the Census changed to self-identification of race/ethnicity (Lujan: American Indians and Alaska Natives Count). In 1990, the Census counted about 2 million American Indians and Alaska Native, an approximately 40 percent increase from the prior Census. By 2000, the Census reported 4.2 million American Indians and Alaska Natives living in the United States, more than double the 2000 population count. Such changes are not driven by demography alone (fertility, mortality, migration), but instead are an artifact of shifting methods of enumerating the racial and ethnic identities of US residents by the Census Bureau. Shifting Census methods, enabling individuals

to identify their own group membership, and to identify membership in multiple groups have dramatically changed official estimates of the size of the AIAN population. This makes direct comparisons of historical AIAN population counts to contemporary AIAN population counts problematic.

For contemporary risk estimates, we rely on age-specific estimates of the population who identify as AIAN alone or in combination with any other group between 2014 and 2018 by state computed by the Census Population and Housing Units Estimation Program. We do not attempt here to make historical comparisons of incident rates of events between the contemporary period and the pre-ICWA period.

## 5. Population data

# 3 Methods

## 3.1 Historical comparisons

We directly compare counts of children experiencing family separation through adoption and foster care in the states surveyed by AAIA in 1976 to counts of children in foster care or adoption in 2019. Because historical and contemporary AIAN population estimates are incompatible, we do not provide estimates as per capita rates. AAIA reports point-in-time counts of children in foster care or adoption by state. For comparability, we compute point-in-time contemporary foster care caseloads by counting the number of children in foster care at the end of the reporting year in 2019, and adoption caseloads by using annual counts of new adoptions from 2010-2019 and estimating the number of children concurrently in adoptive homes under the age of 21 (for comparability with AAIA measures, which used 21 as the age threshold for inclusion). We compare counts of AIAN and non-AIAN children in each system for states included in the AIAN data at these two time points, then compare aggregate totals of children in some form of state-involved family separation across these two time periods.

## 3.2 Age-specific and lifetime risks

For each child welfare system outcome examined here (investigations, substantiations, foster care entries, terminations of parental rights), we use 2014 - 2018 NCANDS and AFCARS data to estimate period life tables for each state for AIAN children and white children separately. Period life tables share some of the analytic benefits of cohort life tables. In a cohort life table, analysts track the incidence of an outcome across a group over the life course, adjusting for mortality and prior-event incidence. When a cohort life table is impractical because of data limitations or shifts in risk over time, a period life table allows for a simulation of risk over the life course by assuming that age-specific risks remain static at the levels observed during the focal period.

In this study, we use 5 years of child welfare and population data to estimate the risk of a first child welfare event for each group and age. We then apply these age-specific risk estimates to a hypothetical cohort of 100,000 infants for each group and state, counting the number of events that would have occurred in this cohort at 2014-2018 levels of age-specific risk and age-specific mortality (CITE THE DEMOGRAPHY BOOK). The key assumption of this method is that event and mortality risk levels remain relatively stable over the period. Caution is due in using these data to extrapolate to future periods, as both event risk and mortality risk may shift over time.

## 3.3 Case processing and conditional probabilities

Period life tables provide us with rigorous estimates of the marginal probability that a child would experience a particular event in a focal population at a fixed level of risk. In this study, we are interested in identifying the institutional sites at which inequalities emerge or are exacerbated. To do so, we compute the conditional

probability of successive steps in child welfare case processing – the probability of substantiation after investigation; the probability of foster care after investigation; the probability of foster care after substantiation; and the probability of parental rights termination after foster care.

To do so, we first estimate period life tables for the joint event of each combination of outcomes. For example, we link the NCANDS and AFCARS foster care data using unique child identifiers to estimate the joint probability that a child experience both a CPS investigation *and* a later foster care entry. Once we estimate this joint probability, we can compute the conditional probability as follows:

$$\Pr(a|b) = \frac{\Pr(a,b)}{\Pr(b)}$$

These conditional probabilities provide information on the likelihood that a child will move up the case processing ladder from one state to the next. By comparing the conditional probabilities of case processing outcomes separately for AIAN and white children across states, we can identify the states of child protection case processing during which inequalities emerge for AIAN children relative to white children.

It is important to note that while state-level analyses provide far more insight into local processes than do national analyses, working at the state-level may obscure important differences in system practices and outcomes occurring at county or local levels. This is particularly relevant for states with county-administered child protection systems. Because of data-masking procedures in the NCANDS/AFCARS, analyses at the county-level are not consistently possible for non-urban locales.

### 3.4 Missing data and imputation

A small proportion of cases in the NCANDS and AFCARS are missing data on focal variables including child race/ethnicity and caretaker race/ethnicity. To address this missing data and ensure that our results are not negatively biased through listwise deletion, we compute multiple imputations of the NCANDS and AFCARS at the report or child level using pseudo Bayesian methods as developed by Van Buuren (<https://www.jstatsoft.org/article/view/v045i03>). These models include child-level predictors such as age and sex in addition to including state-level population composition predictors to adjust for heterogeneity in the racial composition of populations across states. All results reported in the figures below display uncertainty intervals that reflect the maximum and minimum estimates of each statistic, reflecting uncertainty driven by missing data. In most cases, this uncertainty is relatively small.

## 4 Findings

### 4.1 Change Since ICWA

We compare data collected by the Association on American Indian Affairs between 1973 and 1976 on American Indian and Alaska Native children in foster care and adoption to contemporary data on AIAN children in foster care and adoption collected through the Adoption and Foster Care Analysis and Reporting System between 2010 and 2019. Figure 1 shows the total numbers of children in foster care as reported by AAIA in the mid-1970s and in AFCARS in 2019. There were 6665 Native children in the 19 states for which AAIA collected data in the mid-1970s. In 2019, there were 17972 Native children in foster care, an increase of 169.6 AIAN children in foster care over this period. For non-Native children in these 19 states, caseloads increased by 51.3 percent over the same period.

Figure 2 displays counts of children 21 years of age or younger in state-involved adoptions for both the mid-1970s and 2019. Note that 6 of the 19 included states lack complete data on AIAN children in adoption in the AAIA data (Idaho, Maine, Nevada, New Mexico, New York, and Wyoming). For these 13 states with complete adoption data, AAIA estimated that there were 11157 Native children in state-involved adoptions in the mid-1970s. In these same 13 states, there were 19221 AIAN children in adoptions in 2019, an increase

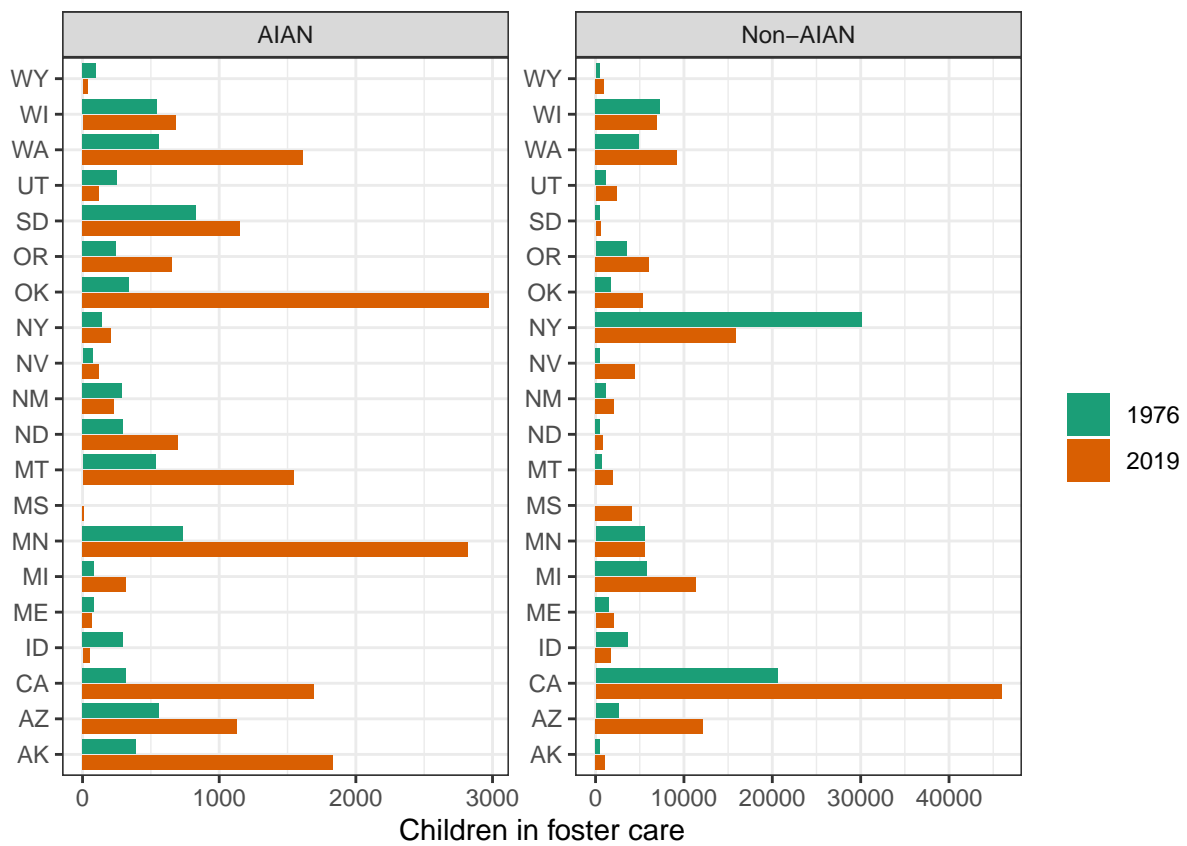


Figure 1: Children in foster care on reporting date (caseload) by state and period. Data from AAIA surveys and AFCARS

of 80.2 percent. For non-native children in these states, there was a 12.2 percent reduction in the numbers of adopted children over the same period.

