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A 5-Year Projection of the Number of Children Reaching Age 18 while in Foster Care

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## Introduction

In this brief summary, we describe our effort to project the number of children who will turn 18 while in foster care (i.e., will age out of foster care) 5 years into the future. As a general finding, the number of children aging out of foster care will most likely decline and then level off over the next 5 years. The number of children aging out is influenced by the following three factors: changes in the number of children entering care, changes in the age distribution of children entering care, and changes in how long children stay in care. All of these factors now point to a decline in the number of children aging out. An explanation of our approach, the underlying population dynamics, and the results all follow.

## Approach

At Chapin Hall at the University of Chicago, the Center for State Foster Care and Adoption Data (the State Data Center), maintains foster care administrative data from a varied group of state child welfare agencies. Using data from the 15 state agencies that reported to the State Data Center from 2002 through 2008, we examined trends in the number children turning age 18 while in care. ${ }^{1}$ The motivation for the present study is clear. Child welfare agencies have an obligation to prepare adolescents for adulthood, especially if they are living away from home under the care and custody of the state. Meeting that obligation in a common-sense way depends to a large extent on knowing whether the expected number of adolescents reaching age 18 while still in the foster care system is growing. Without that knowledge, it is simply more difficult to allocate resources.

To project the number of children who might be expected to leave foster care after turning age 18 inside the next 5 years (2009 through 2013), we used a relatively simple demographic model. Over a long time horizon, the number of children transitioning to adulthood directly from foster care is a function of the number of children admitted, their age at admission, and an age adjusted average length of stay. Very young children (i.e., infants) have a low probability of aging out (i.e., turning 18 while still in care) because they typically leave placement well before that much time passes. Older children (i.e., teens), by comparison, are more likely to age out because their $18^{\text {th }}$ birthday is not so far in the future. To capture these dynamics fully requires data that span at least two full decades.

Because the timeframe under consideration is much shorter, the problem at hand is a bit more complicated. We have data from 2002 through 2008 in a relatively large number of states, and we are trying to estimate what is likely to happen between 2009 and 2013. This means we cannot necessarily assess with any accuracy whether a young child admitted today will eventually leave care at age 18 . What we do know is how many children were in care on January 1, 2002 and their age on that date. Of those children, we can determine, based on their then-current age, whether they could possibly reach age

[^0]18 prior to 2013 and whether they are likely to be discharged prior to reaching that point. To these data, we also have to add children admitted from 2002 forward and children who will likely be admitted during the window of time that runs between 2009 and 2013. For the years, between 2002 and 2008, we have the actual number of children and their age at admission; after 2008, we have to estimate the number and age composition of the children entering care. For the children admitted during the window of observation, we also have to have an estimate of their length of stay in relation to their $18^{\text {th }}$ birthday.

To formally project the number of children aging out of care for the next 5 years, our statistical analysis has two parts. First, we examined the relevance of several variables to the number of children aging out: the number of children who enter care during each year, the number of children in care at the start of each year and their year of entry, entry ages for all children, the length of time children spent in care, and their initial placement status (e.g., congregate care, kinship care or foster care). We developed a statistical model for prediction that includes some of these variables as inputs. ${ }^{2}$ Once the most important factors were included in the model--the number of children already in care, the number of new entrants, entry age and duration in care--then initial placement type and the year of entry did not add much value for predicting the number of children exiting from care in any one year. ${ }^{3}$

Second, we considered recent trends in the number of admissions, ages at entry, and time spent in care in order to set reasonable values for their future levels. For the purpose of predicting the number of children aging out of care in 2009 through 2013, we are not concerned with exit patterns for any children too young to turn eighteen prior to 2013 who were either already in care at the start of 2009 or who might enter care during the projection period. Thus, we only considered children in care at the end of 2008 who will turn at least 13 years old in 2009 and potential future entrants at least age 13 in 2009, or age 14 and older in 2010, or at least 15 years old in 2011 and so on.

As potential factors contributing to this trend, we began by considering recent trends in the number of first-time entrants to care (i.e., admissions), the length of time children spend in care (i.e., duration), and the ages of children at their first entry into care. First, the number of children exiting care will always be related to the number of children who entered care in the past. With respect to the number of children leaving foster care after they turn age 18 , the admission data are indeed telling. Figure 1 shows for each year between 2002 and 2008 how many children were admitted in the states whose data we are using, by their age at admission. In general, admissions have been falling, but most of that effect is found in children between the ages of 3 and 14. Among very young children ( 0 to 2 ) and older adolescents ( 15 to

[^1]17), changes were less pronounced. That said, the general decline in 10 - to 14 -year-olds together with a more recent drop in the number of 15- to 17-year-olds does, all things being equal, portend a drop in children aging out because most children who do age out come from these admission groups.

Figure 1: Number of children entering care for the first time in 2002-2008, by age group.


