

Minn-Link Child Welfare Special Topic Report No. 7

Homeless and Highly Mobile Students:

A description of the status of homeless students from three school districts in Minnesota

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Center for Advanced Studies in Child Welfare

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Minn-LInK

The Minn-LInK project at the Center for Advanced Studies in Child Welfare at the University of Minnesota School of Social Work relies on secondary administrative data obtained from statewide public programs. Minn-LInK provides a unique collaborative, university-based research environment with the express purpose of studying child and family well-being in Minnesota. The administrative data sets used in this descriptive analysis originate in the Minnesota Department of Human Services (utilizing the Social Services Information System, or SSIS) which oversees the state child protection system in Minnesota and student public school education records from the Minnesota Department of Education. All data use has been within the guidelines set by strict legal agreements between these agencies and the University of Minnesota that protect personal privacy.

Human service programs collect data for multiple purposes: program administration, compliance with federal and state reporting, fiscal management, and local outcome measures. Policy and practice research has rarely been the focus of either automated system development or data collection. While these realities do not prohibit the successful design, implementation, and completion of research, it does present researchers with unique challenges related to study design and time-frames for study group selection that do not occur when collecting and working with primary data. Instances in which data system conditions drove the structure of this study have been noted in this report.

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Executive Summary

The current economic downturn has exposed a crisis for that has been quietly unfolding over the past three decades. An increasing number of American school-age children lack fixed, permanent housing which negatively affects their school engagement and ultimately can jeopardize long-term school success. Much of the previous research on this problem has focused on specific interventions that have been launched in specific jurisdictions on targeted populations, but seldom have researchers attempted to study homeless and highly mobile students at a population level. This report describes one attempt at using statewide administrative data from child welfare and education systems in one Midwestern state to form a broader picture of how homeless and highly mobile students are faring. We learned that homeless and highly mobile students are significantly different from their non-mobile peers in a number of ways, and our ability to examine their historical attendance patterns and child welfare involvement suggests that local school data could be used differently to identify students earlier and that social services partnerships with schools should be strengthened and maintained. These data also suggest that it may be possible to build models that can estimate the total population of homeless students in districts and states. Having better population-level estimates of the extent of this problem can help practitioners understand the degree to which they are addressing the students in their communities who are in need as well as make more well-informed funding requests and staffing decisions.

Introduction

The increasing number of homeless students in the United States, particularly in the wake of the current economic downturn, is reaching crisis proportions. Research has begun to identify particular risks and negative outcomes homeless children face in their school, social, and family lives. In academic settings, there are more attempts at providing supports to homeless students, but the effectiveness of these interventions has only recently begun to be measured. One reason for measurement challenges is the difficulty in identifying homeless and highly mobile students, particularly as they move between school districts and are reluctant to self-identify to school staff.

Furthermore, little research has looked outside just one school district or community, and there have been few attempts at describing broad populations of homeless students. This study uses statewide and select local district education and child welfare data in an attempt to identify children with and without indicators of mobility to explore how they compare with students who are identified as homeless by schools. By tracking homeless and highly mobile students across and within Minnesota school districts, as well as examining their child protection contacts, a more comprehensive, population-level picture of homeless students can be developed which can create a better understanding of cross-system involvement of these students. Understanding broad contextual factors can facilitate the development of more effective early intervention strategies, provide a foundation for other population-based research on homeless students, and improve methods of estimating the extent of student homelessness.

Background

The current economic downturn is exposing a growing crisis of homelessness that has worsened over the past two and a half decades. Since the 1980s national shelter bed use has increased dramatically, especially among families (Minnesota Coalition for the Homeless, 2008). The Urban Institute (2000) estimates that of 2.3 million individuals experiencing homelessness in the United States each year 1 million are children. Current estimates are that families with children now comprise 30% of the national homeless population. Minnesota's figures are similar. Some of the most comprehensive work on homelessness is done by Wilder Research. The most recent survey by Wilder (2007) found that children in families made up 35% of Minnesota's homeless population in 2006, with eighty-four percent of these children under age twelve. The same study found that the number of homeless families in Minnesota tripled between 1991 and 2000, with numbers stabilizing between 2000 and 2006. Over the 1991 and 2006 time period the number of homeless parents who reported enrolling their children in

school rose from 52% to 89% - an encouraging indicator of the priority homeless parents are giving school attendance, but a concerning trend for schools (Wilder, 2007).

Despite the steady increase in homelessness over the past 15 years, only recently has the issue garnered the attention of mainstream media. For example, in the wake of the economic downturn of the last year (2008) and the escalating housing crisis, homelessness generally (Dillon, 2008; Armour, 2008) and homeless students specifically (Paige, 2008; Swarns, 2008) have only recently become national news topics. A recent article from the Associated Press noted a significant increase in the number of homeless families in Massachusetts (LeBlanc, 2008) and a September 30 National Public Radio broadcast examined the experiences of California, Chicago, and North Carolina schools educating homeless students in the wake of mass foreclosures (Abramson, 2008). Similarly, local Minnesota press has just begun to give attention to this issue (Masten, Heistad, Cutuli Hebers, Obradovic, Chan, Hinz, & Long, 2008; Rosengren, 2008; Rellerford, 2008; Belden, 2008; Tundell, 2008). The recent escalation in homelessness is driven by the mortgage crisis which affects not only single-family homeowners, but those who rent from landlords whose mortgages are affected, which leads to tenant eviction (Erlenbusch, O'Connor, Downing, & Watlov Phillips, 2008; Wise, 2008).

Homeless Students and Educational Vulnerability

Homeless students experience a variety of significant negative outcomes compared with their non-homeless peers and this was particularly true prior to the reauthorization of the federal McKinney-Vento Act in 2002 (U.S. Department of Education, 2009) which allowed for use of grant funds for educational supports. As a result, most studies that examine the academic achievement of homeless students precede this change and although dated, provide the bulk of what we know about how homeless students fare in school. The ways in which McKinney-Vento has changed the experiences of homeless and highly mobile students is only just emerging.