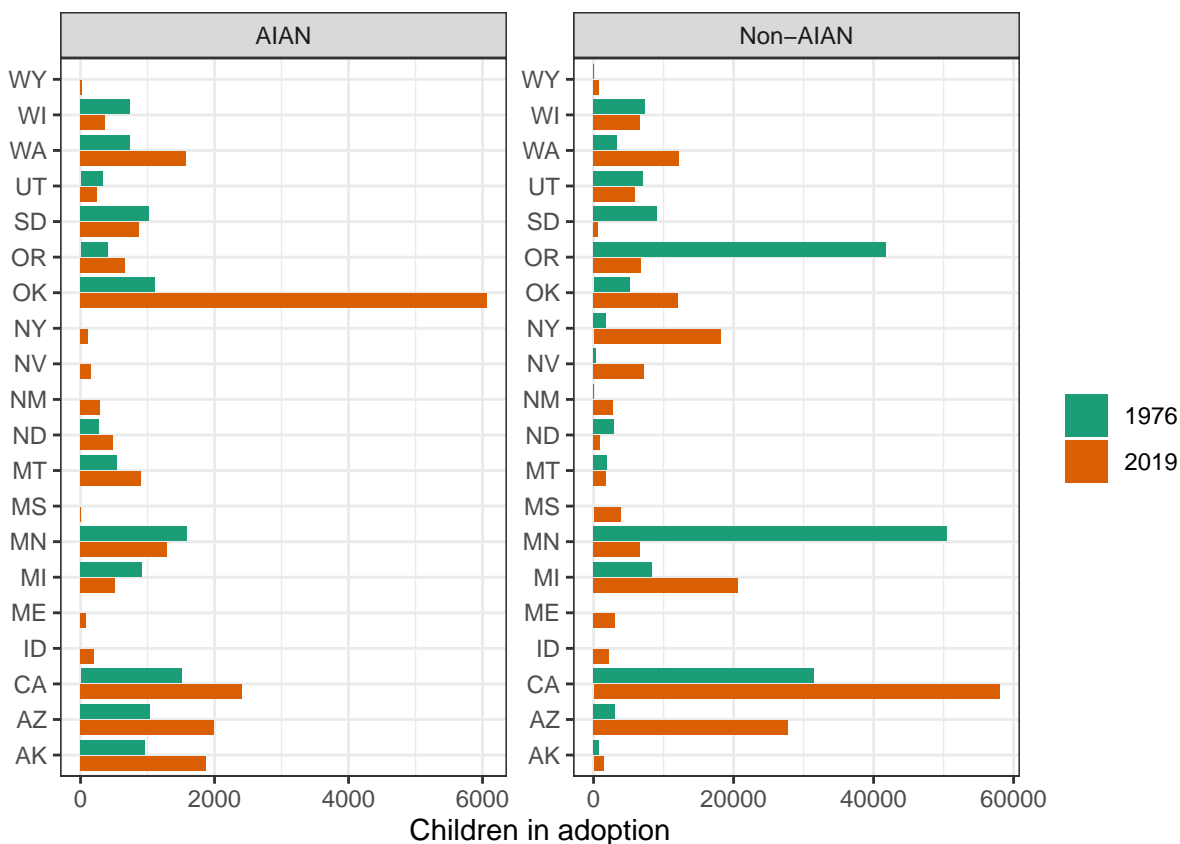


Figure 2: Children 21 and under in state-involved adoptions on reporting date by state and period. Data from AAIA surveys and AFCARS

Figure 3 shows the relative change in adoptive and foster care caseloads between the mid-1970s and 2019 for these large Native population states. Of the 19 states with complete data, 14 saw growth in the numbers of Native children in foster care since the passage of ICWA. Of the 13 states with complete adoption data, 8 had more Native children in foster care in 2019 than in the mid-1970s prior to the passage of ICWA. For non-Native children, foster care caseloads were higher in 16 of 19 states and adoption caseloads were higher in 6 of the 13 states with complete data. Oklahoma saw the largest absolute growth in Native foster care caseloads. In the mid-1970s, there were 337 Native children in foster care in Oklahoma. In 2019, there were 2971 Native children in foster care in Oklahoma, a growth of nearly 782 percent.

Foster care caseloads grew in many states for both non-AIAN and AIAN children. Of the 19 states included here, 12 saw higher growth in AIAN foster care caseloads than they saw in non-AIAN foster care caseloads. Adoption caseloads also grew faster for AIAN children in these states than they did for non-AIAN children. In 7 of 13 states with complete data, AIAN adoption caseloads grew faster between the mid-1970s and 2019 than did non-AIAN adoption caseloads.

Of course, these data do not provide a complete comparative picture of Indian family separation over time. Until the late 20th century, American Indian and Alaska Native children were routinely removed from their families and sent to residential boarding schools. Approximately 25000 Native children were in Bureau of Indian Affairs boarding schools in 1973. This total is larger than the total number of Native children in foster care or adoption recorded by AAIA in 1976. There were more AIAN children in boarding schools in 1973 than were in foster care in 2019. While the scale of separation of Native children from their families

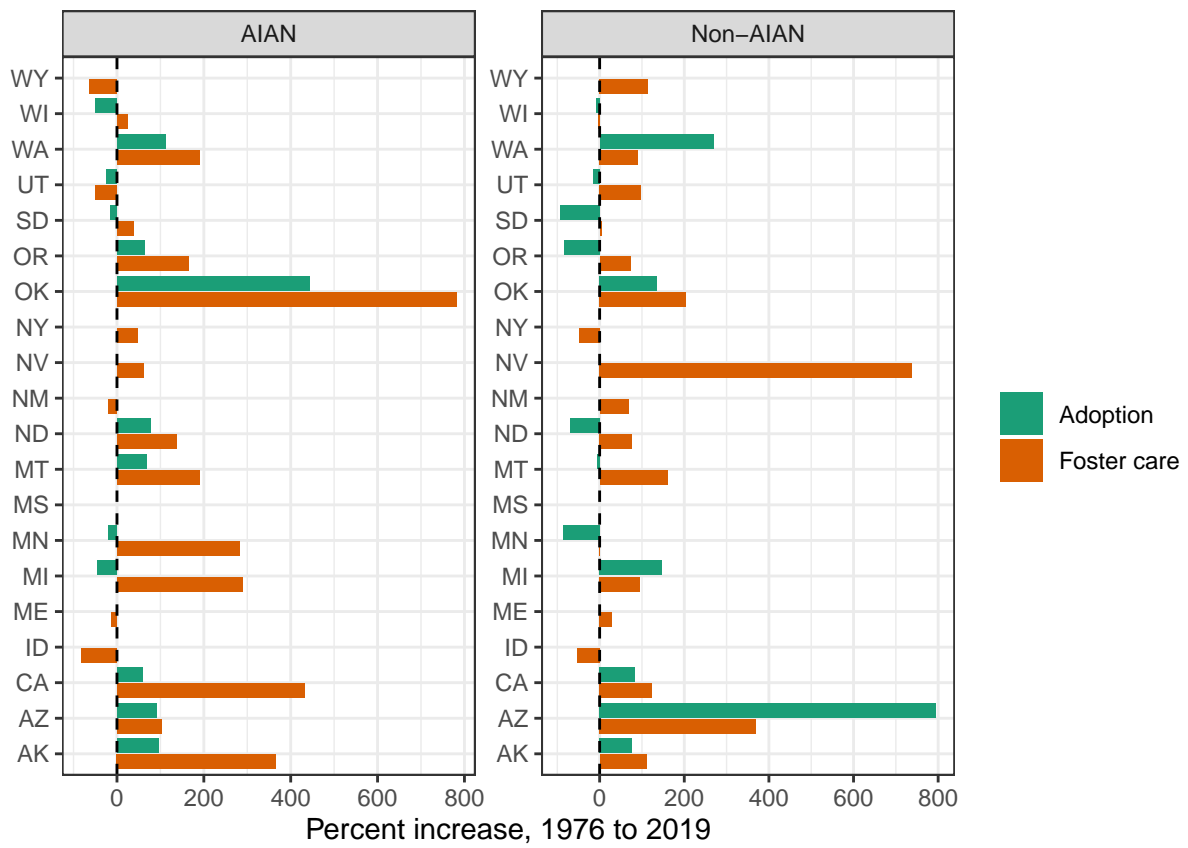


Figure 3: Percent change in adoption and foster care caseloads between 1976 and 2019. Data from AAIA surveys and AFCARS



through foster care and adoption has increased over time in these states, the absolute scale of the separation of Native children from their families has likely declined nationally with the end of the boarding school era.

## 4.2 Contemporary risks of child welfare system contact

We now explore in detail the contours of the contemporary exposure of AIAN children and families to various forms of child welfare system contact. We first present age-specific risks of successive child welfare events. Next, we provide cumulative (life time) risks of child welfare event incidence. Finally, we estimate and visualize conditional probabilities of experiencing successive child welfare events, illustrating differences in case processing for Native and non-Native children across states. All analyses below rely on pooled state-level 2014 - 2018 data on child welfare system events from the NCANDS child file and AFCARS foster care file, along with pooled state-level data on child populations from the Census Population and Housing units Estimation Program.