The second model input is average time spent in care (length of stay). These data (not shown) suggest that length of stay has not changed much over the recent past. Put another way, the likelihood of aging out, given age at admission, does not appear to be changing enough to offset the decline in the number of children entering care. The number of children in care on January 1 of each year (not shown) was a third model input. These data suggest that as a result of declining admissions, reflected in Figure 1, the number of teenagers in care at the start of each year has also been declining. For example, we found that the number of teenagers already in care at the start of 2009 was just 80 percent of the number in care at the start of 2008 and 70 percent of the number of teenagers in care at the start of 2007. Again, this is a result of the decline in the number of children ages 10 to 14 entering care in 2002-2008 and provides more evidence for the conclusion that any projection should show a shift in the number of children turning age 18 while in care.

Finally, although not an input into the model, we did examine the number of children aging out each year between 2002 and 2008. These data, which are found in Figure 2, represent the baseline against which future trends are judged. Consistent with national trends, these data show the general increase in the number of children reaching age 18 while still in care. The data also show that the increase was for the
most part a function of changes affecting children in the older age groups. The data also point to a slowdown in the rate of growth, as the year-over-year increases became smaller.

Figure 2: Number of children aging out of care in 2002-2008, by age at first admission.


## Results

Going forward, Figure 1 makes it clear that a reasonable projection model will likely forecast a decline in the number of children aging out of foster care. As already noted, duration in care has been quite stable in recent years for older children and we have no evidence of a change going forward. Further, because the distribution of entry ages is simply taken as observed for those children already in care, the only model inputs in need of further discussion are plausible values for the count and entry-age distribution for future entrants to care in 2009 through 2013.

We used a conservative scenario for estimating future entrants to care at ages 13-17 in 2009 through 2013. We assumed that the total number of entrants to care will return to 2006 levels (higher than in 2007 and 2008). Also, we set the future age distribution each year to mirror that of 2006, putting the number of age 15-17 entrants at its highest level since 2002 and increasing the number of age 10-14 entrants to prior, higher levels. The result may be an overestimate of the number of children aging out during the projection period.

Figure 1 illustrates the likely time trend for the number of children aging out based on the data from 15 states. Three separate time series are depicted: the observed number of youth aging out in 2002-2008, plus two projections. The first projection tests the model by predicting the number of aging-out exits in 2004-2008, but using only the historical record of children in foster care up through December 31, 2003. The second projection uses all of the data through December 31, 2008 to look forward 5 years (20092013) by applying the model. As suggested by the empirical data, the model predicts that the rising number of youth aging out of care up through 2008 is expected to decline and then level off.

Figure 1: Estimates of the number of children turning 18 while in foster care.


Of course, whether the projected decline is observed depends on whether the model assumptions hold true going forward. Because we opted to use conservative estimates for future admissions (i.e., a return to higher admission rates), the decline could be, and will be, steeper if admissions to foster care follow recent trends and decline further. Even if admission rates rise and length of stay increases in the next few years, the model suggests that it will be some time before changes at the system's "front door" are observed at the "back door" because of what has already happened. In short, looking out over the next few years, it appears the number of youth aging out is poised to decline, at least insofar as this collection of states is concerned. It is important to point out, however, that the results presented here reflect what is likely to happen in the aggregate. Results in individual states may and do differ. Even within states, the results may differ from what is true at the state level.

Finally, with respect to the challenges facing public child welfare agencies, these data say nothing about the unmeasured ways in which the population of youth aging out is changing. Although fewer in number, it may be that those youth who continue to age out are those youth who have always needed the most support. If so, the drop in the absolute number says less about what is required to meet the needs of youth making the transition to adulthood than we might think at first.

## About Chapin Hall

Established in 1985, Chapin Hall is an independent policy research center whose mission is to build knowledge that improves policies and programs for children and youth, families, and their communities.

Chapin Hall's areas of research include child maltreatment prevention, child welfare systems and foster care, youth justice, schools and their connections with social services and community organizations, early childhood initiatives, community change initiatives, workforce development, out-of-school time initiatives, economic supports for families, and child well-being indicators.

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[^0]:    ${ }^{1}$ Some states already provide extended services for children who reach age 18 while in foster care. As a result of the 2008 Federal Fostering Connections to Success act, more states are expected to join this effort and existing programs will likely expand. The State Data Center currently holds data through 2008 and will not reflect 2009 effects from these programs.

[^1]:    ${ }^{2}$ The model is a standard statistical and actuarial model called a generalized linear model. In particular, we used a Poisson loglinear regression model that estimates the average number of children remaining in care at the end of a year as a function of the number children in care at the start of the year and their time already spent in care (duration) plus the number of children entering care during the year (admissions) and their entry ages.
    ${ }^{3}$ The State Data Center has information on children through $12 / 31 / 2008$, but many children in care at that time will stay in care for some time after and may eventually age out. Others may have left care prior to $12 / 31 / 2008$, but could later reenter care and then stay long enough to age out while in foster care. After an examination of durations and reentry patterns by entry age, care was taken to avoid bias in duration estimates due to this so-called right censoring of the data.