Much of the research on cognitive and academic achievement has found that though homeless students do not differ significantly from their low-income (housed) peers on achievement tests, they are likely to score lower than them, and the general population (Masten, Sesma, Si-Asar, Lawrence, Miliotis, & Dionne, 1997; Obradovic, Long, Cutuli, Chan, Hinz, Heistad, & Masten, 2007; Rafferty, Shinn, & Weitzman, 2004; Rubin, Erickson, San Augustin, Cleary, Allen, & Cohen, 1996; Zima, Wells, & Freeman, 1994). For example, in a large group of 3,805 homeless 3rd through 10th grade students in New York City, 42% scored at or above grade level on the Degrees of Reading Power test, compared with 68% of all New York City students (Rafferty & Rollins, 1989). In addition, the authors report that

of the 4,203 2nd through 8th grade homeless students taking the Metropolitan Achievement Test, only 28% scored at or above grade level, compared with 57% of all students. Smaller studies have similar findings. Rafferty and colleagues (2004) compared the academic achievement of 46 formerly homeless adolescents to 87 permanently-housed adolescents who were receiving public assistance benefits and found that homeless youth scored well below grade level in reading and math compared with their housed peers and other children in the city: in reading 20% of homeless, 31% of housed, and 54% of all students scored at or above grade level; in math, 28% of homeless, 44% of housed, and 55% of all other students scored at or above grade level on achievement tests.

In 1996, Rubin and colleagues compared 102 homeless children living in shelters in New York City with 178 housed students. They randomly selected the housed comparison group from the same classrooms as homeless youth to control for educational environment. Upon examination of verbal and non-verbal intelligence test scores, there were no significant differences between the two groups. However, differences in academic achievement emerged, as homeless youth performed much worse, an indication that although they have similar cognitive capabilities, achievement differs significantly. More homeless youth performed below grade level than housed youth on all three academic scales: reading (75% versus 48%), spelling (72.4% versus 50%), and math (53.6% versus 21.7%). Although the Minnesota-specific literature on the academic outcomes of homeless students is more limited, 41% of homeless families report having a child with a learning disability or other school difficulty (Wilder, 2007) and a study of the achievement of 59 African-American children living in shelter in Minneapolis found that 80% scored in the bottom quartile on overall academic achievement tests (Masten et al., 1997).

Several other studies have demonstrated that the disproportionate negative academic experiences of homeless students often lead to poor academic performance including absenteeism (Rafferty et al., 1989; Rubin et al., 1996; Zima et al., 1994), grade repetition (Buckner, Bassuk, & Weinreb, 2001; Masten et al., 1997; Rafferty et al., 2004; Rubin et al., 1996), and the need for special education services (Masten et al., 1997). Rubin and colleagues (1996) found that 22% of homeless children repeated a grade compared with only 8% of a housed comparison group, while Buckner found a slightly less significant likelihood of being held back if homeless (36% for homeless and 32% for housed youth) (Buckner et al., 2001). In Minnesota, 19% of homeless families reported having a child who repeated a grade (Wilder, 2007).

Homeless Students and Child Welfare Involvement

Though there is very little literature examining child welfare contact and homeless families, what does exist indicates that homeless families have higher rates of child welfare involvement than non-homeless families. Child welfare involvement varies across studies of homeless families, but generally includes receipt of services, child protection investigation, or out-of-home placement (foster care). A study of 8,251 homeless children in New York City found that in the five years following their first shelter admission, 18% of families had received some child welfare services (Park, Metraux, Brodbar, & Culhane, 2004). More recently, a report by Duffield & Lovell (2008) notes significant increases in child protective services involvement reported by public school homeless liaisons surveyed in the wake of the 2008 housing crisis. In Minnesota in 2006, Wilder (2007) found that 10 percent of homeless adults who have minor children report that there was an open child protection case in the county (this among the 9% of homeless adults who had children with them.)

Homelessness can also negatively affect mothers whose children are involved in foster care (Bassuk & Weinreb, 1994; Robertson, 1991) and can create a barrier to reunification if a homeless mother also has mental illness (Hoffman & Rosenheck, 2001). Culhane and colleagues (2003) investigated the prevalence of child welfare involvement of 23,227 mothers grouped into three housing categories over a five-year period: ever homeless, low-income, and all others. They found that the children of women with any history of homeless shelter use were much more likely to have child welfare involvement (37%, compared with 9.2% of low-income and 4% of all other mothers) and disproportionately more likely to be in foster care at least once (62%, compared to 39% of low-income and all other mothers).

In Minnesota, Wilder (2007) found that 70% of homeless youth reported an out-of-home placement in foster care, residential treatment, corrections, or a group home and that 24% of adults who were homeless reported being homeless as children themselves. When looking specifically at foster care, Wilder reported that 2 of 5 homeless children had lived in a foster home. In a smaller study comparing homeless youth with low-income peers, Masten and colleagues (Masten, Miliotis, Graham-Bermann, Ramirez, & Neemann, 1993) found that 7% of homeless youth and 3% of housed youth had lived in foster care at some point during their lives. Considering the strong correlation between child welfare involvement, family dysfunction and family stress, a high likelihood exists that homelessness is one of many problems experienced by families involved in child welfare.

The Social, Emotional, and Behavioral Costs of Homelessness

In addition to academic problems, homeless youth struggle socially and it is important to note that this relationship is not causal, but correlational. National and local studies have found disproportionate rates of emotional and behavioral problems in homeless children (Masten et al., 1997; Wilder, 2007; Ziesemer, Marcoux, & Marwell, 1994; Zima et al, 1994). Zima et al. (1994) reported that 37% of homeless children exceeded the threshold on the Children's Depression Inventory, and although they were twenty times more likely than their peers to have depressive symptoms, only 23% had ever received therapeutic services. Homeless students were also 1.5 times more likely to have behavior problems. Overall, Zima and colleagues (1994) found that of 78% of homeless students with academic, emotional or behavioral problems, only one-third of parents were aware of any problems with their children and only approximately half received some type of service.

In Minnesota, homeless families are three times more likely to have at least one child with an emotional or behavioral problem (Wilder, 2007). A Minneapolis study of 159 homeless youth and 62 low-income housed youth on various measures of social and emotional issues found that homeless youth had experienced significantly more negative life events, had lower perceived self-worth and academic confidence, were less likely to report having a close friend, and exhibited more behavior problems than their low-income peers (Masten et al., 1993). A subsequent study by these researchers confirmed the presence of more behavioral problems in homeless students compared to expected norms. Moreover, there was a strong correlation between behavior and achievement (Masten et al., 1997). The frequency of exposure to traumatic events contributes to these behavioral and emotional vulnerabilities for homeless children. It is estimated that 25% of homeless children have been exposed to domestic violence in the previous year (Institute for Children and Poverty, 1999) and by the age of eight, Bassuk & Rosenberg (1997) found that one in three homeless children have a diagnosable mental disorder. A recent study of Minnesota children in shelter revealed that many children had experienced the death of someone close to them and they had experienced an average of 3.7 violent events (Bassuk, 2007).