All estimates should be interpreted as risks at 2014 - 2018 levels. Caution should be exercised in using these estimates to project risk to future periods.

### 4.2.1 Age-specific risks

Figure 4 shows the marginal probabilities of experiencing a series of child welfare system events for both Native and non-Native children. This plot shows national age-specific event probabilities at 2014-2018 risk levels for AIAN and non-AIAN children for experiencing 1) a screened-in investigation, 2) a confirmed maltreatment case, 3) a foster care placement, and 4) termination of parental rights through the child welfare system.

Across all outcomes, and for both Native and white children, infants are at highest risk of child welfare system contact. About 5.7 percent of Native infants experience a CPS investigation nationally, and about 6.1 percent of white infants experience a CPS investigation. About 2.2 percent of AIAN children experience an agency confirmed maltreatment case before their first birthday, compared with about 2. About 2 percent of AIAN children are removed from their families and placed into foster care before their first birthday, and about 0.5. Risk of a first event declines steadily with age for both groups.

Nationally at 2014 - 2018 risk levels, white children are at higher risk of investigation at all ages, risks of substantiation are similar for white and Native children, risks of foster care are higher for native children, and risks for termination are slightly higher for native children.

Of course, there is substantial variation in risk of child welfare system contact across US states. States have tremendous flexibility in designing and implementing both child welfare surveillance systems and foster care systems. The character of government-to-government relationships between tribes and states varies tremendously across places. Federal law also differentially affects tribal governance and the relationships between states, counties and tribes across places (CITES). Figure 5 shows the age-specific risk of experiencing a first screened-in investigation by US state for both AIAN and white children at 2014 - 2018 levels of risk.

Infants are at highest risk of investigation in all states, and the shape of the age-risk curve is similar to the national pattern shown in Figure 4. Risk tends to be markedly higher for infants, and decline slowly with age. However, there is tremendous variation in levels of risk across states, and clear regional patterning in inequalities in the exposure of infants to CPS investigation. AIAN infant risks of investigation are highest in Alaska. In 2014 - 2018, about 18.4 percent of AIAN infants had a screened-in CPS report. More than 10 percent of AIAN infants experienced an investigation in 3 other states: Minnesota, Oklahoma, and Montana. White children in Southern states like Mississippi, West Virginia, Florida, and Kentucky are typically at higher levels of risk of investigation at all ages than are AIAN children, whose risk levels are typically quite low. In The Great Plains and Upper Midwest states, AIAN children typically have much higher investigation risk than do white children. Inequalities are pronounced in Wisconsin, Minnesota, North and South Dakota, Nebraska, and Oklahoma. Other than Alaska, states in the West typically have similar investigation rates for AIAN and white children.

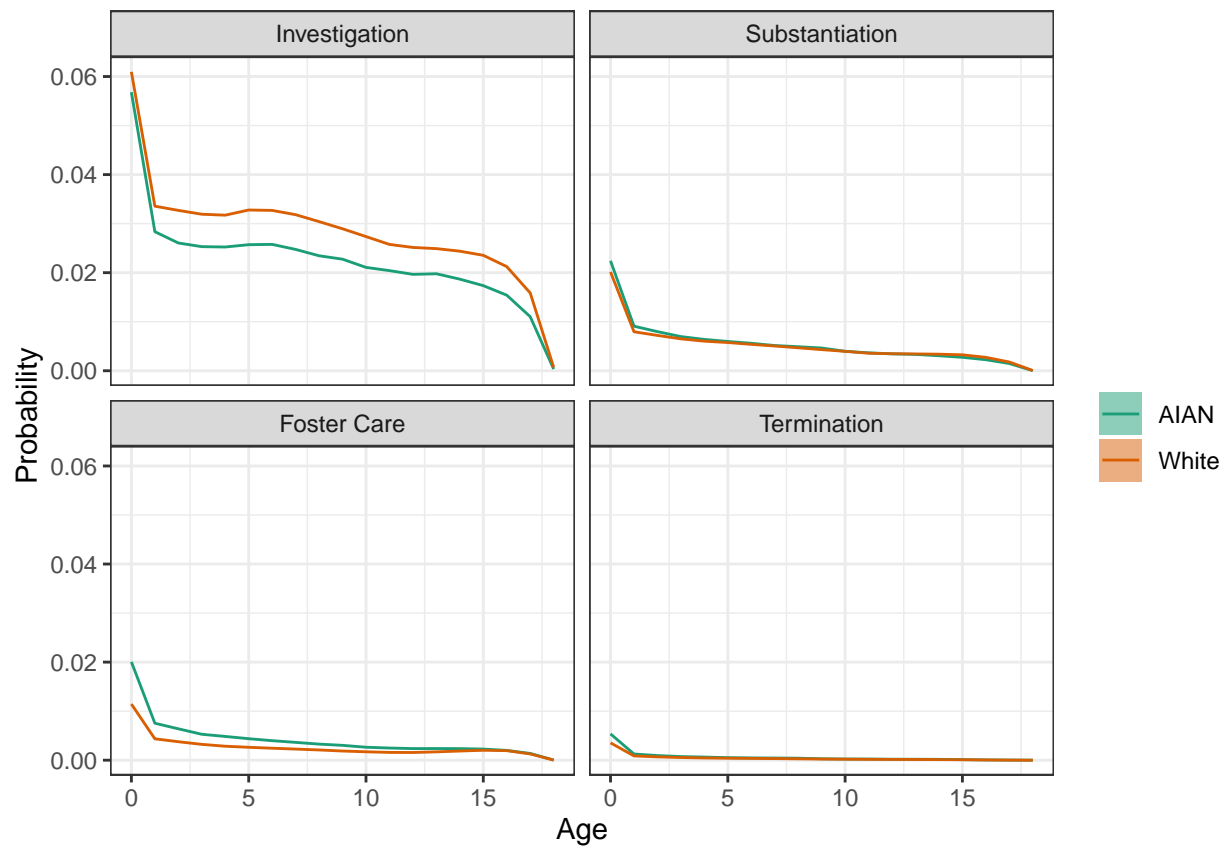


Figure 4: Marginal probability of child welfare event incidence for AIAN children by age 18, 2014 - 2018 risk levels, US totals

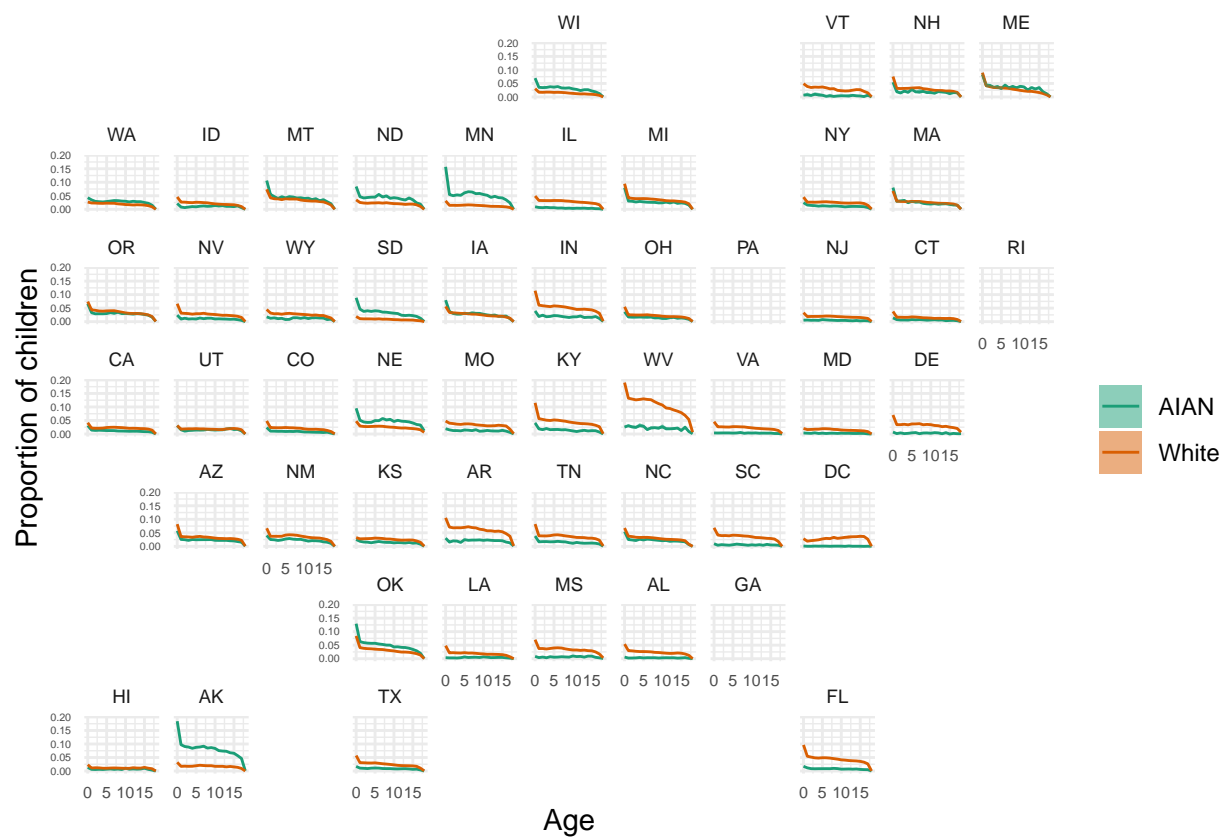


Figure 5: Age specific risk of experiencing first CPS investigation by state, 2014 - 2018 risk levels

In Minnesota, at 2014 - 2018 levels of risk, 9.7 percent of AIAN children could be expected to be removed from their families and placed into foster care before their first birthday. This is the highest level of risk in the country for infants of any racial or ethnic group (CITE YI EDWARDS WILDEMAN WORKING PAPER). AIAN infants are also at exceptionally high risk of foster care placement in Montana, Alaska, South Dakota, North Dakota, Oklahoma, Washington, Oregon, Nebraska, and Wisconsin. At 2014 - 2018 risk levels, more than 3 percent of all AIAN infants would be placed into foster care. White children face a 3 percent risk of foster care before their first birthday in only one state: West Virginia. Unlike with investigation, where white children in some Southern states experienced levels of extreme risk similar to risk levels experienced by AIAN children in Plains and Midwestern states, Native risk of foster care in high-risk states is categorically different from white risk in any state.