The Effects of School Mobility on Engagement

Homeless students experience high rates of situation-specific school mobility (related to the immediate episode of homelessness) and over their lifetimes (not necessarily related to specific episodes of homelessness) (Buckner et al., 2001; Masten et al., 1993; Rafferty et al., 2004. In one year, 76% of homeless youth changed schools compared with 36% of housed youth (Buckner et al., 2001)

and in Minneapolis, 64% of homeless and 40% of low-income housed children had changed schools in their lifetimes (Masten et al., 1993). Rafferty and colleagues (2004) found that mobility rates were higher for formerly homeless than never homeless adolescents, at 4.2 schools to 3.1 schools since kindergarten, and also found that students who moved more frequently had higher rates of grade retention, an indication that school movement becomes part of some homeless student's educational experiences even after homelessness is resolved.

In this discussion it is important to acknowledge that students change schools for many reasons that often have little or nothing to do with residential instability. In many cases, such changes are positive (e.g. moving to a school that better meets their needs or one that provides special education services). However, excessive school mobility adversely impacts school engagement and can hinder school completion. Christensen and Thurlow (2004) define two types of school engagement: academic and behavioral, which refers to observable academic performance, attendance, and classroom behavior; and cognitive and psychological, which relates to a sense of belonging, connection, and positive relationships with peers and teachers. Establishing these connections to school requires regular attendance. Given the school movement and enrollment disruptions experienced by homeless and highly mobile students, dimensions of engagement are seriously threatened.

Older Students: Unaccompanied Homeless Youth

In addition to young children living in homeless families, there is also a subset of homeless youth who live on their own. These unaccompanied youth (under age 18) comprise almost 3% of Minnesota's total homeless population (Wilder, 2007). While the estimates of these youth have been stable over time, Wilder reports that youth are often turned away from shelters and 25% recently reported having slept at least one night outside. Of surveyed unaccompanied youth, 35% participated in special education services in school, over three times the average rate of special education participation for Minnesota students (generally 11-13%) (Wilder, 2007). In addition, unaccompanied youth were more likely to have been physically or sexually abused, have a mental or behavioral health issue, entered drug treatment, or have involvement with child welfare services than the general population.

McKinney-Vento Act (2002)

The Stewart B. McKinney Homeless Assistance Act of 1987 was reauthorized in 2001 as the McKinney-Vento Homeless Education Assistance Improvements Act (2002). It ensures that homeless students have the opportunity to "meet the same challenging State student academic achievement

standards to which all students are held," and that homeless students have access to the "same free, appropriate public education as provided to other children and youths" (U.S Department of Education, 2009). The Act also mandates that school districts provide school access to homeless students, within their available resources. The policy defines homelessness as lacking "a fixed, regular, and adequate nighttime residence" and includes children and youth who are sharing the housing of other persons or living in motels, hotels, trailer parks, camp grounds, shelters, cars, bus or train stations, abandoned buildings, substandard housing, or any other public place not ordinarily used as a regular sleeping accommodation and applies to migratory youth and children awaiting foster care placement.

In practice, McKinney-Vento requires states to enroll homeless students in any public school immediately, even if they do not have proper documentation, such as birth certificates or immunization records and the most recent reauthorization strengthened the data collection and reporting responsibilities of districts and state. McKinney-Vento also provides federal funding to states for a variety of services. Each state is to establish a state coordinator's office to gather data on and create a plan for the education of homeless students. Funds can be used for tutoring and after school programs, school supplies, parent education, preschool, referrals to health and mental health services, and other related services. Money used for transportation of homeless students is especially valuable. McKinney-Vento allows homeless students to continue to be transported to their school of origin (the school in which they began the year) even if they move out of the school's attendance area during the year. Since many homeless children move frequently among attendance areas within and between districts, this helps provide some stability in their lives by keeping them connected to their home school community. Limited evaluation of the effectiveness of the McKinney-Vento policy has shown the transportation component to be a particularly critical support (Wand James & Lopez, 2003).

Improving Breadth and Depth of Knowledge: Identifying and Describing Homeless Students

McKinney-Vento policy has enabled school districts to identify and stabilize a significant number of students who are homeless or highly mobile (H/HM) through transportation and tutoring supports. Through McKinney-Vento reporting, districts and states are better able to quantify trends in identified H/HM students. Specific intervention strategies target youth in shelters and school locations or measure the results of piloted services to specific H/HM populations. What is often unavailable in these important studies is an understanding of the target population in relation to a broader geography (such as a school district or state) or a description of a broader picture of the public systems in which H/HM students are involved (such as child welfare) – often simultaneously or in succession.

In schools, staff face particular challenges to identifying and reaching out to homeless students. While some students are willing to divulge their homelessness, others keep it themselves and often only after a staff person notices that a student seems unusually sleepy, has poor hygiene, is unusually fatigued, hoards food, or wears the same clothes for a number of days in a row do they discover the housing situation (National Center for Homeless Education, 2009). Older students may be homeless for many reasons that involve leaving for their own safety, being kicked out of their home or running away from parents. Other students may be definitionally homeless but do not consider themselves as such because they may be staying at a friend's house, sleeping on a relative's couch, or sleeping in the family car (literally having a roof over their heads).

Because homeless students look similar to students living in poverty, it is sometimes impossible to identify students unless they identify themselves (National Association of Secondary School Principals [NASP], 2004). As with any difficult-to-serve population, without an estimate of the total number of students likely to be affected, it is impossible to have substantive discussions about the additional resources required to meet needs or speculate on the degree to which interventions are serving a significant portion of the affected population. And, as with other vulnerable groups, only the most visible and most seriously affected children are served and, ultimately, studied.

In addition to building a better understanding of cross-system involvement, it will be advantageous to understand what we can of the histories of homeless students prior to their homelessness (or identification by schools) to explore opportunities to intervene earlier. Understanding this context and history can help (1) craft more effective early intervention strategies and (2) create a clearer sense of multi-system interaction that will produce opportunities for intervention that may relieve schools of the sole burden of homeless student vigilance. The purpose of this study was to fill these two important gaps in our current knowledge of homeless and highly mobile students in Minnesota and to provide a broader geographic and systemic foundation of analysis on which additional research may rest.