Nationally, white infants experienced about a 1.1 percent risk of foster care entry before their first birthday. Teenagers are typically at relatively low-risk of entering foster care for the first time, but in Minnesota, AIAN 16 year olds face a 1.4 percent risk of a first foster care entry, higher than the national risk faced by white infants. Risk for 16 year old AIAN children is also higher than white infant risk in North Dakota.

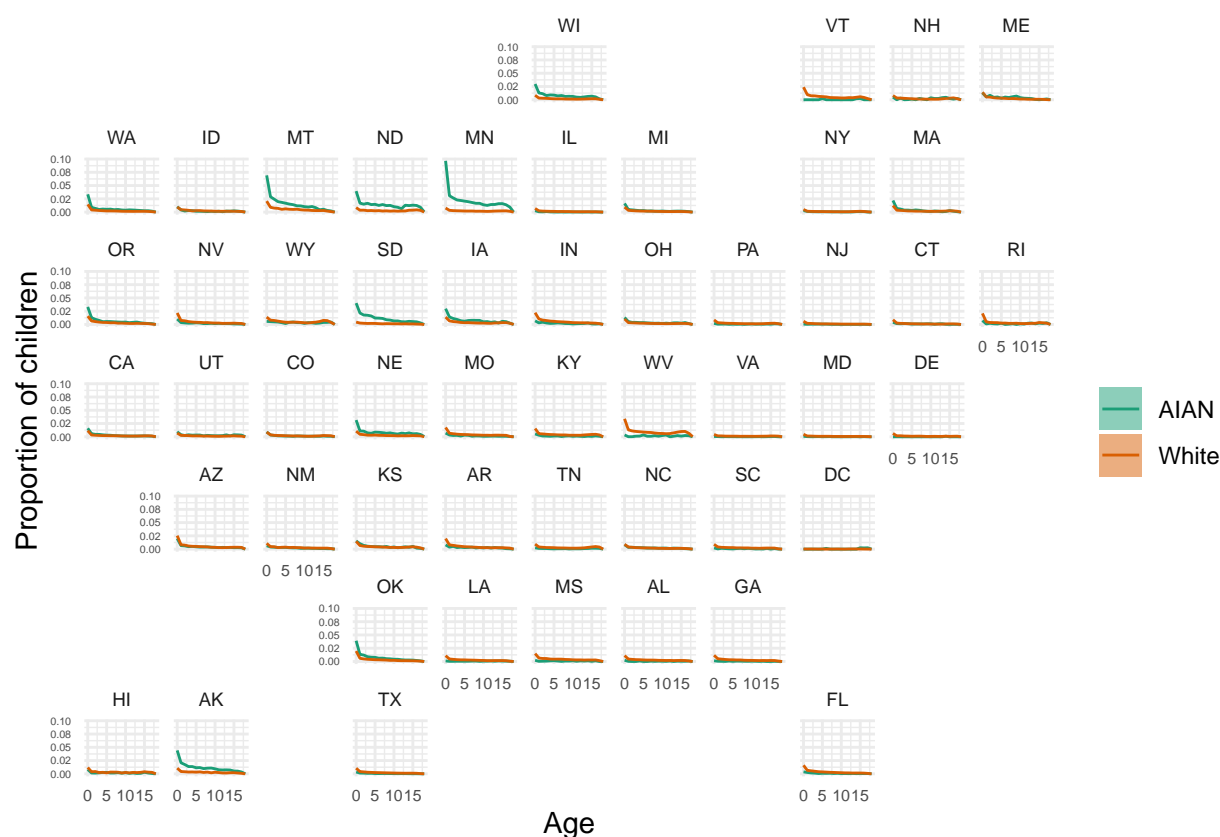


Figure 6: Age specific probability of entering foster care, 2014 - 2018 risk levels

In states where Native children are at high risk of investigation, they are typically also at higher risk of substantiation. Figure 7 shows the age-specific risk of a first substantiated maltreatment investigation for the states with the six highest levels of risk for AIAN infants: Alaska, Iowa, Massachusetts, Minnesota, Montana, and Oklahoma. In Alaska, Minnesota, and Oklahoma, about 6 percent of AIAN infants experience an investigation at 2014 - 2018 risk levels. About 5 percent of AIAN children experience a substantiated case before their first birthday in Massachusetts, Iowa, and Montana. AIAN children are at consistently higher risk of substantiation over the life course in each of these states except Massachusetts, where white children's risk is similar to AIAN children's risk after infancy.

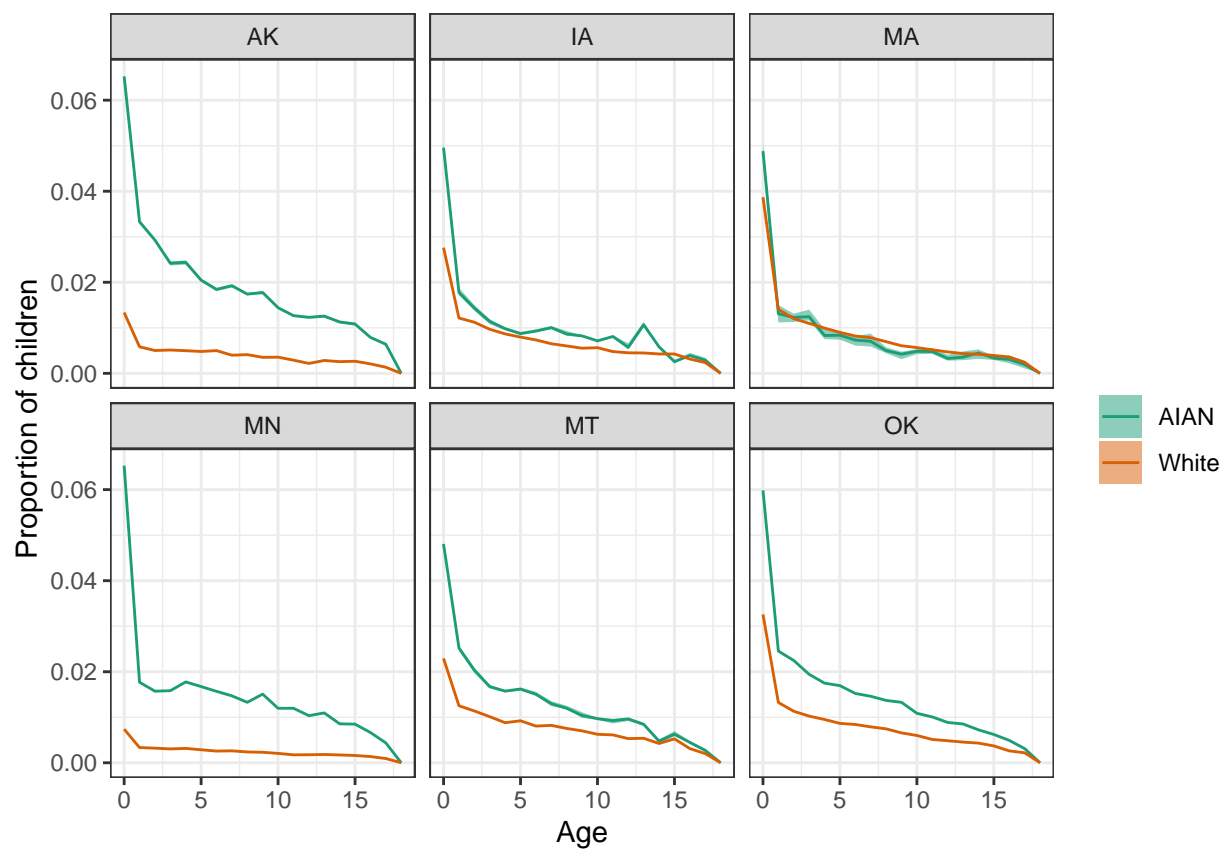


Figure 7: Age-specific probability of agency-confirmed maltreatment case in high-risk states, 2014 - 2018 risk levels

AIAN children are at higher risk nationally of experiencing the full termination of parental rights while in foster care than are children from any other racial or ethnic group (CITE WILDEMAN EDWARDS WAKEFIELD). Like other outcomes, risk is at its peak for infants. Figure 8 shows the age-specific probability of termination for Native and white children in the six states with the highest risk of termination for native infants. Risk for infants is highest in Minnesota. About 1.8 percent of AIAN children would experience full termination of parental rights before their first birthday at 2014 - 2018 levels of risk. Risk for infants is also at or above one percent in Alaska, Iowa, Montana, North Dakota, and Oklahoma.