Study Data and Design

Study Approach

Three of the seven school districts that receive McKinney-Vento grants to serve homeless students in Minnesota accepted our invitation to assist with study design and data provision: Saint Paul, Minneapolis, and Duluth. Saint Paul and Minneapolis represent a significant portion of the Twin Cities metropolitan area and oversee all of what constitutes inner city or urban public schools. Duluth, a port city on the shore of Lake Superior in northern Minnesota, constitutes a district that serves a combination of urban and rural communities.

District Data

Based on local identification practices and the maturity of Homeless/Highly Mobile (H/HM) services to students, these three districts suggested the 2006 school year as the study year. This decision was also driven in part by the availability of public school data at the Minn-LInK project at the University of Minnesota, which would be used to learn more about students who had been identified as homeless by these three study districts. Because districts were asked to share their identified H/HM student records for the 2006 school year, data sharing agreements were signed between the University and the districts, to allow for exchange within data practices laws and agreed upon data security methods.

Statewide Education Data

Minn-LInK, which houses statewide data from the Departments of Human Services, Health, and Education, prepared statewide public education data for the 2006 school year for record matching and analysis as school districts prepared their H/HM data for exchange. The first step was to code the statewide education data so variables that would potentially indicate student mobility could be identified. Because education data contains a longitudinal record of the student's activity within a school year, it is possible to create a chronology of events and experiences for each student. Two areas of the public school data were believed to be particularly helpful in identifying student mobility: school, district, residential district changes, and student status updates. These variables were used together to identify which students were mobile and which were not.

Mobility

For each of the 858,023 students enrolled in public schools in grades kindergarten through 12 during the 2006 school year in Minnesota, the number of school changes, district changes, and

residential district changes were quantified by creating new variables. Students who had zero changes in these three areas were coded as Non-Mobile. The balance required additional examination.

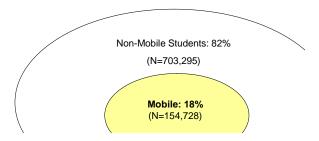
At this point is important to remember that there are many reasons why students change schools and districts and many have nothing to do with a residential move. These changes include, but are not limited to, changes in special education settings, school choice promotions, summer school enrollment, after-school activities, or changes that are beneficial to the student in some other way. In interpreting student movement in the administrative data, it was important to not mistake these types of change for indications of housing instability that would potentially over-identify mobility. Residential district changes, on the other hand, indicate that the student has changed the district in which they reside. This change indicates that the student has moved residences and, again, while this does not constitute a state of homelessness, it is an indicator of residential mobility.

Once the number of school, district, and residential district changes were quantified, a set of variables were examined that provide information about enrollment changes. School administration staff use these codes (called status end codes) to clarify changes in enrollment over the course of the school year. There are over forty status end codes, but some examples of typical codes include leaving school due to pregnancy, dropping out and re-enrolling, leaving school due to a juvenile corrections commitment, or due to social or financial reasons. Four status end codes were considered particularly helpful in the identification of students who had moved: moved outside of district (04); moved outside of state/country (05), or may be homeless: left for financial reasons (32); and left school for family environment reasons (33). If student records contained residential, district, or school moves as well as one or more of these four status end codes, they were coded as Mobile. If students had residential district moves but no status end codes indicating residential moves, they were coded as Non-Mobile.

Student records without residential district moves or status codes indicating residential moves but having some number of school or district moves were examined further. In these instances, each school or district move count was reduced by one for every status update that indicated a change in enrollment that had nothing to do with a residential move, but that may have involved a school move such as changes to special education enrollment, early childhood assessments, or dual enrollment. The rationale was that school and district moves might be reasonably attributable to these other changes and should not count toward the type of school mobility we wanted to measure. In almost all cases, the school and district change counts were reduced to zero after adjusting by these status updates and these students were coded as Not Mobile. For a summary of mobility coding, see Appendix A. This coding

scheme resulted in 82% of all public school students (statewide) (n=703,295) as Non-Mobile and 18% as Mobile (n=154,728).

Figure 1. Statewide Student Mobility, 2005-2006



It is important to remember that Mobile does not mean "homeless," but unidentified H/HM students are more likely to be among Mobile than among Non-Mobile students.

Joining District Data: Creating the Study File

In order to analyze the data from the three participating school districts, we created a sub-file that contained only the students who were enrolled in Saint Paul, Minneapolis, or Duluth schools at any time during 2006 (n=104,680 students). The proportion of students who were Mobile in this three-district file climbed to 42% (compared to 18%, statewide), or 44,022 students (Figure 2).

Minneapolis, St. Paul, and Duluth Students Only
N=104,680

N=44,022 42.1%

Figure 2. Core Study Districts and Proportion Coded Mobile

Next, we combined the H/HM identified students from 2006 from the three study districts (n=3,776 students) to explore the degree to which there was agreement between the students who were coded Mobile (using only the administrative education data) and the students who were identified as homeless or highly mobile by district liaisons.

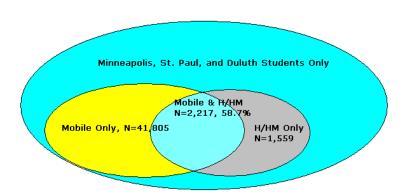


Figure 3. Agreement between H/HM Status and Mobile Coding for three Core Districts

Many students were identified as Mobile who were not identified as H/HM by the districts (n=41,805) which was expected. However, it was encouraging to see that 58.7% (n=2,217) of the students coded as Mobile using only the administrative education data were also students identified as H/HM by school district liaisons (a total of n=3,776 H/HM students, or 2,217 plus 1,559 in Figure 3). There were also 1,559 students that the districts identified as H/HM who were not identified as Mobile. This is a reflection of the stable attendance exhibited in their administrative education data and will be discussed later in this report.

These three student groups consequently formed the basis for subsequent analyses and discussions. For the majority of analyses we focus upon H/HM and Non-Mobile students as they provide the greatest contrast for mobility. All statistical analyses were conducted using version 13 of the Statistical Package for the Social Sciences (SPSS).

Results

Our goal was to take a multi-district and multi-system look at the status of students identified as H/HM utilizing data from a time period before as well approximately one year after they were identified. We began with an examination of these students prior to and during the year in which they were identified as H/HM by school staff.

Before: Status Prior to and During 2006

Geographic Distribution of H/HM Students

H/HM students change schools and districts frequently with a large proportion enrolled in the Minneapolis schools (Figure 4). One reason why Minneapolis students disproportionately appear among all H/HM students is that the majority of available shelter beds are located in the city. Figure 4 also shows that some H/HM students moved and were identified as H/HM in more than one school district.

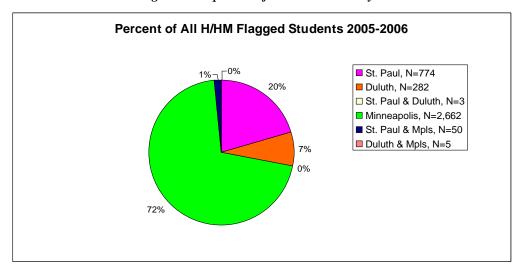


Figure 4. Proportion of H/HM Students by District

Comparing Groups: H/HM and Non-Mobile

Our analysis established four groups to support the exploration of how H/HM students differed most significantly from Non-Mobile students: H/HM (district identified only), H/HM and Mobile (identified by districts *and* by the administrative data), Mobile (identified only by using administrative data), and Non-Mobile (students with no evidence of movement and not identified as mobile by either districts or by using the administrative data) (Figures 2-3). We used the H/HM and Non-Mobile groups for the following cross-system comparisons. We return to a discussion of the district-only identified H/HM students in the discussion section of the report.

Child welfare involvement. Because both the statewide and core district files contained thousands of student records that made work unwieldy, sub-populations were selected for matching to statewide child welfare records. Because young children (ages 0-6) and teens (ages 13-15) are disproportionately more likely to become involved in child welfare generally and in out-of-home placement in particular (Wulczyn, 2002), two child welfare study age groups were extracted from the file: students in kindergarten and first grade and students in grades 7, 8, and 9. Two types of child welfare involvement were examined: determined child maltreatment and out-of-home placement (or foster care). Determined child maltreatment findings are those in which an investigation of a report has determined that maltreatment has occurred (in some states this is called verified or substantiated maltreatment). Out-of-home placement represents a removal of the child from home to a foster care setting and can occur with or without a determination of maltreatment. Students identified as H/HM experienced significantly more determined child maltreatment in the years prior to the 2006 school year than students who were Non-Mobile (Figure 5).

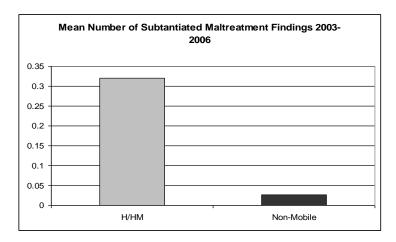


Figure 5. Substantiated Maltreatment Findings

This disproportionate involvement with child welfare was also reflected in out-of-home placements over the same time period (Figure 6) as well as the higher average number of days in placement experienced by H/HM students (Figure 7).

Figure 6. Out-of-home Placements

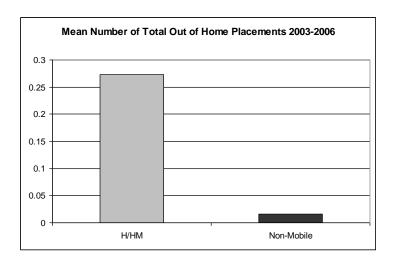
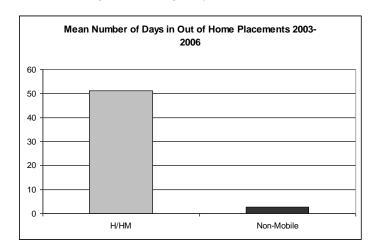
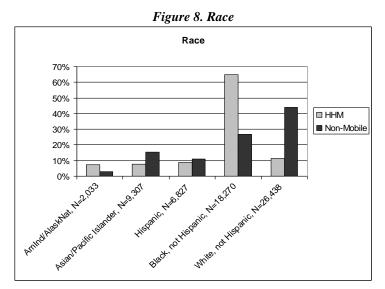


Figure 7. Average Days in Placement



Demographics. Black children are disproportionately represented among H/HM students (Figure 8).



There is a slight increase in H/HM identification among teens which peaks at grade 10 when H/HM status is examined by grade (Figure 9).

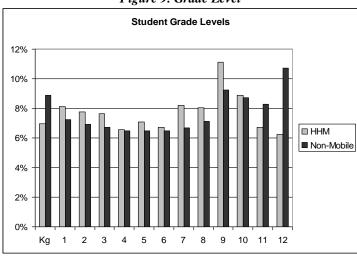


Figure 9. Grade Level

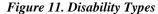
H/HM students were disproportionately more likely to be eligible for free meals (based on low income) (97.9% H/HM compared to 47.7% Non-Mobile), less likely to be identified as gifted and talented (3.3% H/HM compared to 21.4% Non-Mobile), and were slightly more likely to speak English in the home (81.7% H/HM compared to 72.8% Non-Mobile). In school districts, H/HM students are given automatic eligibility for free meals, so this rate of eligibility is also a reflection of practice.

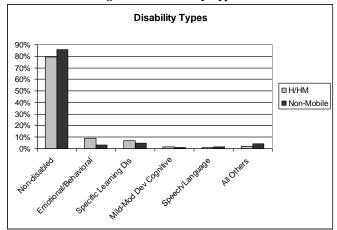
This particular cohort of H/HM students had only slightly higher rates of special education eligibility than their Non-Mobile peers (Figure 10), and the most notable differences in disability type

for H/HM students were slightly higher proportions of emotional and behavioral disorders and specific learning disabilities (Figure 11).

Special Education 05-06 100% 90% 80% 70% 60% □ H/HM 50% ■ Non-Mobile 40% 30% 20% 10% Not required Receiving Spec IEP/IFSP/IIIP Req, not participating in Ed terminated Spec Ed

Figure 10. Special Education





School attendance. We then examined the attendance histories as well as the attendance ratios for students during the 2006 school year. Figure 12 shows that H/HM students were exhibiting deteriorating attendance prior to the year in which they were identified as H/HM by districts.

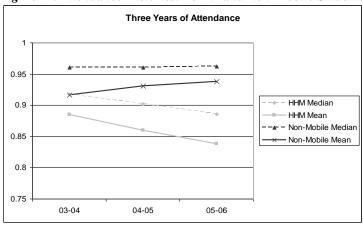


Figure 12. Attendance Histories: H/HM and Non-Mobile Students

Administrative education data also provides information on school disruption through status end codes. Given that there are over 30 codes, they were grouped into four categories: school change in enrollment (with no residential move), residential moves, disconnections, and school completion (e.g. graduation). Codes categorized as disconnections included leaving school due to marriage, pregnancy, residential treatment, entering corrections, financial reasons, expulsion, family or social environment, death, or unknown reasons. For the 2006 school year, H/HM students had higher rates of moves, school changes, and disconnections compared to their Non-Mobile peers.