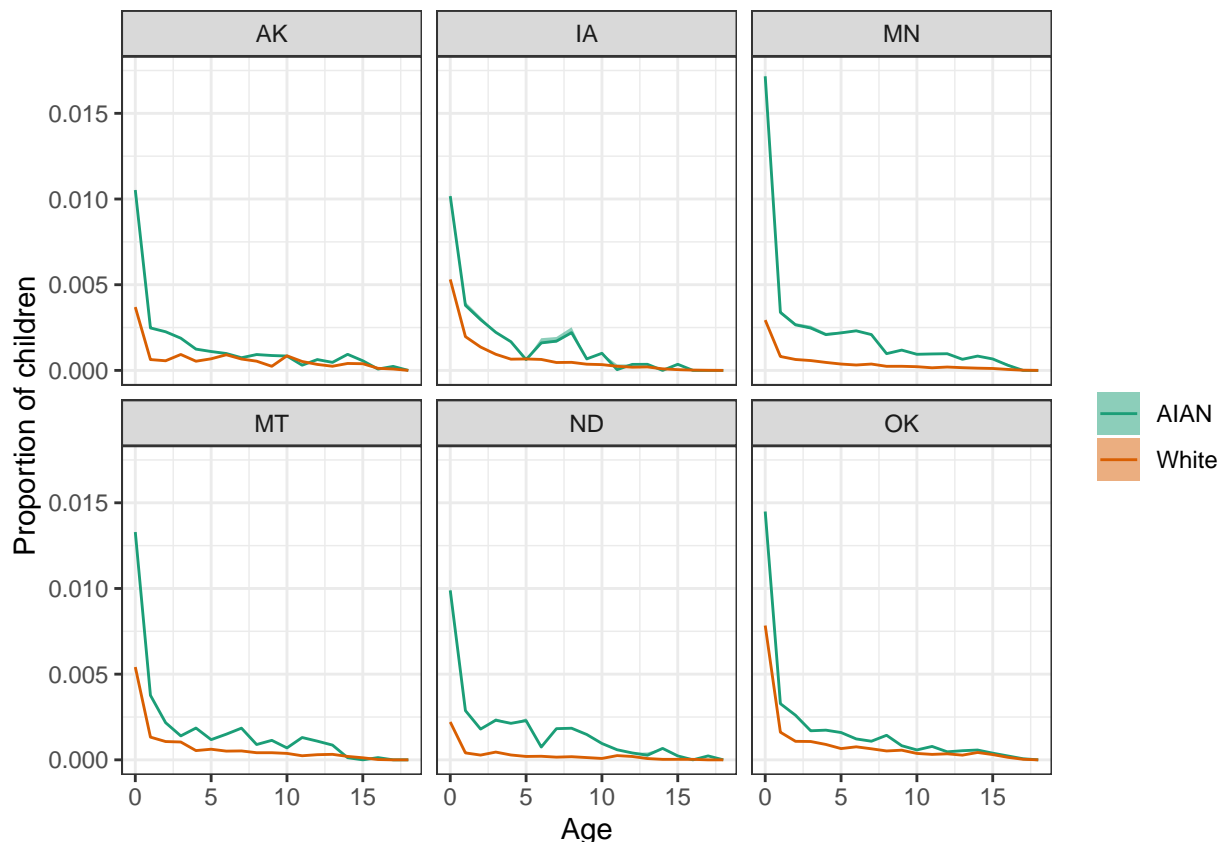


Figure 8: Age-specific probability of full termination of parental rights, 2014 - 2018 risk levels

While there is a very clear relationship between the risk of experiencing child welfare system events and age – infants are at much greater risk than other children, then risk typically declines slowly with age – there is tremendous difference in the frequency of these events across places, and clear regional patterns in differences in risk between Native and white children.

#### 4.2.2 Lifetime event risks and inequalities in lifetime risk

Next, we provide a summary of lifetime incidence of each child welfare event for Native and white children across US states. These cumulative risks simulate the total exposure of the population of children to a first event by applying age-specific risks and mortality risks (computed from the observed data) to a hypothetical cohort of 100,000 children in each state. They can be interpreted as lifetime risks of child welfare system event incidence for each group.

Figure 9 displays AIAN risk of ever experiencing each child welfare system event by age 18 at 2014 - 2018 levels of risk. Note the variable scale for each outcome, and note that Georgia, Pennsylvania, and Rhode Island lack reliable identifiers with unsubstantiated screened-in investigations for the period. More than half

of all American Indian and Alaska Native children living in Alaska, Montana, Oklahoma, Nebraska, Montana, and North Dakota would experience a CPS investigation by age 18 at 2014 - 2018 levels of risk. Risk is highest in Alaska, where nearly 80 percent of AIAN children receive an investigation during their childhood. There are 7 states where white children have risks at or above 50 percent; West Virginia, Arkansas, Indiana, Kentucky, Florida, Tennessee, and Michigan.

More than one in five Native children can expect to have a substantiated or confirmed CPS case in Alaska, Minnesota, Oklahoma, North Dakota, and Montana at 2014 - 2018 levels of risk. AIAN children in Alaska are at greatest risk, about 3 in 10 children have a confirmed case by age 18. There are only two states where white children face a one in five risk of a substantiated case: Kentucky and West Virginia.

We estimate that about 1 in 3 Native children in Minnesota will ever enter foster care at levels of risk similar to those observed between 2014 - 2018. In Montana, this risk is about 1 in 4. In North Dakota, Alaska, and South Dakota, the risk is about 1 in 5. There is nowhere in the country where white children face levels of risk as high as 1 in 5. AIAN lifetime risk of foster care is also high (greater than 1 in 10) in Nebraska, Wisconsin, Iowa, Oklahoma, Oregon, and Washington.

Termination of parental rights through the foster care system occurs for about 4 percent of all AIAN children in Minnesota. About 3 percent of AIAN children in Oklahoma, Montana, North Dakota, Iowa, and Alaska can expect to experience the full termination of parental rights by age 18 at 2014 - 2018 levels of risk. White children in West Virginia and Arizona also face risks of termination of parental rights of around 3 percent.

Child welfare system lifetime event risks are highest for AIAN children in the same Great Plains, Northwestern, and Midwestern states that showed high levels of event risk for infants. In many states, more than half of all AIAN children ever have contact with the child welfare system, and foster care is disturbingly common for Native children in Minnesota, Montana, North Dakota, Alaska, and South Dakota, where more than one in five Native children can expect to ever enter foster care at current levels of risk.

Figure 10 shows the ratio of AIAN lifetime event risk to white lifetime event risk for each state. These rate ratios provide a measure of the magnitude of inequality in AIAN system contact compared to white system contact. The same states that have high levels of event risk for AIAN children also have high levels of inequality in the rate at which AIAN children experience system contact compared to white children. Inequalities in investigations are less pronounced than inequalities in other outcomes. South Dakota, Minnesota, and Alaska exhibit the highest levels of inequality in CPS investigations. AIAN children are about 3 times more likely than white children to be investigated in these states. In these same states (South Dakota, Minnesota, and Alaska), AIAN children are at least 4 times more likely than white children to ever experience an agency-confirmed maltreatment case.

Foster care inequalities are particularly pronounced. In Minnesota, AIAN children are about 8 times more likely than white children to ever enter foster care. In South Dakota, AIAN children are about 7 times more likely than white children to ever enter foster care. Native children in North Dakota, Wisconsin, and Alaska are about 4 times more likely than white children to ever enter foster care. Native children are more likely than white children to enter foster care in 20 states. Inequalities in termination of parental rights have a similar geography. In South Dakota, North Dakota, and Minnesota, AIAN children are at least 5 times more likely than white children to experience full parental rights termination through the child welfare system. In Massachusetts, Montana, Alaska, Iowa, Wisconsin, Nebraska, and Washington, AIAN children are about twice as likely to experience termination of parental rights as are their white peers.

### 4.3 Case processing and conditional risks

The marginal probabilities of event incidence discussed above provide compelling pictures of the magnitude of the exposure of AIAN children to the child welfare system across the U.S. in the post-ICWA period. However, they do not answer core questions about the sources of such routine contact and disruptive intervention. Below, we explore how AIAN children are processed through state child welfare systems. We identify the risk of experiencing a child welfare system event, conditional on experiencing a prior case-processing event. These conditional probabilities allow us to examine how inequalities emerge or are exacerbated as AIAN children are processed through child welfare systems.

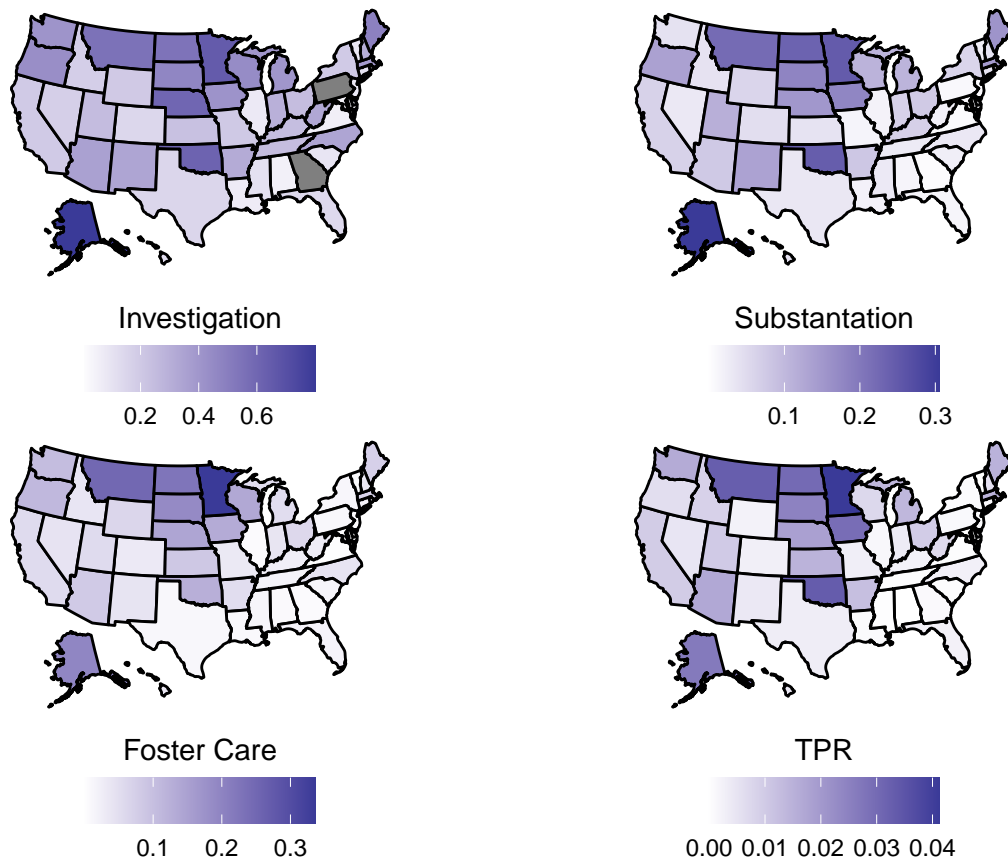


Figure 9: Cumulative risk of child welfare system event for AIAN children by age 18 at 2014 - 2018 risk levels



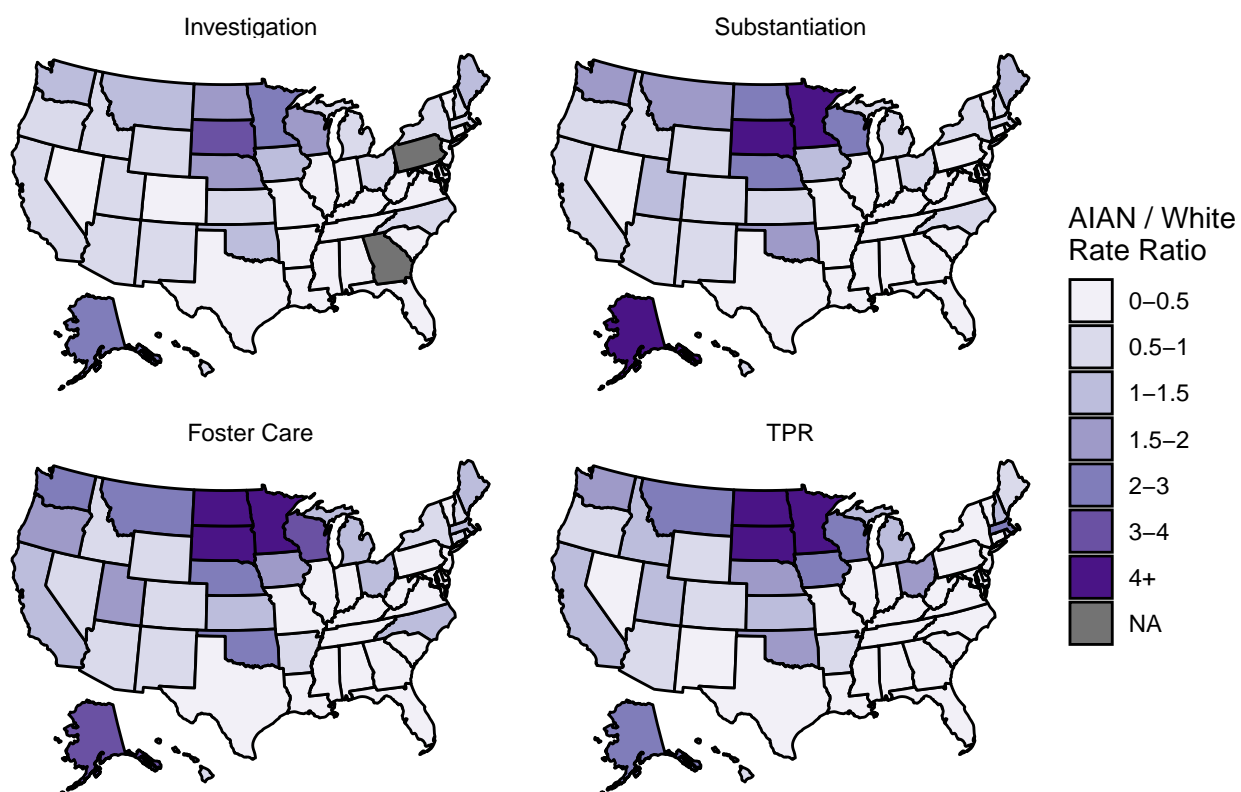


Figure 10: Inequality in cumulative risk of child welfare system event for AIAN children by age 18 at 2014 - 2018 risk levels

Table 1: How cases move upstream in Minnesota: AIAN infants

	Number of children	Child population	Event rate	Transition rate
Investigations	481	2806	0.17	
Confirmed maltreatment	191	2806	0.07	0.41

Table 1 demonstrates the basic logic of this approach. We display the average numbers of AIAN children subject to either an investigation or a substantiated investigation. The crude event rate is simply the number of children experiencing each event divided by the size of the population at-risk of experiencing the event. To compute the rate at which children transition from one case processing event to the next stage of case processing, we first compute the joint probability of experiencing both events, then divide by the marginal probability of experiencing the first event. In this case, because all children with confirmed maltreatment cases also must have had an investigation, we treat the confirmed maltreatment rate as the joint probability  $\Pr(\text{investigation, substantiation}) = \Pr(\text{substantiation})$  and simply divide this quantity by the probability of investigation. We learn that about 41 percent of all AIAN children infants in Minnesota with a screened-in case can expect to be substantiated at 2014 - 2018 rates.

Because we cannot assume that all children entering foster care experienced either a) an investigation or b) a substantiation, we match unique identifiers across AFCARS and NCANDS for first events of each type, then separately estimate life tables for the joint probability of the focal event.

To identify sites of institutional decision making where inequalities in AIAN child welfare system case processing emerge or are accelerated, we compute conditional event probabilities for 1) case substantiation, conditional on investigation; 2) foster care placement, conditional on investigation; 3) foster care placement, conditional on substantiation; and 4) termination of parental rights after foster care placement for both AIAN and white children. Figure 11 displays the national risk levels for each event.

Nationally, at each stage of case processing other than the termination of parental rights, AIAN children are more likely than their white peers to have their cases move up to the next, more serious stage of case processing. About 40 percent of AIAN infants who are the subject of an investigation experience a substantiated case, compared to about 33 percent of white infants. About 28 percent of AIAN infants who experience a screened-in investigation enter foster care, compared to about 15 percent of white infants. About 62 percent of AIAN children who experience an agency-confirmed maltreatment case enter foster care, compared to about 41 percent of white children. About 27 percent of AIAN infants who enter foster care experience full termination of parental rights, compared to about 31 percent of white children. For each outcome, these gaps are relatively stable as children age.

We display the distribution of age-specific probabilities of substantiation, conditional on investigation across US states in Figure 12. Note that states with relatively small AIAN populations, such as Vermont and Delaware, have relatively unstable estimate for these conditional probabilities, as small changes in event counts can drive large fluctuation in relative rate estimates when population denominators are relatively small. The probability of substantiation, conditional on investigation is highest for infants. White children in Louisiana experience the highest conditional probability of substantiation, at about 65 percent. Similar levels of risk occur for AIAN infants in Idaho, Utah, Massachusetts, and Iowa.

Figure 13 shows the age specific probability of entering foster care, conditional on experiencing a CPS investigation. American Indian and Alaska Native infants in California, Minnesota, Hawaii, Idaho, Oregon, and Montana all have a greater than 40 percent chance of entering foster care if they experience a child welfare investigation, at 2014 - 2018 risk levels. Figure 14 shows the age specific probability of entering foster care, conditional on experiencing an agency confirmed maltreatment investigation. In Oregon, California, Missouri, Montana, New Hampshire, and Washington, more than 80 percent of all AIAN infants with substantiated cases will be placed into foster care at 2014 - 2018 levels of risk.