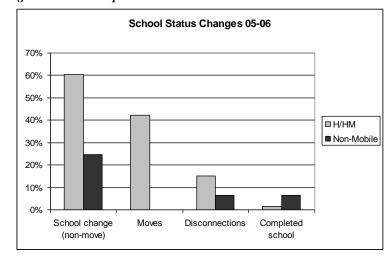


Figure 13. Status Updates to Enrollment: H/HM and Non-Mobile Students

One Year Later: Missing Students

To round out our description of H/HM students, we used data that allowed for the creation of a description of how students were faring the year after they were identified as H/HM. The first step to following up on students was to locate their records one year later.

Missing Students

Not all students identified by school districts as H/HM in 2006 had corresponding education records for the following school year. In fact, 943 students who were in grades kindergarten through eleven in the three study districts during 2006 were no longer enrolled in any Minnesota public schools by the following year (We unsuccessfully attempted to match these students to statewide data for 2006-2007 in case students moved elsewhere in the state.). We disregarded 148 seniors from 2006 since we assumed they graduated, left school to attend a GED program, or otherwise have less likelihood of being in public high school the following year. It is possible that some of the students who were expected in school again the following year left for private schools (for which data is not available). It might also be that their families left the state.

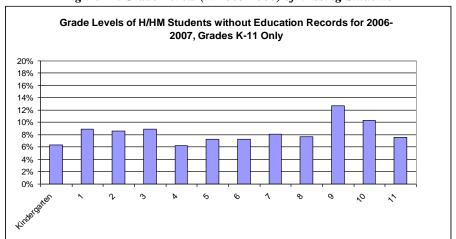


Figure 14. Grade Levels (in 2005-2006) of Missing Students

A significant proportion of missing students were teens during the 2006 school year (Figure 14) and may represent a group that is particularly vulnerable if on their own and homeless. Further, a deteriorating school attendance pattern can be observed for all missing students for the years prior to 2006 that is very similar to H/HM students who remained in Minnesota the following year (Figure 15).

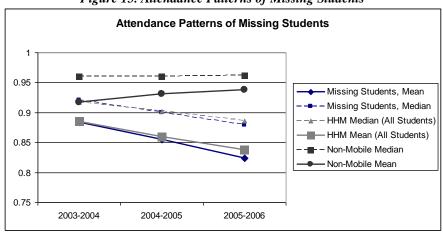


Figure 15. Attendance Patterns of Missing Students

An examination of the child welfare data from the post-2006 period for missing students showed that the majority had no contacts, but there were three children who experienced four total determined maltreatment events, two of whom experienced out of home placements between June 2006 and June 2007. However, if many of these children had in fact left the state, it would make sense that they would not have had encounters with the child welfare system.

After: Comparing H/HM and Non-Mobile Students One Year Later

Child Welfare Involvement

For the most part, study students (both H/HM and Non-Mobile) whose child welfare involvement was examined prior to and during the 2006 school year had no child welfare involvement between June 2006 and June 2007. Similarly, some children entered child welfare during the post-2006 period who were not involved in the prior period. Here we have focused on students who were involved in child welfare both before and after the 2006 school year. A smaller proportion of H/HM students were involved in determined maltreatment or out-of-home placement before and after the target school year compared to Non-Mobile students (but these groups are very small, Figures 16 and 17).

Figure 16. Students with Determined Maltreatment Before and After 2006, by Group

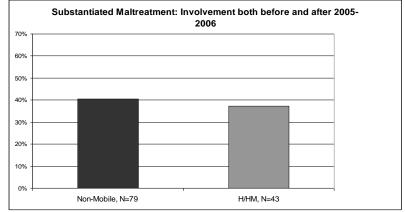
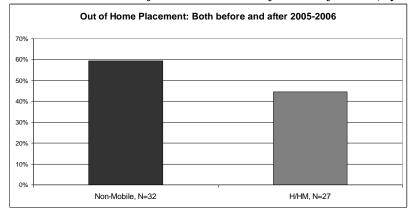


Figure 17. Students with Out-of-Home Placement Before and After 2006, by Group



Education

H/HM students who were enrolled in public schools in Minnesota during the next school year (2007) exhibited an overall increase in their attendance trajectories compared to their prior histories and to their Non-Mobile peers (Figure 18).

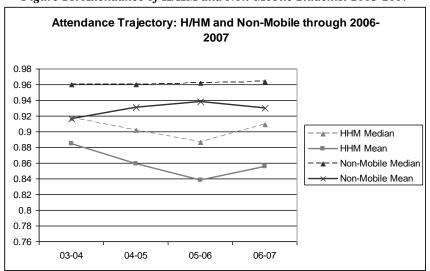
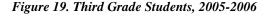
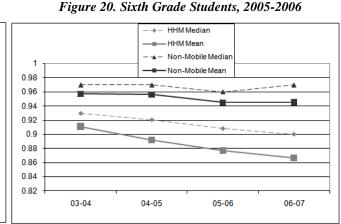


Figure 18. Attendance of H/HM and Non-Mobile Students: 2003-2007

As a group, H/HM students had relatively low median (87%) and mean (84%) attendance during 2006 (Figure 18). By the end of the 2007 school year, their attendance rose to 91% (median) and 86% (mean). H/HM students experienced a group-wise improvement in attendance when compared to Non-Mobile students. Examined by grade level (Figures 19-22), there were variations in the degree to which attendance patterns improved in the year after H/HM identification. Students in third and ninth grades (Figures 19 and 21) experienced the most dramatic positive changes in attendance while the attendance trajectories of eleventh and sixth graders (Figures 20 and 22) were mixed.