When interpreting Figures 12 13 14 jointly, along with Figure 5, a clear pattern emerges. Much of the inequality experienced by AIAN children emerges once a child welfare system begins processing a case. With certain exceptions (Alaska, in particular), inequalities typically emerge post-investigation. Once AIAN

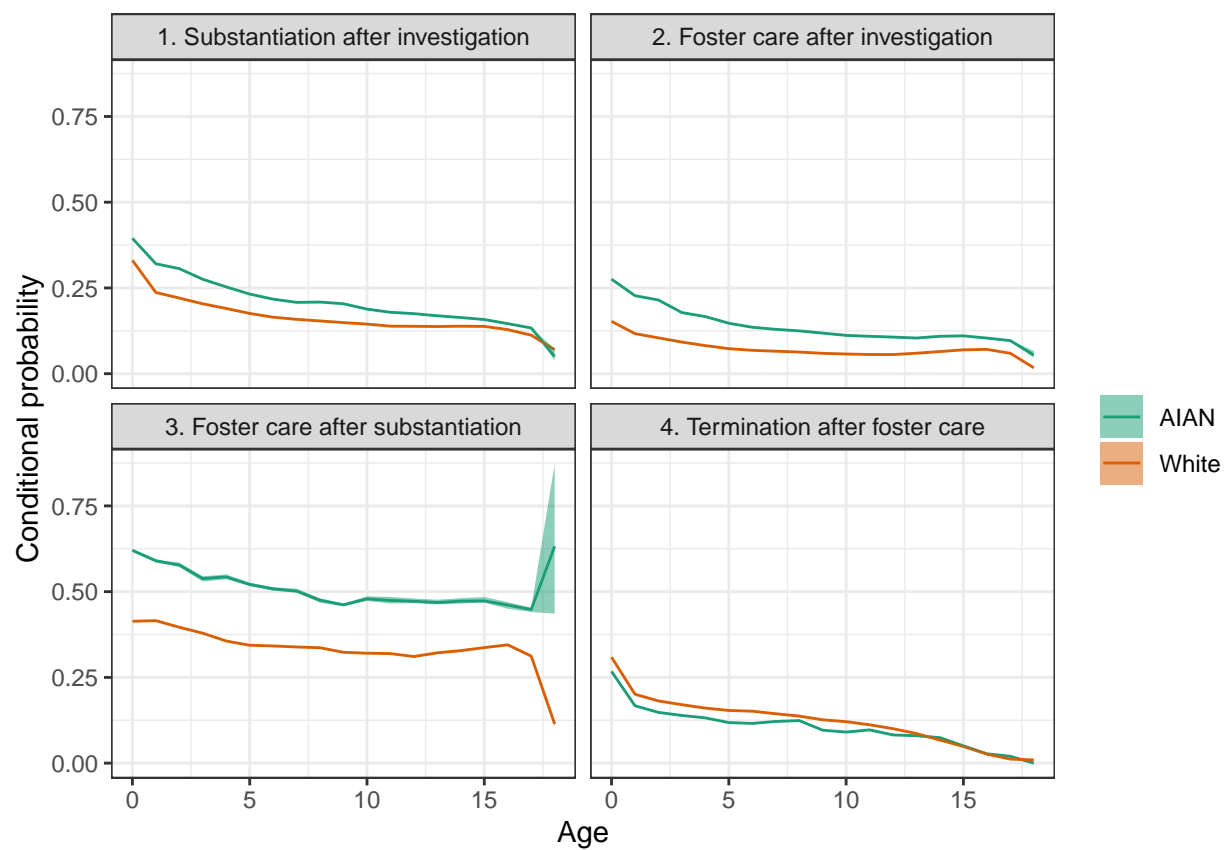


Figure 11: Risk of child welfare system event, conditional on prior system event at 2014 - 2018 levels of risk

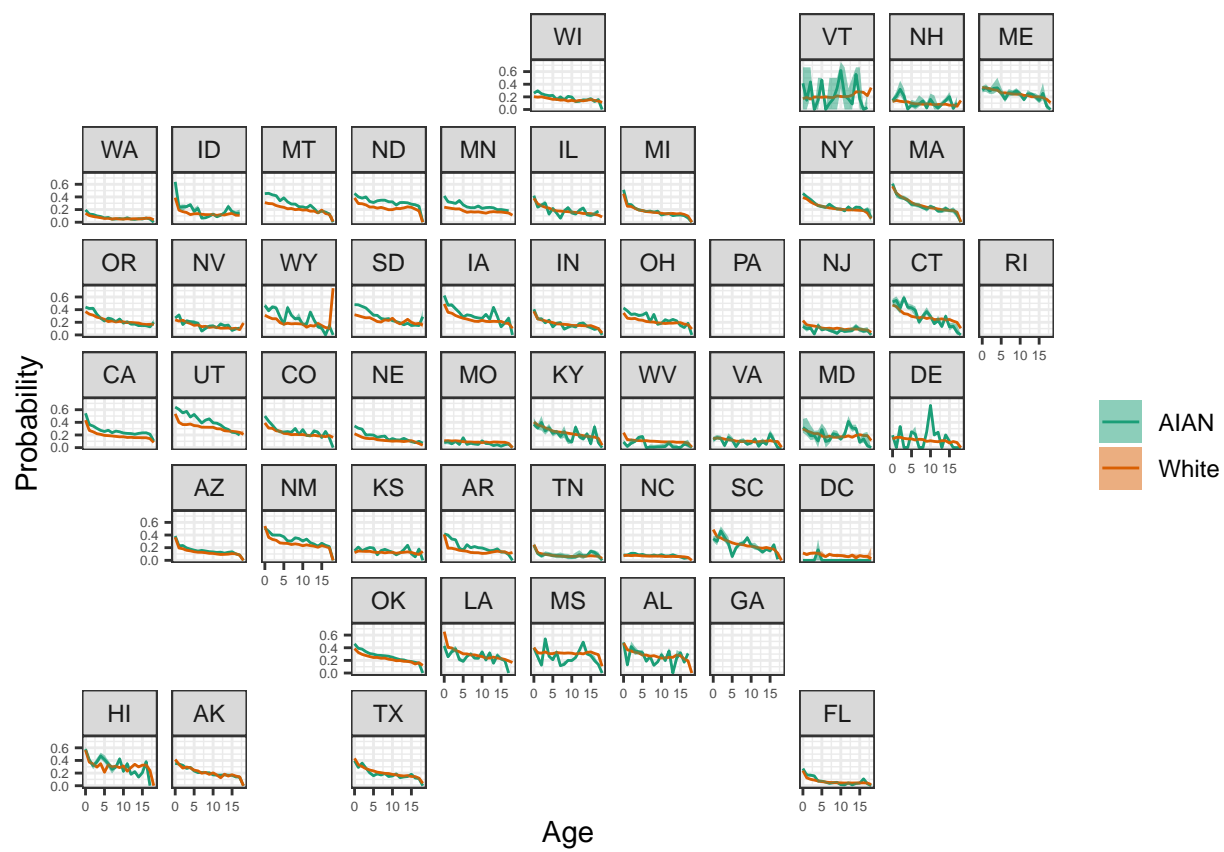


Figure 12: Probability of substantiation, conditional on investigation, 2014 - 2018 levels of risk

children come into contact with child welfare systems, they are often at much higher risk of substantiation than their peers, and much more likely to be placed into foster care than their peers in both substantiated and unsubstantiated cases. The unequal treatment of AIAN children in the child welfare system is dramatically accelerated at the at the point of the decision to place a child into foster care.

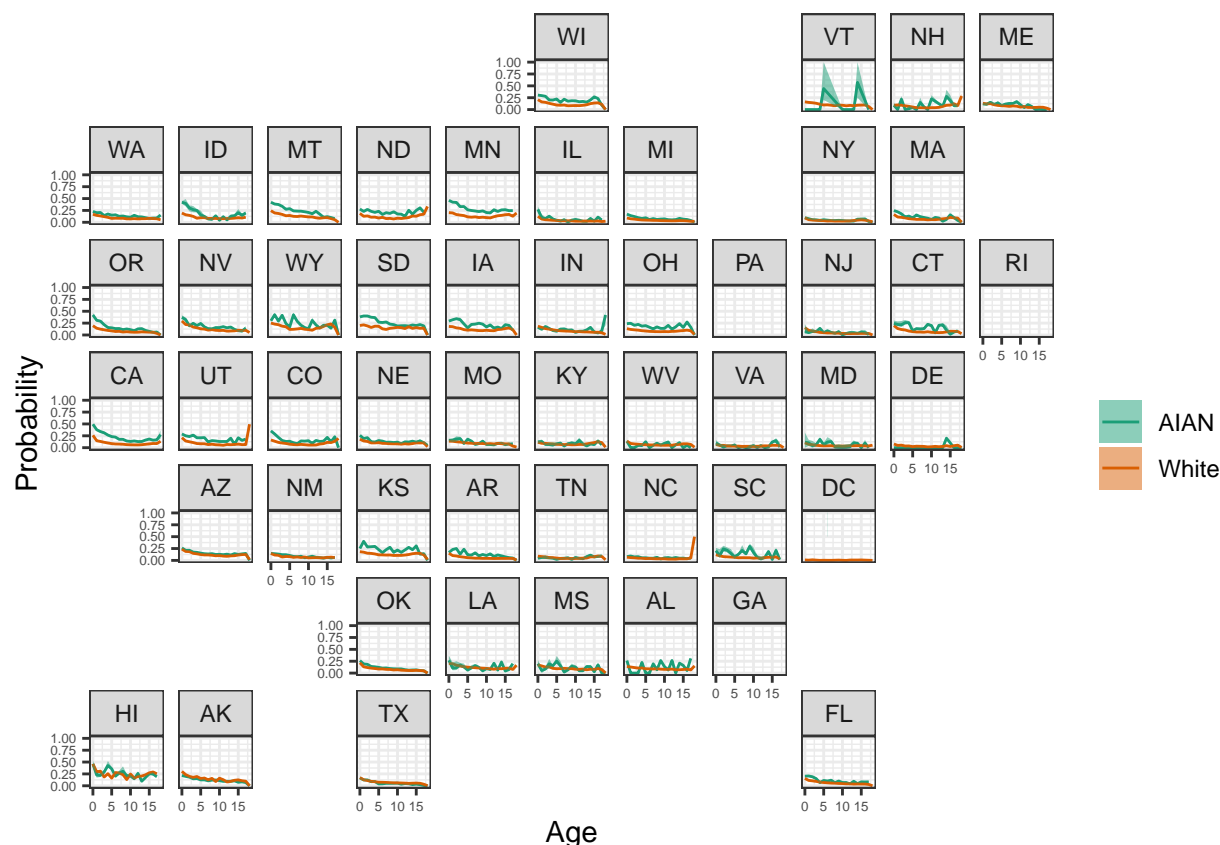


Figure 13: Probability of foster care, conditional on investigation, 2014 - 2018 levels of risk