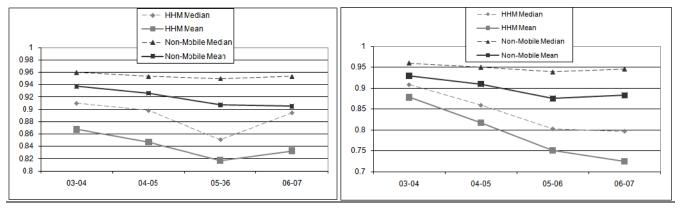




HHM Median HHM Mean Non-Mobile Mediar Non-Mobile Mean 0.98 0.96 0.94 --0.92 0.9 0.88 0.86 0.84 0.82 03-04 04-05 05-06 06-07

Figure 21. Ninth Grade Students, 2005-2006

Figure 22. Eleventh Grade Students, 2005-2006



Many attributes of students whose education records were reviewed in 2006 will not change the following school year (e.g. gender, race), but it helps to get a sense of the degree to which students' needs are consistently identified and met by different schools, staff, and over time. Two areas of particular importance for a student's educational continuity is special education participation and meal program eligibility. In 2006, 19.0% of H/HM students were participating in special education and a similar proportion (19.4%) were eligible during the following school year. Slight differences are explained by patterns of participation over the two years. In particular, while 89% of H/HM students had the same special education participation status both years (74% did not require special education and 15% were eligible both years), a small proportion (1%, or 21 students) met their plan goals during either school year, and 6%, (148 students) participated in special education in 2006 but were not participating in 2007. Approximately 4% of H/HM students who did not participate in special education during 2006 (n=115) were participating the following school year (the solid wedge in Figure 23).

Special Education Receipt H/HM Students: 05-06 and 06-07

Did not require, either year
Received both years
Needed but did not receive, either year
Received 05-06 but didn't need in 06-07
Needed but did not receive 05-06 but received 06-07
Did not receive 05-06 but received in 06-07

Figure 23. Special Education Receipt of H/HM Students: 2006 - 2007

While 98% of H/HM students qualified for free meals during 2005-2006, this percentage dropped to 93% in 2006-2007. Over half (n=2,460) of the original H/HM students were eligible for free meals during both school years.

Limitations

There are a number of important limitations to this work worth noting, many of which have implications for future research on homeless students.

Administrative data provide an incomplete picture of student's lives. There are many factors that determine outcomes for all students, including attributes that promote resiliency, that are not available in administrative systems. In fact, the information contained in much administrative data is reflective of the program the data is intended to support and, as such, is often deficit-based (as is the case with child welfare data) or is indicative of financial reporting requirements of public entities such as schools. Missing from these sources are aspects of student well-being including mental health, family assets and support systems, and the resources in local communities that can help students facing multiple challenges to thrive.

Mobility itself hampers longer-term follow-up. A fairly significant proportion of H/HM students could not be located in education records one year after the year of identification. As these students are highly mobile and dealt with homelessness during the previous school year, we cannot know how they fared one year later.

Cross-sectional examination of this population has important limitations. We examined a single population of students. This creates a number of important limitations to keep in mind when interpreting results. Although students were identified as H/HM during 2006, we have no way of knowing whether they were similarly identified during previous years or the year after. It is also impossible to know whether these findings are typical of H/HM students or reflect only the condition of H/HM students in these three districts during 2006.

Discussion

This study accomplished a cross-system examination of the status of a population of students who were identified as Homeless or Highly Mobile (H/HM) by three school districts in Minnesota during the 2006 school year. While there are limitations to using cross-sectional data (a single population), these data represented the total universe of students enrolled in these three districts during 2006, and historical data were incorporated to broaden our view. One study purpose was to describe a population of known H/HM students in relation to public education and child welfare systems. A secondary aim was to investigate whether linking the data from these other systems, which allowed for the incorporation of some historical data (such as attendance patterns), could shed light on whether there were typical patterns to H/HM students' involvement with these systems that would enable earlier identification. Contrasting historical and post-2006 data on H/HM students with a Non-Mobile population of students in the same school districts over the same time period provided evidence that H/HM students have significantly more involvement with child welfare and falling school attendance prior to the identification of homelessness or high mobility by the schools. The significance of these findings to practice, policy, and future research are iterated here. Our community practitioner study advisory group has proved instrumental in this regard and their feedback is incorporated throughout this section.

Falling Attendance and Child Welfare: Possible Antecedents of Homelessness

While our analysis did not test the predictive power of falling attendance trajectories, child welfare involvement, and eventual H/HM identification, the deteriorating attendance trajectories and high rates of child welfare involvement of H/HM students were not shared by their stable (Non-Mobile) peers. While not all students with falling attendance or child welfare involvement will wind up homeless, many homeless students are disproportionately more likely to have these experiences. If schools are able to examine attendance histories for students from prior years, they may have a ready way to identify students who require attention and referral to other resources such as economic assistance, housing assistance, or food support that might help avert impending housing crises in the family. Future research should examine the value of these attendance trajectories as well as future-oriented examinations of the eventual high school graduation rates of students who were H/HM at any time in their school careers.

Contact with child welfare is an indication of family stress and dysfunction and housing crises go hand-in-hand with family financial instability and poverty. The important connections between child welfare involvement and poverty are complex, well-documented, and cannot be overstated. Families

who come to the attention of child welfare agencies require economic assistance much more often than other types of services, and there is growing recognition that the inability of a parent to provide for their children becomes a source of depression, which leads to withdrawal and eventually neglect, the most common form of maltreatment. A neglectful parent is as unlikely attend to their child's educational needs as they are the child's emotional and physical needs. In communities where schools and child welfare agencies work cooperatively, there are opportunities for proactive identification of students whose families may be at risk for homelessness due to the stresses that lead to neglect and harm. Future research should incorporate the stabilizing role, if any, of child welfare involvement for homeless families.

Homelessness and Foster Care

Once maltreatment is determined, there is the possibility of out-of-home placement (or foster care) for a child, and H/HM students were much more likely than Non-Mobile students to have experienced placement prior to identification. Some connection between McKinney-Vento and foster care can be expected given that the policy states that students who are awaiting foster care placement are considered homeless. However, awaiting foster care placement cannot fully explain the dramatically higher rates of placement for H/HM years prior to 2006. These students are clearly experiencing a great deal of disruption prior to the year in which they were identified as homeless. Considering the critical importance of school stability for school engagement, future research should attempt to disentangle the degree to which foster care placement exacerbates school mobility and to what extent it interacts with homelessness for students in the child welfare system. Research should also consider whether broader interpretations of the application of McKinney-Vento policy as it relates to foster care students have differential effects on school outcomes. For instance, some states consider all foster care settings temporary, or highly mobile and provide services to these students as they would any homeless student.