Once a decision has been made to place a Native child into foster care, the Indian Child Welfare Act specifies a preference for placements with kin, with members of the child's tribe, or with another native family. Non-native and non-kin foster families are intended to be a last resort, when preferred placement settings are unavailable. Figure 15 shows the proportion of AIAN children in foster care who were ever placed into a non-kin non-native foster setting during their time in foster care. Infants have the highest likelihood of being placed with kin or with a native family. However, if 41 US States, we estimate that more than 50 percent of AIAN infants are placed in a non-native non-kin foster setting. Maryland, New Hampshire, Connecticut, Pennsylvania, North Carolina, and Florida have the highest rate of ICWA preferred placements for infants, ranging between 54 and 61 percent of infants placed with either kin or an AIAN foster family. In Georgia, South Carolina, and Kentucky, more than 80 percent of AIAN infants were placed with a non-kin non-Native foster caretaker. States with the greatest frequency of AIAN foster care also routinely place AIAN children with non-kin non-AIAN caretakers. In South Dakota, 70 percent of infants are placed in non-kin non-Native settings, In Washington and North Dakota, 65 percent of AIAN infants are placed in non-kin non-AIAN settings. In Oklahoma, Minnesota, Wisconsin, and Montana, more than half of all AIAN infants placed in foster care are placed with non-kin non-AIAN caretakers. The likelihood that an AIAN child will be placed with a family member or other Native foster caretaker typically decreases with age. There is generally a very small chance that an AIAN teenager placed into foster care will be placed with kin or with an AIAN foster family.

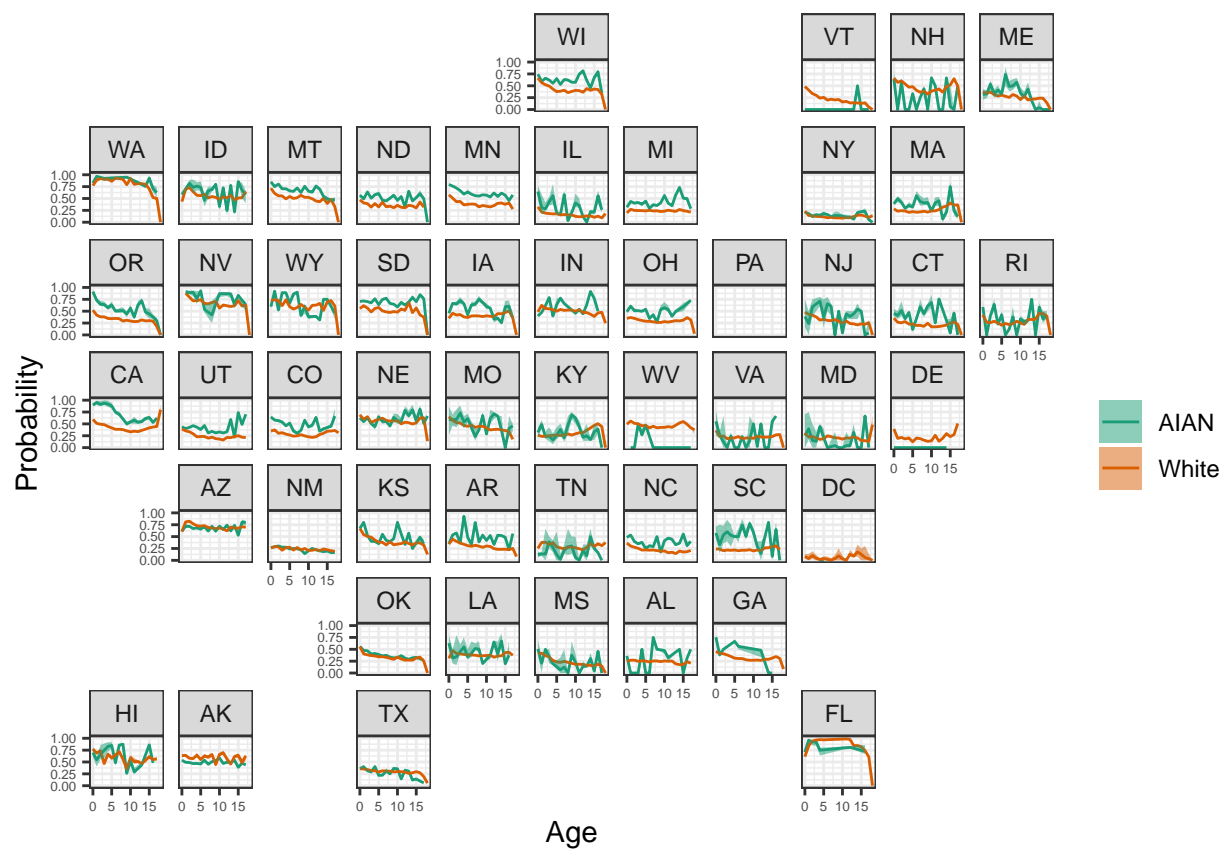


Figure 14: Probability of foster care, conditional on substantiation, 2014 - 2018 levels of risk

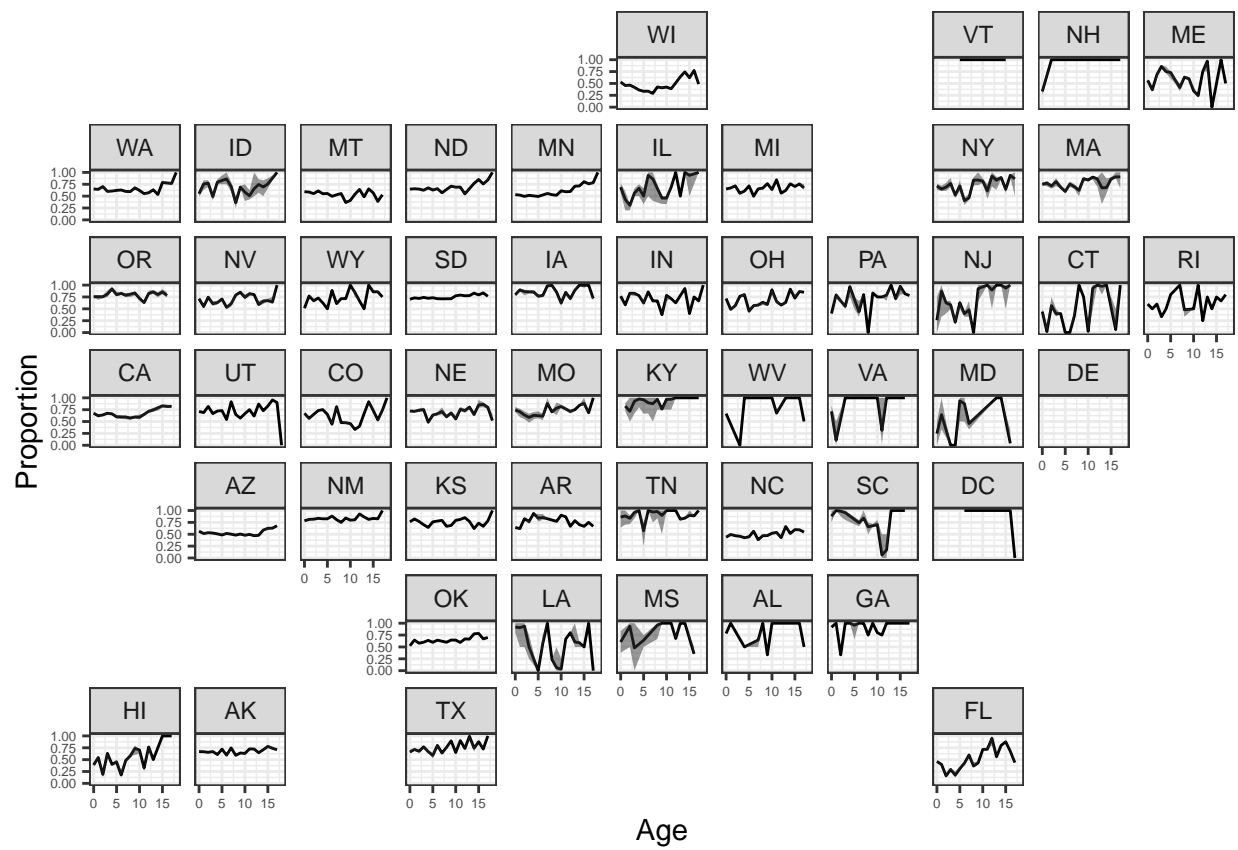


Figure 15: Probability AIAN children in foster care ever placed in non-kin, non-native foster setting, 2014 - 2018 levels of risk

## **5 Discussion**

## **6 Conclusion**