For adolescents in placement the potential for homelessness increases because as children in care age, they are more likely to run away. This results in another form of homelessness — unaccompanied youth — and children in this situation are particularly challenging to serve. The data from this study may reflect an identification of these adolescent H/HM students, in Figure 9 in which the proportion of H/HM students peaks in 9th grade and then drops off dramatically perhaps as students drop out of school and in Figure 14 where the disproportionate number of H/HM students missing, presumably from the state, by 2007 were in 9th or 10th grade the previous year. These data imply that this age group is particularly vulnerable to school disconnection and because of their high mobility. We have no way of knowing if, in the following year, they re-enrolled in another high school in another

state or a private school in the state or if they are living on the streets. The recent passage of the Fostering Connections Act which mandates that a plan is established to ensure the educational stability of a child in foster care may promote greater stability among children who have foster care involvement and have periodic homelessness (H.R. 6893, Sec. 204, 110th Congress, 2008).

Improved Attendance and District-Only H/HM Students: Indications of McKinney-Vento at work?

While there have been few evaluations of the effectiveness of the McKinney-Vento policy, three aspects of this study are encouraging and suggest that more thorough, population-level evaluations are warranted. First, there is a marked increase in the mean and median attendance trajectories of H/HM students the year after they were identified (Figure 18) compared to their Non-Mobile peers that implies, although it does not prove, that contact with McKinney-Vento policy helps stabilize school attendance for these students. Second, some students (4%) who were not receiving special education the year they were identified as H/HM were receiving it the year following identification (Figure 23). This raises the question of whether these 115 students (seven of whom were assessed as needing special education in 2006 but were not receiving it) would have received special education during 2007 had they not been identified as H/HM during the previous year and experienced more stable school attendance. The lower out-of-home placement rates for H/HM students compared to Non-Mobile peers after H/HM identification in 2006 deserves further attention but may again imply that stabilizing school attendance had broader affects on the situation of families or was a reflection of families receiving needed help elsewhere – perhaps even from school referral (e.g., housing, food support, or jobs). Research on school attendance changes in the wake of child welfare contact for educational neglect for school-age children shows promising attendance improvements as a result of families coming into contact with that system, particularly for younger children (Zuel & Larson, 2006; Larson, Zuel, & Swanson, forthcoming). Perhaps there is a reverse effect of school interventions that reduce the need for child welfare involvement that deserves further exploration.

Third, the 1,559 students who were identified by school districts as H/HM but were not detectable as Mobile using the administrative education data provide an intriguing contrast to the status of H/HM students who were identified by both methods (the districts and the administrative data). The first reaction of advisory group members to this finding was "we are doing our jobs" and the McKinney-Vento policy was successfully stabilizing these students. The study data does not allow us to tell how these students might be different from other H/HM students, such as being identified very early in the school year which would minimize how "mobile" they look throughout the year using the metrics we established and described in Appendix A, but they may provide important information about how

McKinney-Vento policies affect student stability. Clearly, upon being identified as H/HM, these students looked no more mobile in the administrative education data than did Non-Mobile students. Homelessness as a Population-Level Issue

Much of the literature on homeless students has revolved around specific groups in specific geographies receiving specific interventions. These efforts, while critically important, tend to individualize student homelessness. This leads to an incremental description of the problem which can detract from the systemic context in which it is embedded. Advisory group members expressed the desire to elevate the discussion of student homelessness to incorporate considerations of how national and state housing, school, and poverty policies intersect to help or hinder the ability of systems to meet the needs of homeless students and their families. In the same vein, small-scale studies to date have been unable to adequately describe the magnitude of student homelessness – something that is needed if direct service providers are going to articulate the amount of additional dollars and staff that are required to begin to tackle homeless student needs in significant ways that lead to community-level effects.

Although the data used here were imperfect, some findings suggest that it may be possible to apply what we learn about large groups of H/HM students to the development of estimating models that provide the possible range of the number of H/HM students in a state. In particular, *Minn-LInK Brief No. 7B* contains the results of such a range of calculations, which are built upon these findings, with recommendations for ways in which models can be improved upon over time through replication and comparisons to identified populations.

The Urgency of Student Homelessness

This study examined a population of students affected by homelessness and high mobility that preceded the current economic downturn. As a result, the findings and any estimation models that ensue represent the bare minimum of what we might expect to find at the close of 2008 and by the first half of 2009. Things are undeniably worse for many American students whose families have been adversely affected by the deteriorating economy, and the media continue to report upon the distressing urgency of the problem of homeless student populations. McKinney-Vento school district liaisons on our advisory group report a veritable explosion in the numbers of students affected by homelessness during the current school year and the fact that by mid-year, transportation resources and staff were straining to meet needs. Practitioners report that there is a downward push of low-income housing being taken up by middle-income families who have lost their homes to foreclosure. As these families take up rental stock, it leaves lower income families without any options.

In rural areas, housing issues are more subjective and complex. It has become necessary to define whether certain types of shelter (e.g. tents) are inadequate or determine whether other types of housing are safe, given the inability of rural municipalities to formally condemn a structure. When housing options in rural areas are exhausted, some residents end up leaving altogether in search of some form of housing – something that has long-lasting consequences for communities and usually leads families to urban areas. This fragments communities and severs social and generational family ties to rural areas.

Of all public systems with which students and families come into contact, schools bear the mandated responsibility to identify and address the needs of homeless and highly mobile students through McKinney-Vento. Perhaps at no other time has it been as important to find better ways to describe and estimate the number of students affected by homelessness or high mobility so that agencies can identify students early, request additional funding, and target resources effectively while assessing the degree to which services are reducing the problems associated with H/HM. Without such planning and global assessment of population-level needs, programs are limited to point-in-time service delivery that is sometimes crisis-driven. Smaller scale studies of specific interventions, although critically important, should be paired with broad-scale examinations of populations of students to estimate trends in student homelessness and the short- and long-term costs and benefits of the many interventions underway in communities.

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Appendix A

Mobility Identification Decision Matrix

	Status code	No move	a. Dual	b. Juvenile	c. Special	d. Early	e. School	f.	g.
	indicating	indicated	enrollment	detention	education	childhood	or district	Remaining	Remaining
	move (04,	in status		enrollment	instructional	screening	move, but	school	school
	05, 03 33)	code			setting	(kindergarten	student did	moves >0?	moves = 0
					change/special	only)	not move		
					education		(20)		
					update (50)				
School or	Possibly Mo	bile	Reduce	Reduce	Reduce school	Reduce	Reduce	Low	Not
district			school	school	move count	school move	school	Mobility	Mobile
moves (any			move	move count	by one	count by one	move		
number)			count by	by one			count by		
			one				one		